Project Title
"Interior design management system"

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Submitted by:

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Department of Computing and Information System (CIS),
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APPROVAL

This Project titled "...Interior Design Management System.......................", Submitted by ...A H M SHARAER......, ID No: ...181-16-282..... to the Department of Computing & Information Systems, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computing & Information Systems and approved as to its style and contents. The presentation has been held on-03-03-2021.
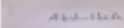
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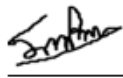**Dr. Saifuddin Md. Tareeq**   **External Examiner**
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Declaration

I hereby declare that, this project has been done by me under the supervisor of "**Md. Rafiqul Huq Rafi**" assistant professor of CIS of Daffodil International University. It is also declared that neither this project nor any part of there has been submitted anywhere else for the award of any degree, diploma or other qualification.

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Interior Design

Executive Summary:

In the era of the modern world, everything is digitalized and people proceed from traditional things. Nowadays interior design is very demanding. Interior Design Management System is a web-based system for dynamic process management. The interior design management system always focuses their performance on their work and this platform is an independent system. Here managed full organization systems. There are admin management system, product management system, user management system, worker management system, report management systems etc. The web-based systems can help to know the interior design. Here they can handle the full business process and record their old and present works details. By using this system, they can easily prevent business losses and increase profits.

Acknowledgement:

First, I want to apply the goodness of Almighty Allah who will give me physical and spiritual strength during my work to do it right. Here, this project is the final step of my degree in Computing and Information System BSc (Honors) from Daffodil International University.

I would like to thank my teacher, my dear and respected teacher, my project supervisor Md. Rafiqul Huq Rafi sir. Throughout my project, he really helped me, guided me, gave me the right motivation, and gave me the real guidance I needed. Without helpless and proper guidance I can't finish my project.

I want like to thank my fellow, members of my family and other teachers for their incredible support in working on the project. They really help and support me.

And finally, praise again to Allah Almighty, and I truly thank Him.

A H M SHAREAR

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Chapter 1- Introduction

Description of the Project:

People today like the digital system. Because the dynamic system can handle the full management system properly and it takes short time. It can be stored all information and easily access all information at any time. But paper-based way can't help all time and takes a very long time. A paper-based methods system is a difficult way for the company business. Here they cannot receive any information when they need it. So it's not the proper way for any business. Governance is suffered from these systems.

These reasons I prefer the dynamic system. Here I choose Interior design management systems which are web-based systems.

An interior designer is the one who designs, finds, organizes and manages that type of work. Interior design is a diverse range of activities including concept development, field design, field research, programming, research, staff engagement, project management and project deployment. If this work is paper-based then it's very difficult for workers because here need many research, planning, design, a sketch that is implement from the internet. Also here the company has many works such as product sell, a designer portfolio managed, product management, packages management, user management, report management etc. For these reasons, I decided to the project developed in web-based systems. Here customer can easily buy their product online. Admin can know about their report details where details about profit or loss are. User can update their profile, show designer portfolio, buy the product, choose their packages, search their product, they can like any blog etc. Also, the admin can manage all organization, managed user, managed product, managed workers schedule, admin can update any blog, they can comment answer, managed monthly report etc. And also the designer can show their portfolio and show their work schedules. For these reasons, I choose web-based systems for Interior design management systems.

Document Context of the project:

- ❖ **Chapter 1: Introduction:**

This chapter describes the introduction of the web-based system.

- ❖ **Chapter 2: Initial Study**

This chapter describes the aims of the project, its background of the project, problem area, possible solution all those.

- ❖ **Chapter 3: Literature Review**

This chapter describes the domain problem and the proposed solution. Also here I compared my project.

- ❖ **Chapter 4: Methodology**

This chapter describes the methodology what should use and which I have used and the reasons behind it for the project.

- ❖ **Chapter 5: Planning**

This chapter describes the way how I managed my project plan according to the breakdown structure, how I handled risk management and how to execute the test plan for the project.

- ❖ **Chapter 6: Feasibility**

This chapter describes the economical, operational, social and technical feasibility of the project.

- ❖ **Chapter 7: Foundation**

This chapter describes the structure of the project with a proper diagram.

- ❖ **Chapter 8: Exploration**

This chapter describes the structure old system and its boundaries with different types of diagram.

- ❖ **Chapter 9: Engineering**

This chapter describes the activities and engineering.

- ❖ **Chapter 10: Deployment**

This chapter describes the work prioritization, technique and steps.

- ❖ **Chapter 11: Testing**

This chapter showed the project test case.

❖ **Chapter 12: Implementation**

This chapter describes the implantation step and technique.

❖ **Chapter 13: Critical Appraisal and Evaluation**

This chapter describes the evaluation of this project.

❖ **Chapter 14: Conclusion**

This chapter short describes this project and the complete process of the project.

Chapter 2- Initial Study

2.1 Project proposal:

1. Initial Conception

A. *Brief description of the project:*

Nowadays the whole world uses technology and all work are chosen in a dynamic way. For these reasons I chose the dynamic way for this business and developed with web-based systems. Today people are very interested for interior design. Day by day people interest in interior design is increased. They want to know about this design, work process, cost etc. which are all included with the project. Before people didn't know this interior design process. Now the project helps to know about this process.

Here the interior design management system works with people interest and managed the full interior organization with the web-based system.

The web-based system manages the whole organization. Here they can manage customer, product details upload, delete, edit, manage product sell details, update blogs where customer can comment, like etc. they can reply customer comment, manage organization monthly report where can show profit or loss, manage their designer work schedule, can show intern cv. Also, the designer can show their portfolio and show their work schedule. And the customer can log in to their system, shows product details, can purchase their product with add cart, show invoice and download, can show portfolio, show past work design, can comment, like, write blogs, update their profile, choose their interior packages etc.

B. *Proof of a concept:*

i. **Prototype:** Here given the interior design prototype as if they can show their web site how to look like.
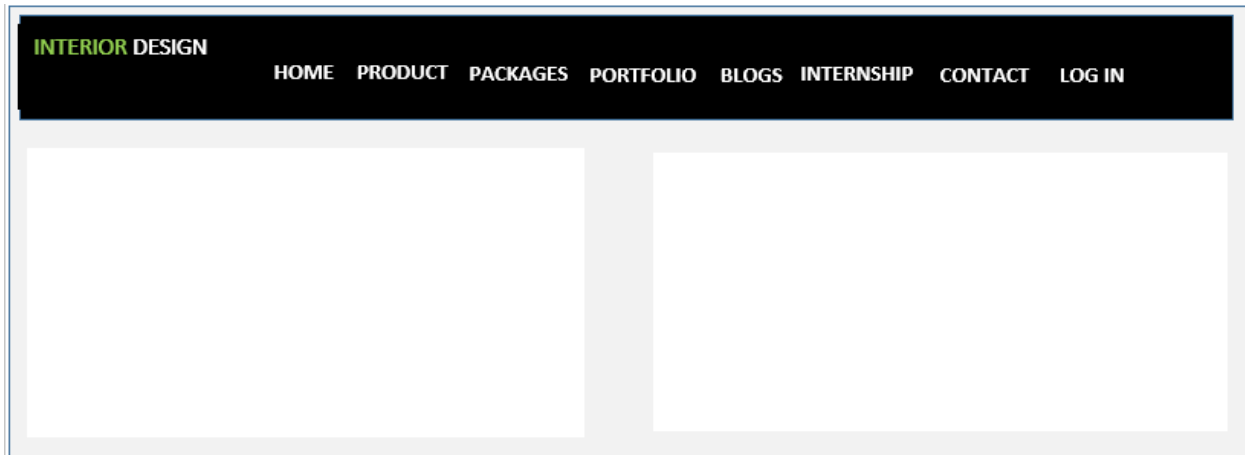
Shown the prototype of interior design.

ii. **Initial research:**

Market Viability:

The interior design management system is developed in dynamic way. Nowadays Bangladesh peoples are interested about interior design management. They want to all digital decoration their home, building, office, school etc. places which is managed by interior designer. The interior design management system helps to know about this works. Here the system managed all business by the web based. They can manage customers, upload product descriptions, delete, edit, manage product descriptions, set up blogs where customers can comment, etc., show intern cv. Also, the designer can show their package and show their work plan. The customer can login to their system, display product details, can purchase the goods by delivery, show invoices and download, can show package, work show the past, be able to answer questions such as, write blogs, update their profiles, select their interior package etc.

I choose the interior design management system because Bangladesh haven't good interior design management system. Here the interior design are very costly and take

many times. So I am trying to work about customer interest. As if customer can be easily communicate and interested for the company's work. From this perspective, I want to create this system to capture this market.

2. Feasibility Study

A. Operational Feasibility:

With this system, different types of organizations can dynamically manage their interior design. There is a user named admin in this system. Here admin can manage customers, upload product descriptions, delete, edit, manage product descriptions, set up blogs where customers can comment, etc., show intern cv, manage designer schedule, manage product order, manage packages etc. Also admin can take all decision about the interior design company. Here I will provide an enhanced operating capability for the system:

- Easily added all product.
- Easily accessible of the system.
- Easily update blogs.
- Maintenance of the system easily.

B. Technical Feasibility:

We only need one computer and one server to run our web-based system. Where the PC is at the end of the client and the server is at the end of the server. All information printed by the system is stored on the server. As required, the information is passed from the server to the client.

Hardware	Computer/Laptop (1TB HDD, 4 GB RAM), Router(Wi-Fi)
Software	➢ Windows 10 ➢ MS Office 2016 ➢ Visual office ➢ Adobe creative Cloud ➢ Browser

C. Economic feasibility:

Since wanting to create this project for managing inventory, we needed a computer and a server. That way, we can a low cost because we don't need too many computers and servers.

Costs:

- ➢ Software cost
- ➢ Hosting cost
- ➢ Storage cost
- ➢ Development cost

Serial Number	Component	Price (BDT)
1	Software	25,000/=
2	Hardware	35,000/=
3	Web Hosting	2,000/=
4	Others	10,000/=
Total		72,000/=

Hardware: Here shown hardware prices:

Serial Number	Component	Price (BDT)
1	Computer/Laptop	45,000/=
2	Router(wi-fi)	2,000/=
3	Others	1,500/=
Total		48,500/=

Software: Here shown software prices:

Serial Number	Component	Price (BDT)
1	Windows 10	10,000/=
2	MS Office 2016	10,000/=
3	Adobe Create Cloud	8,000/=
4	Visual Basic	10,000/=
5	Browser	0/=
Total		38,000/=

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Hosting: Here shown hosting prices:

Serial Number	Component	Prices (BDT)
1		2,000/=

D. Comparative analysis:

Bangladesh lacks an effective and efficient Interior design management system. Officers use manual systems to store and manage internal records. But my system does not have a manual system. Here can also manage all interior design packages, products, designers schedule and manage reports with one click.

3. Foundation

A. Defined goals/objectives of the project:

Goal: The main goal of this system is to improve interior design to prevent damage. This approach was needed as a tool to facilitate effective interior design management.

Objectives:

➢ **Product setup:** Admin can manage the product details. He can add a product, delete a product, edit product details, update the products, check products etc. Also, the customer can show all product and buy.

➢ **Order setup:** Admin can manage the order process. Here admin can shows which are pending and complete order status. Also, update the product status as pending, delivered, ready to ship, shipped, received and cancelled.

➢ **Blog setup:** Admin can manage blogs. He can write any blogs. Update their company details with the blogs. Also, he can comment on these blogs. Here customer can easily write any comment and like the blogs. Shows the customers comments and reply to their comments. Here can upload any pdf, images etc.

- **Designer schedule setup:** Admin can manage designer works schedule. He can update their workplaces. Here gives the designer workplace, time, date and work duration.

- **Report check:** Admin can check monthly reports. Here he can show profits and losses. And maintains its company reports.

- **Internship:** If an intern wants to upload their cv they can easily it. Admin can show intern CV and check this. If their CV has requirement fill-up then he chooses and gives a chance.

- **Packages setup:** Admin can manage interior packages. Here can choose the requirement which the customer wants. He can update their packages. Here gives all information which is included in these packages. Also, customer can choose their interior packages.

High level features/requirement to achieve goals/objectives:

- Add product
- Add packages
- Check monthly reports
- Add Blogs
- Blogs
- Creates Designer schedule
- Order products
- Search products
- Comments
- Likes the blogs
- Rating

Nonfunctional requirements:

- Validation/ verification
- Security
- Responsive
- Efficiency of system

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- ➢ Reliability
- ➢ Flexibility
- ➢ Testability

4. Exploration and Engineering

A. Iterative development:

Here given below Iterative development are listed below:

- ➢ Manage report
- ➢ Manage product

Time box:

Time box N	Task Name	Duration	Acting Role
Time box 1	Initial Study	6	Analyst
Time box 1	Feasibilty study	6	Developer and analyst
Time box 1	Foundation	12	Developer and analyst
Time box 2	Introduction	6	Analyst
Time box 2	Literature Review	8	Analyst
Time box 3	Methodology	15	Analyst
Time box 3	Planning	13	User and Analyst
Time box 3	Exploration	9	Developer and Analyst
Time box 3	Engineering	9	Developer and Analyst
Time box 4	Testing	12	Tester, Developer and user
Time box 4	Deployment Phase	9	Tester, Developer and user
Time box 4	Implementation	14	Tester, Developer and user
Time box 5	Lesson learned	4	Tester, Developer and user
Time box 5	Critical appraisal	7	Analyst
Time box 5	Conclusion	5	Analyst

Gantt chart:
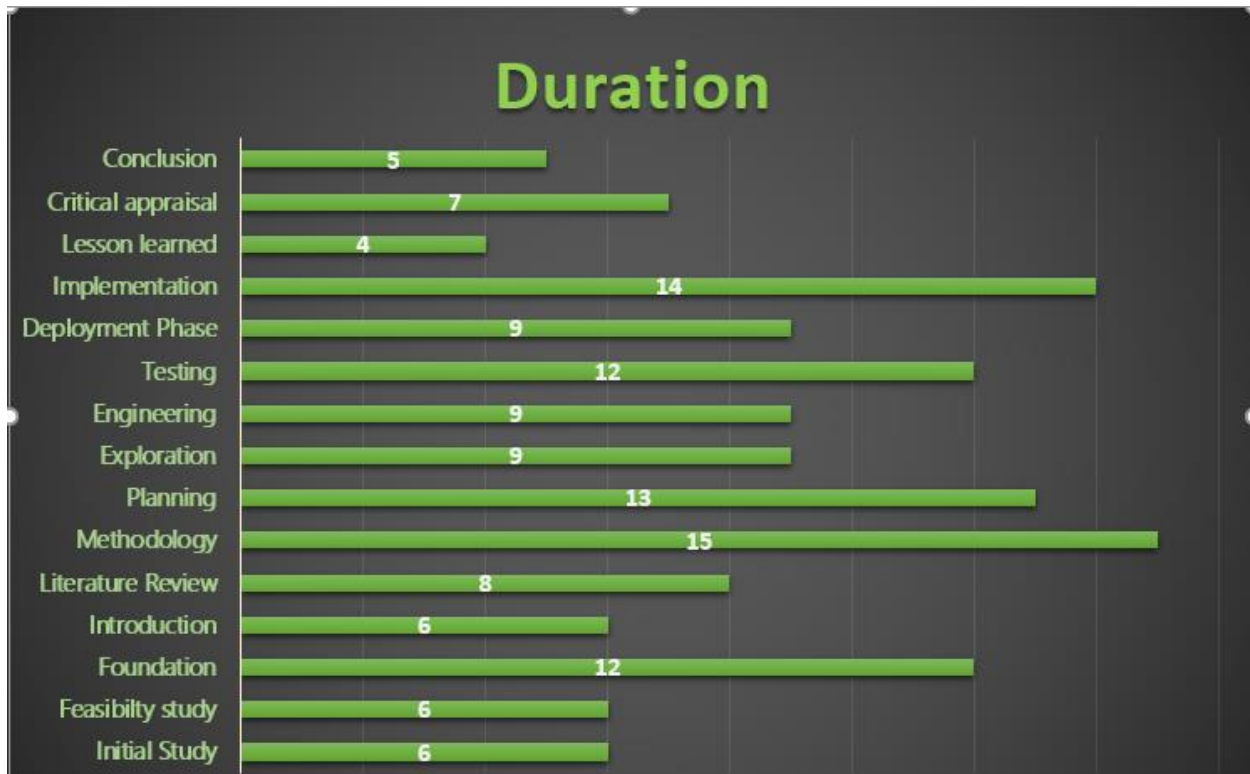
Features wise development:

Firstly focus on the project features where must be product setup, order setup, blog setup, designer schedule setup, report check, internship, packages setup etc.

Deployment:

I'm developing a web application and there's one that the user used called admin. Compared to others, I think the website makes the internet more suitable for our devices. It has many features and benefits such as internet-wide accessibility, cost-effective, no need to install equipment, quick and easy to change etc.

I run my work with PHP as a background, jQuery for UI and make it original and responsive, HTML and CSS and versions, MySQL windows and more, as needed.

2.2 Background of the project:

Interior design management is a manual system these reasons people face many problems. People can't know about this interior design properly. Nowadays people want to know about these works process. If interior design management works in an analogue way then they face many types of problem. The analogue way process takes a lengthy time. For these reasons peoples suffer many difficulties and ignore interior design. Also, many people can't explain the proper design. Also, the interior designer can't understand their wants. The designer creates a sketch with paper-based but this is a long process. If any wrong then the designer again creates a new sketch. Also, here the product can't manage easily. The interior design management system can face loss.

This reason I decided on the project developed in web-based systems. It works digitally. Here can manage the whole interior design easily. The dynamic way can help manage their company. Interior design is the expected outcome of the management system dynamically controls interior design. After full development of this system, the system should be capable of production, order processing, messenger management, blog creation, design format configuration, reporting checks, internships, configuration packages, and so on. Production and basic functions in the sales model. Once developed, the admin can buy and sell the product.

Peoples are interested about interior design management. They want to all digital decoration their home, building, office, school etc. places which is managed by interior designer. The interior design management system helps to know about this works. Here the system managed all business by the web based. Admin can manage designer worker schedule where gives a date, time, places and duration. Admin can manage products, he can update the product information where can edit, update, delete. He can check the product stock. Also, can the maintenance product order process and manage product status. Admin can manage blogs status where can write a new blog and reply to customer comment and also show customer like. Admin can manage interior packages and updates all information. Admin can manage monthly reports and show company profit and losses. User can log in to their page and show their website. User can choose their interior

packages which need. Also, the user can show the designer portfolio and checks their works demonstration. User can search for their product which is wanted. User can buy their product with add cart. Also, they can download their invoice. And designer can log in to their web site and show their work schedule and portfolio.

2.1 Goals of the project:

- Easily product purchasing and selling.
- Manage reports.
- Manage packages.
- Prioritization of customer.

2.1.2 Objectives of the project:

- Helps properly manages the systems.
- Helps proper stock of their products.
- Helps properly keep their reports and checks their profit or losses.
- Helps make the right decision at the right time.

2.2 Problem areas:

Interior design management is a new concept for Bangladesh peoples. Nowadays peoples have knowledge about interior design and they want to decorate their room. Interior design management system can fulfil people's wants. Here focused environmental weather which is perfect for their room. Bangladesh peoples achieve their dream from interior design. These reasons the company want to dynamic way for interior design management. But there are some problem areas which are given below:

- ➢ All product information must be input correctly
- ➢ Old reports information must be input correctly. If here input wrong information then the company can face many difficulties.
- ➢ Admin must be knowledgeable about their web-sites.

- ➢ Customer must be knowledgeable about their websites and must know how to work there.
- ➢ The designer must be knowledgeable about their websites.
- ➢ If anyone can't work with websites then must be training for the website.
- ➢ Can be a customer information security problem.

2.3   Possible solution:

After analysis, I focused on the problem areas. Here I choose the dynamic way for interior design so must work with problem-solving. When I developed the system then carefully input their product information. As if the company can easily maintain their products. Also, carefully inputs their reports information because reports information is most important where they can show their business profit or loss. Must be take training with websites. Also focused on security because the security issue is create many hassles for the customer. If when I developed the systems then I focused on the solution

Chapter 3 – Literature Review

The literature review is an important part of the development of the system. The literature review helps to identify the specific area. During development, the literature review helps to identify the same activity in the field of comparison. This will help identify key points that need to be incorporated into the proposed system.

3.1 Discussion on problem domain based on published articles:

The interior design industry is constantly evolving. New homeowners are becoming more and more interior designers. Ten years ago, there were only indoor models who had access to a wealthy man. The only survivors were houses that were beautifully decorated with magazines and catalogues. However, over the years, work and capacity have increased dramatically, interior design is more important than luxury design. Despite this growth, the interior design industry is facing domain problems which are given below:

➢ **Managing costs:**

Cost control is a big issue for any company, Interior Design Company or anything. Includes jobs, products, ads and even monthly phone bills when doing business. For most interior design firms, managing property costs can be a major challenge. Staff costs are out of control if the project takes longer than expected or customers change their mind in the middle of the project. Even poor performance in your work environment can be costly, time-consuming and expensive.

➢ **Lack of Transparency:**

The interior design industry is still hardly overwhelmed and growing. So prices are never normal and the price of the same furniture varies greatly depending on where one source comes from. While consumers expect a certain price range, it is difficult for decorators to negotiate, bargain and find a reasonable price. In addition, there is constant pressure on consumers to compare prices. Creating a sense of self-confidence.

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> **Frequent changes by customer:**

For clients, decorating a dream home may be a once in a lifetime project. Then unsurprisingly, they look for perfection until they are satisfied and demand changes to the plan. Customers today have access to the internet and therefore many ideas for design, design and decoration. However, clients do not see this as changing plans and paper design. Inform the applicant of changes, changes to the proposal, the influence of changes in implementation, and so on. It needs to maintain a good balance.

> **Schedule and manage to time:**

Interior designers aren't free people. That's why making sure you and your coworkers manage their time effectively is an important part of your job. The design has always been a problem for most interior designers and it's too long.

> **Limited Product:**

Unlike homeowners who do this three times in their lifetime, interior designers have to find furniture almost every two weeks. Access to high-quality furniture and special decoration is limited, depending on location. In addition, each house they create has a different theme, different decorating style and basic inspiration. Even the most talented designers have to physically go from one store to another and try to find good furniture that looks elegant. Other options include offering the use of online and mobile marketing tools and branded websites. However, this market is still developing and is not well regulated. Logistics is in creates problems.

Discussion on problem solutions based on published articles:

Many interior design firms operate in a competitive market and interior designers are busy competing with companies who are at the forefront of choosing the right design according to their project and time management. Here some of the interiors design management problem solutions are given below:

> **Managing time:**

Time management skills are essential for interior design. There are many hours and events in the day that need to be accomplished. Preparing your time schedule will allow you to organize your work efficiently, prioritize projects, and stay on schedule to meet regularly.

> **Maintaining customer expectations:**

In many cases, you work with clients who have very high expectations. Being an interior designer means working with people and managing expectations. Don't worry about it. Create boundaries, work within your budget, and don't forget your project deadlines.

> **Managing costs:**

Interior designers need to keep a close eye on their budgets. If the client is thinking about it or the project lasts longer than expected, you may be in a difficult situation. All aspects of the business need to be done efficiently so that they do not spend money on the creative process.

> **Selling your big ideas:**

One of the big challenges for interior design is selling good ideas. You often need to have pictures or a plan to recreate the feel of the whole room. It's difficult to sell something that the body doesn't have. Do everything to satisfy your imagination. From clothing to clothing, your customers will always appreciate the hard work that will help them understand the look.

> **Training:**

Training can help to learn to use the websites. It can be easy to work. Here admin and designer can easily work and learned about the dynamic way.

3.3 Comparison of 3/4 leading solution:

Here, I compare the 3/4 main project to give the group the best solution. It will be compared and these key sites are listed below:

➢ https://imagineinteriors.design/
➢ https://housedesigner.net/
➢ https://havenly.com/interior-designers

3.3.1 Best features:

***Imagine Interior:***

- Online-based websites for the interior management system.
- Here has a home, services, portfolio, testimonial, contacts and blogs.
- They can write blogs which they want.
- They can give their portfolio with all details.
- They have many services where they can give many furniture designs.
- The website has contact options where customer can show their contacts (Anon., 2021).
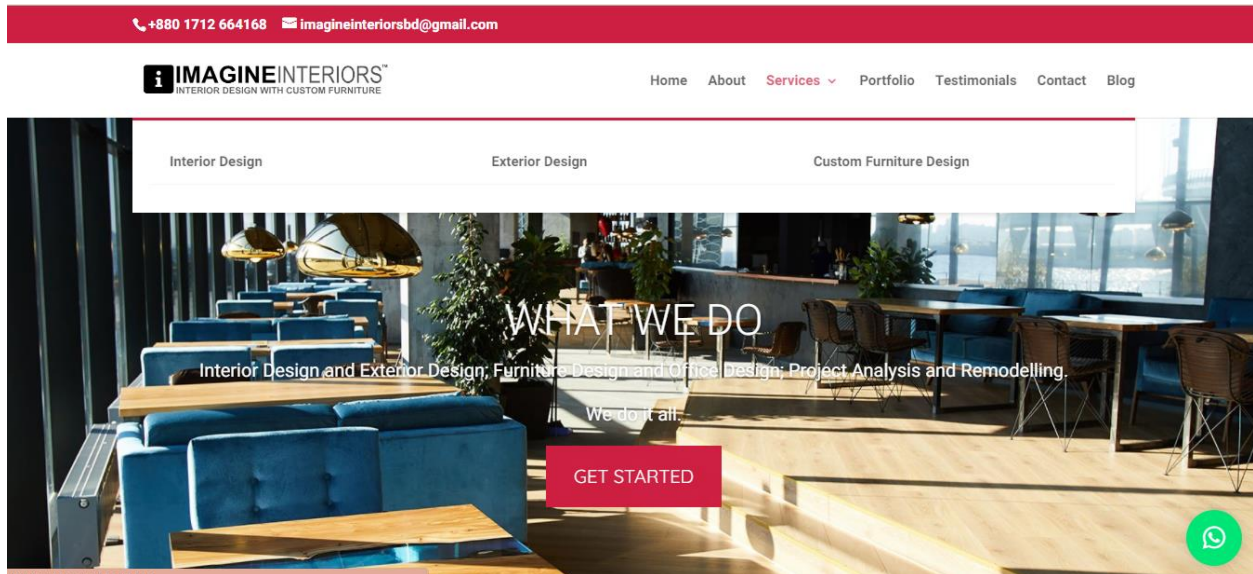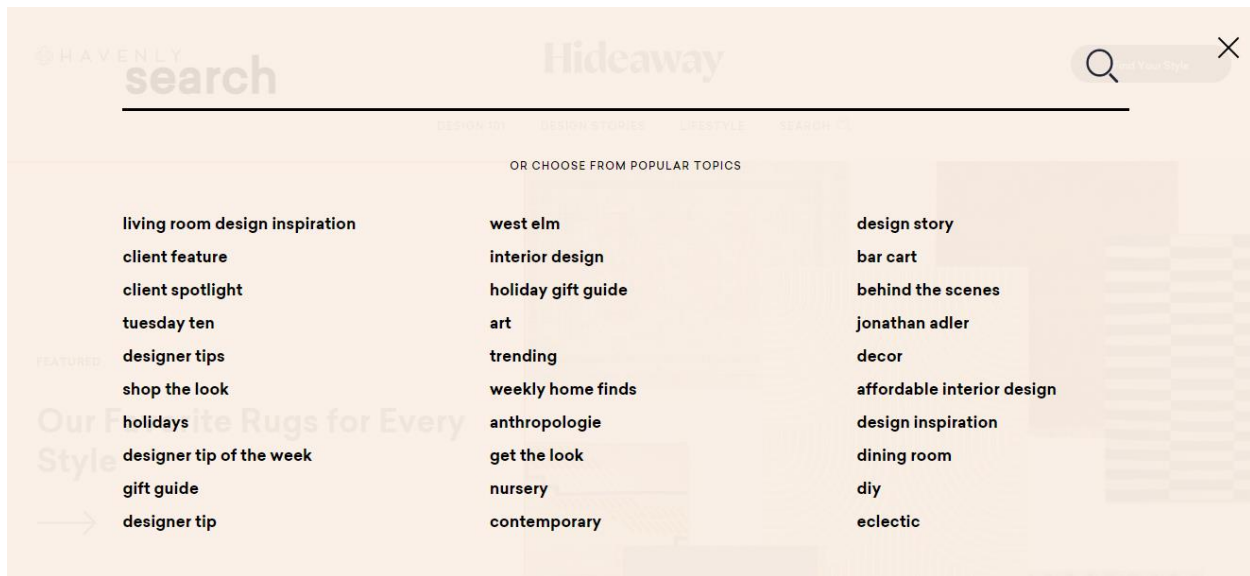
House designer:

- The websites have how it works features which helps to know about works processes.
- Here can know about their interior design prices.
- Customer can show their work before and after.
- Customer can live chat with their company.
- Here have to explore options.
- Here can show blogs and uses the add cart option to choose any services (Anon., 2021).
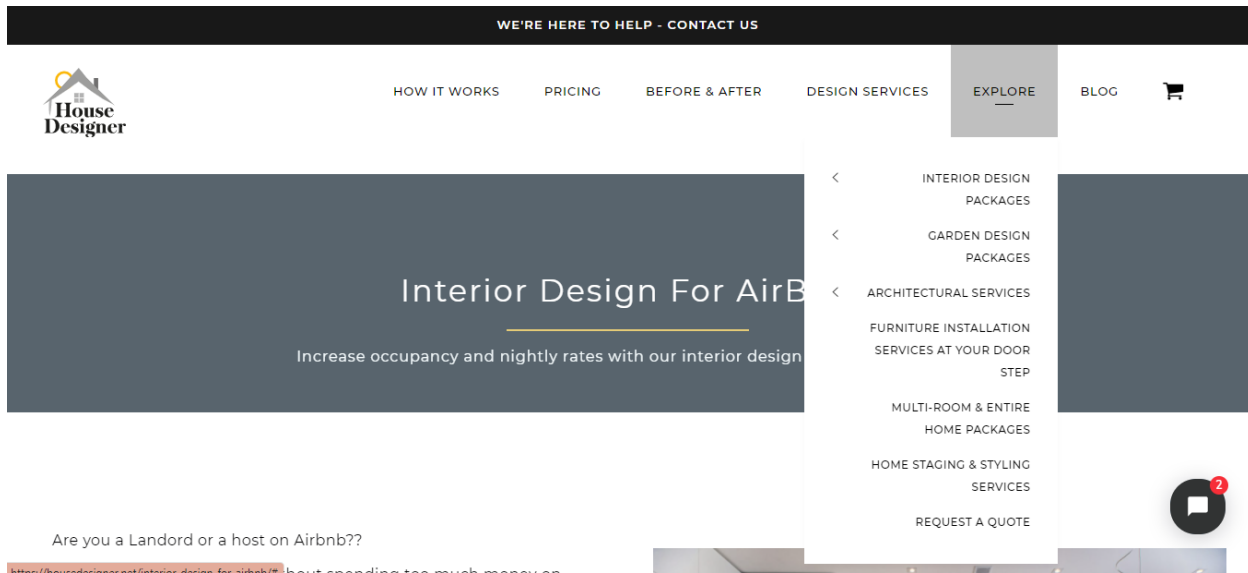
Havenly:

- The websites have how it works features which helps to know about works processes.
- Here clients can show their stories.
- Clients can search them any stories.
- Clients can show explore where are bedroom, living room, dining room, nurseries and offices options.
- Here clients can choose their lifestyle (Anon., 2021).

3.3.2 Limitations:

Imagine Interior:

- Here aren't security and anyone can show all information.
- Also, Services can be many details.

House designer:

- Some main features are missing.
- Response time too long.

Havely:

- The website interface is not user-friendly.
- The navigation bar isn't attractive.

3.4 Recommended approach:

It would be best to develop the system with an agile philosophy based on the priority of their requirements and where the requirements are properly met so that they can move easily and properly from their work without difficulty. Prior to commencement, the risk management plan should be developed and implemented. Once developed, the acceptance criteria must be combined. In any case, this project must be implemented on time with great features.

Chapter 4 – Methodology

A project methodology is mainly used for project analysis. To improve the system, focus on the project budget, duration time and potential risk factors and build understanding between the company and the customers (Anon., 2021). We need to follow software processes while designing any system. In the field of software engineering, software development is the foundation. Information system development is used to plan, structure and control processes.

4.1 What to use:

There are different methodologies to use different software to develop applications around the world. But the key is learning the best way to project. First, I will describe three ways, both good and bad. So choose the best ones in my academic project.

Waterfall model:

The waterfall is one of the traditional models in the software development process. In this model, the work is done through a series of sequences with a specific set of scenes. The waterfall model is the most powerful process model available. Also known as the model of the direct life cycle. Easy to understand to use. In the Waterfall module, all steps must be completed before the next step can be started. These steps are not covered. The Water fall model is the most useful SDLC method for software development. The Waterfall model directly illustrates the software development process. This means that not every step of the development process starts until the end of the final stage. Not all levels are covered in this waterfall model.
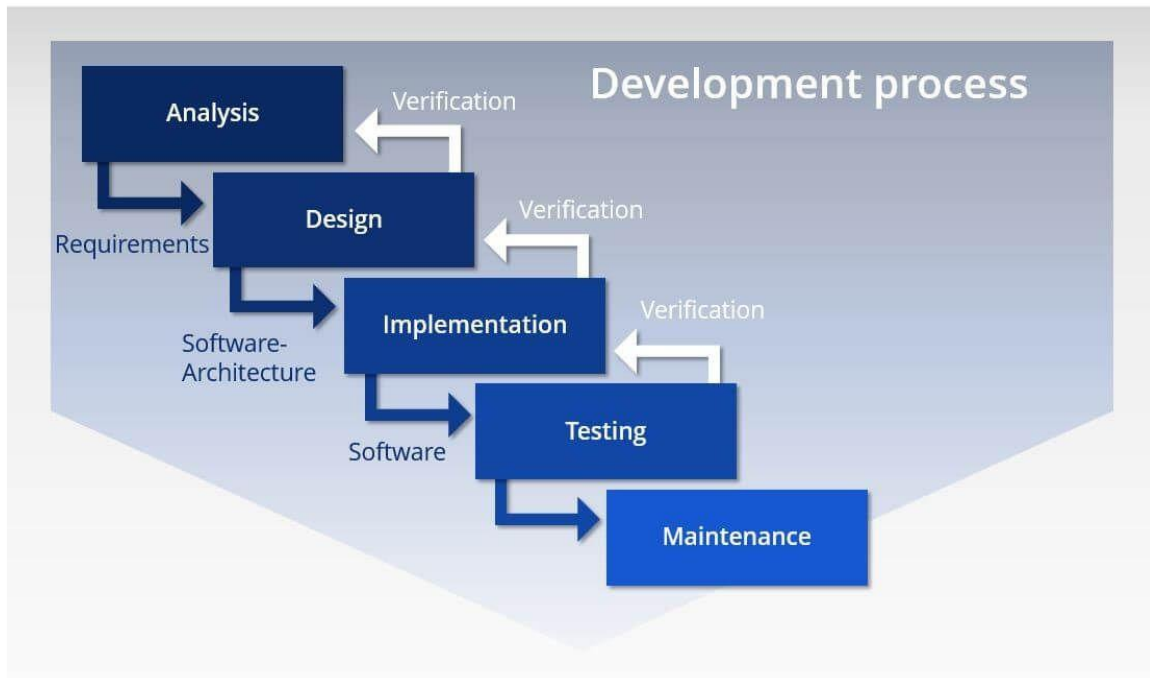
1This is the waterfall model developed process.

(Anon., 2021)

Advantages:

➢ The model of the waterfall is easy to understand

➢ After one level it will go through another level.

➢ Development saves time easier than other methods.

➢ The test method and inspection process are very simple.

➢ The waterfall model can easy to handle.

➢ Easy to understand and use.

Disadvantages:

➢ The waterfall model is not going to be backward on completion.

➢ After completing the level it is impossible to solve the problem

➢ If you do it once, there is no chance of going to the next level.

➢ Not suitable for the project launch.

➢ No, the magnitude of the differences varies in some cases.

➢ It is not possible to add or delete requests during the project.

Agile Methodology:

The agile methodology is a way to take risks, especially to promote software, where requests and actions are made through automated delivery and joint efforts made by cross-use teams and customers. Based on the characteristics and standards of the Agile Manifesto, it was designed in response to appropriate traditional technological advances, such as the Waterfall strategy. The software company is a very serious market because the software is constantly updated. This means engineers have to constantly refine and refine components to stay in the game, and the simple and seamless approach of waterfall technology isn't just broken.

2This is the agile development methodology.

(Anon., 2021)

Advantages:

➢ The agile methodology can satisfy customers with prompt and complete delivery of educational materials.
➢ It helps people and interactions can help emphasize more than actions and tools.
➢ Customers and developers and also tester can interact together.

- ➢ Business software can be delivered regularly
- ➢ It can face -to -face communication which may be great communication.
- ➢ It helps daily interaction between entrepreneurs and developers.
- ➢ It works with good design.

Disadvantages:

- ➢ Because of some types of software, most of which are large tools, it is difficult to define what needs to be done at the beginning of the working life of the software.
- ➢ Can make incomplete project requirements and documents.
- ➢ The project can be skipped if user representatives do not specify the desired result.
- ➢ Only older developers can make important decisions when using improvements. Therefore, there is no opportunity for these initiatives unless they are linked to financial literacy.

Dynamic system development methodology (DSDM):

Dynamic System Development methodology (DSDM) is a partner-level approach to intelligent code development that provides system design and management. The reason for DSDM is an 80% change in humanitarian management. The application will usually be submitted 20% when you need to submit the application (100%). DSDM is a repetitive coding method in which 80% of the principles related to the actions required for each cycle to promote co-development are maintained in each cycle. The rest of the analysis is usually required after reviewing a large number of transactions to see if there has been a change.
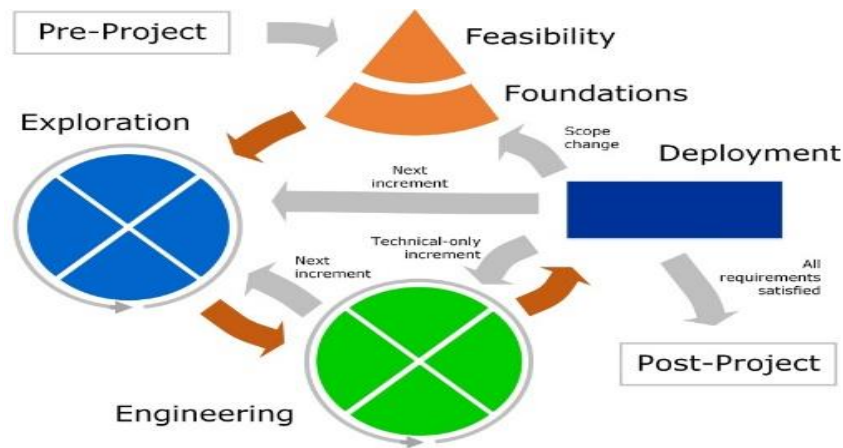
3This is DSDM methodology process
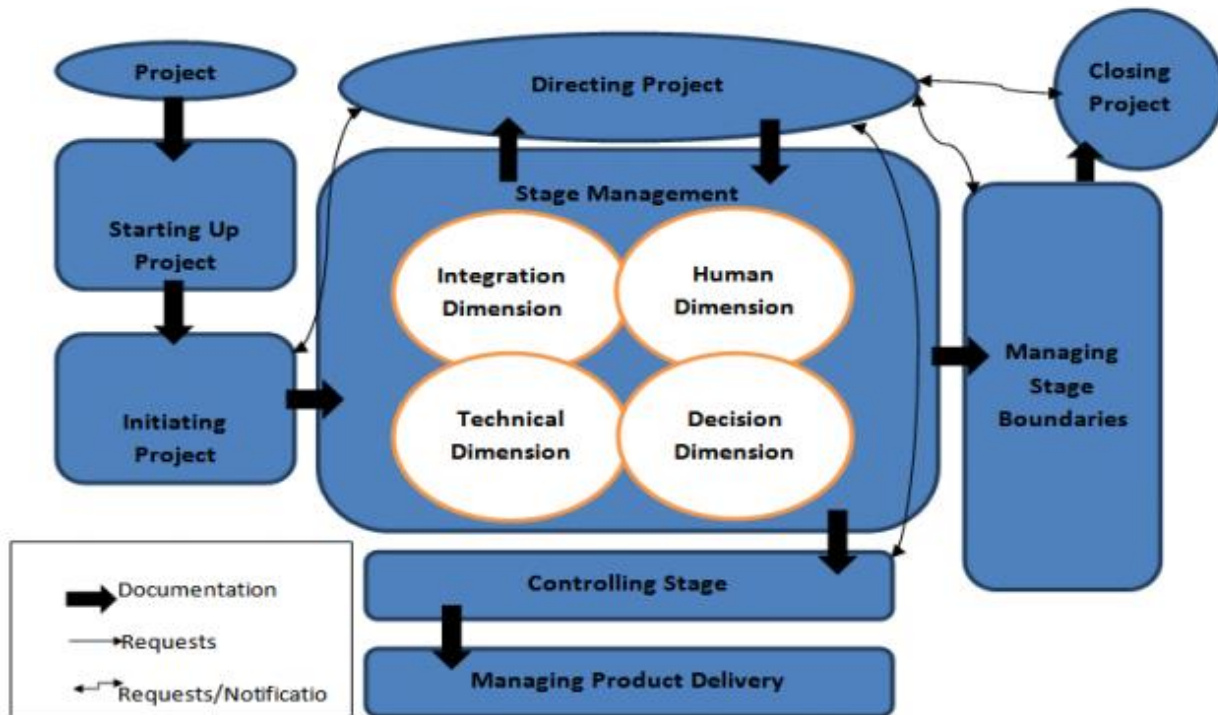
(Anon., 2021)

Advantages:

- ➤ Focused on duration time.
- ➤ The DSDM methodology budget-friendly.
- ➤ The methodology is flexible.
- ➤ User can help with them during development.
- ➤ The methodology can safe time.

Disadvantages:

- ➤ The methodology is expensive for implementation.
- ➤ The small organization can't use the methodology.
- ➤ DSDM methodology isn't common.
- ➤ Many times it hard to understand.

The Interior management system is the internal management system and I am developing this site for my own research project, so it is difficult to follow a specific approach. Because not all studies are predefined or compiled at once. Here I first need to collect data, analyze data, and then prioritize systems and their development. I developed the project myself.

There are no team members or the development team. Therefore, there is no specific method that is compatible with the system. A hybrid methodology is a good choice for the development of this project as it combines waterfalls and DSDM modes. Waterfalls are great for gathering complaints. DSDM would be a great choice for the ongoing process.

4This is DSDM work process system
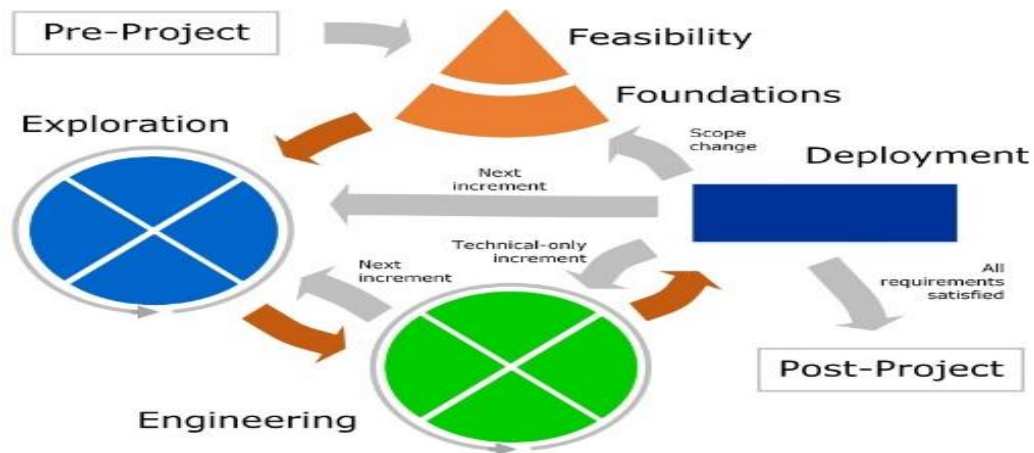
(Anon., 2021)

4.2 Why to use:

The main purpose of the academic project was to address issues related to this activity. I believe that the stacking process meets the system requirements. This process is helping the business to grow and prosper. There are many advertising options, but the best requirement for my job is because it meets the requirements of the system. The

exact methodology for the route is not available in this case. Here some reasons are given below:

- ➢ The system can interact with the customer and end-user.
- ➢ Can be used interactive power.
- ➢ The proposed system can set proposed systems.
- ➢ For quick response when asking for help.
- ➢ Get the project done within the allotted time.

4.3- Sections of methodology:

DSDM methodology has several stages which are given below:

5This is the DSDM methodology stage

(Anon., 2021)

Pre project:

There are Initial requirements and solutions this part where maintains time, the budget, risk factor for the factors mentioned in this section.

Feasibility study:

Whether the investment is worth investing in or not, we examine feasibility from market research. The feasibility that can be used to determine the validity of an opinion, even if the investment is legal and effective for the company, are easy to understand. He tells us that this is a very good investment. Create projects in many ways, such as technology, business and other activities. The quantity and quality of the project are also determined.

Requirements gathering:

This section summarizes the requirements for not taking or taking no action. There are many ways to gather claims, such as interviews, comments, questions, value suggestions, and more. There are many recommended programs available for collecting applications.

Requirements analysis and prioritization:

Once all the needs have been gathered based on the activity, it's time to prioritize. High priority demand first, followed by low priority demand. Here will deal with the requirements in detail.

Exploration and engineering:

These two steps are often referred to as basics. Review and audit are necessary to evaluate the process. For further development, he sent it to a technology company. If the user wants to change the terms again, they will be added again during the search.

Post-Project:

When the project is complete, the team will receive documentation and systems. This section will discuss the benefits and features of the project.

4.4 Implementation plan:

The system is available for the users when the project is in the final stage. Here the system is almost ready to maneuver. If there is a problem in this area, it will return to the

expansion stage. After troubleshooting, the domain is consolidated with the correct configuration. The final release of the system for use as a post-project.

Chapter 5 – Planning

5.1 Project plan:

Planning is essential for any work. Planning requires the determination of work requirements, planning, risk factors, time, budget and work structure. This will help developers to understand their needs and implement them properly. The design is in line with everything described in this section. The project is divided into several sub-sections. Then plan all the materials. Here the platform to start and will all decisions be made in this area.

5.1.1 Work Breakdown Structure (WBS)

The project team tries to complete each project on time. The work breakdown structure of the project is a guide to the weakening of the design of the "multi-level rescue zone created by the project team". It helps to identify opportunities and steps for change that will make the team easier to work with. Each level of work will be different from primary to primary at the time of breakdown. I use the work breakdown structure block to get the best results. The foundation of the structure is suitable for planned breakdown structure.

Timebox No	Task Name	Start Date	Last Date	Duration
Time box 1	Initial Study	16/01/2021	21/01/2021	6
Time box 1	Feasibilty study	22/01/2021	27/01/2021	6
Time box 1	Foundation	28/01/2021	8/2/2021	12
Time box 2	Introduction	9/2/2021	15/02/2021	6
Time box 2	Literature Review	16/02/2021	23/02/2021	8
Time box 3	Methodology	24/02/2021	10/3/2021	15
Time box 3	Planning	11/3/2021	23/03/2021	13
Time box 3	Exploration	24/03/2021	1/4/2021	9
Time box 3	Engineering	2/4/2021	10/4/2021	9
Time box 4	Testing	11/4/2021	22/04/2021	12
Time box 4	Deployment Phase	23/04/2021	1/5/2021	9
Time box 4	Implementation	2/5/2021	15/05/2021	14
Time box 5	Lesson learned	16/05/2021	19/05/2021	4
Time box 5	Critical appraisal	20/05/2021	26/05/2021	7
Time box 5	Conclusion	27/05/2021	31/05/2021	5

6 This is the Work Breakdown Structure (WBS) Table.

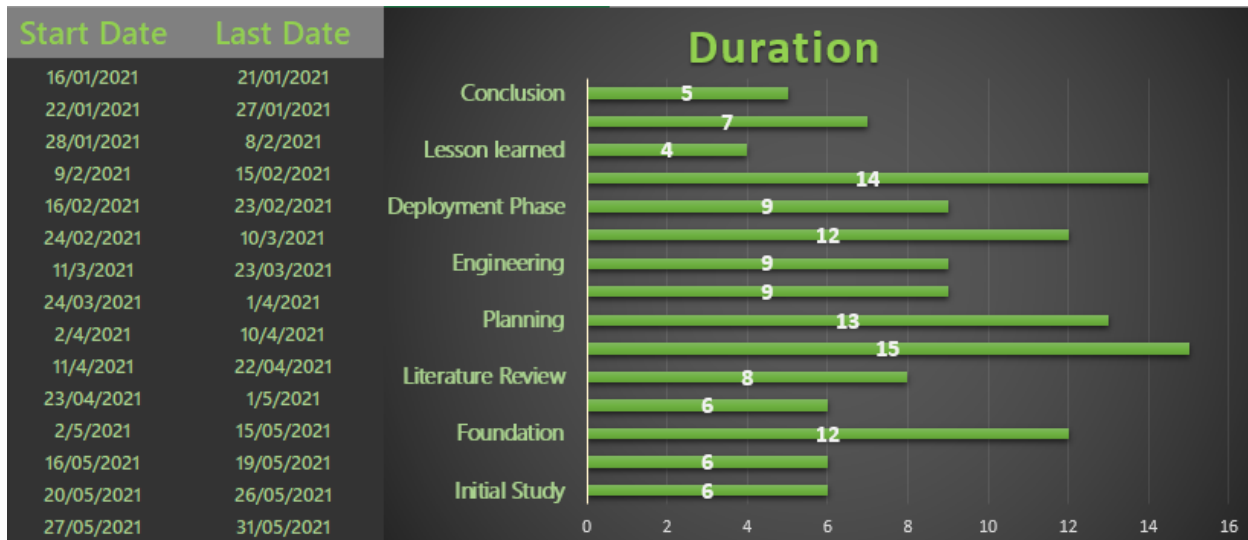## 5.1.2 Time Duration / Time Boxing

Time-box helps to deliver orders within a specified time, after which projects can be scheduled to be completed on time. It is important to choose the right time to complete the project. Here the project time box is given below:

Task Name	Acting Role	Duration
Initial Study	Analyst	6
Feasibilty study	Developer and analyst	6
Foundation	Developer and analyst	12
Introduction	Analyst	6
Literature Review	Analyst	8
Methodology	Analyst	12
Planning	User and Analyst	10
Exploration	Developer and Analyst	8
Engineering	Developer and Analyst	8
Testing	Tester, Developer and user	9
Deployment Phase	Tester, Developer and user	7
Implementation	Tester, Developer and user	12
Lesson learned	Tester, Developer and user	2
Critical appraisal	Analyst	5
Conclusion	Analyst	4

7This is the project time box.

5.1.3 Gantt chart:

The Gantt chart is used to display a work program schedule that shows all actions, including start and end dates, and the duration of those tasks. The Gantt chart is helping recipients know when and to what time. It can help achieve its goals at a given time. Here the project Gantt chart is given below:

Start Date	Last Date
16/01/2021	21/01/2021
22/01/2021	27/01/2021
28/01/2021	8/2/2021
9/2/2021	15/02/2021
16/02/2021	23/02/2021
24/02/2021	10/3/2021
11/3/2021	23/03/2021
24/03/2021	1/4/2021
2/4/2021	10/4/2021
11/4/2021	22/04/2021
23/04/2021	1/5/2021
2/5/2021	15/05/2021
16/05/2021	19/05/2021
20/05/2021	26/05/2021
27/05/2021	31/05/2021

8This is the project Gantt chart.

5.2 Test plan:

Testing is one of the most important aspects of software development. The software malfunctions and errors are identified through tests. We compare actual test results with expectations. It also monitors the implementation of programs and standards.

5.2.1 Testing against time boxes:

Here time box is in the deliverable from time to time. Tests are always required result in the time box. Be clear about the consequences of the time box. Therefore, prenatal testing is necessary. Here this is a test against the time box listed are given below:

User name	Example	Role		Example	
Time Box ID					
Time Box contents					
Test type	Test steps	Expected Result	Actual Result		Comment
Unit test					
Module test					
Integration test					
Security test					
Acceptance test					
System test					
Reliability test					

9 This is the project testing against time boxes.

5.2.2 Required tests:

While many types of tests are essential to solving system problems, tests can help differentiate between dots and gaps in a proposed system. Here some required testing is given below:

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Functional testing

❖ **Unit testing:**

This section measures the sections and components of the project. Unit tests usually run as intended. Assistance to law enforcement and helps to code.

❖ **Integration testing:**

These mostly work for testing software. The organization is certified as a software unit. Integration of test unit multitasking. Including an inspirational feature or groups here. All software modules are working properly, after which successful test calls will be made.

❖ **System testing:**

It usually works for integration tests. It works with capabilities, features and requirements control the system. It will have control over the workload, which should be the right approach.

❖ **Acceptance testing:**

Functional testing is the last stages of acceptance testing. Users are directly involved in this test. The main purpose of this test is look at customer satisfaction and business needs.

Non-functional

❖ **Security testing:**

The section works for web application, software internal and external security. SQL injection is used for security. Here external attracts and internal attracts are checking with security.

❖ **Usability testing:**

This section tests easy-to-use software. The user can operate the system here easily or quickly. Focused on consumer interest. Usability testing improves user experience in a software environment.

❖ **Reliability testing:**

Here user can work with the testing. The section checks software durability and software failure. And also testing reliability.

Chapter 6-Feasibility

Feasibility study

If self-defense is relevant, quick and accessible, and has a legal framework, it can be said to be the feasibility study. This will help determine the viability of the process. This section outlines the various courses that can be taken, such as specialized courses in feasibility studies, practical feasibility studies and feasibility studies.

6.1 All possible type of feasibility:

6.1.1 Economic feasibility:

The software is easy to implement other charges, such as installation, depending on the need I provide free maintenance for the system for half a year at the end of this year. The company will stop the service if the need to change or requirements. The service is paid to the service you need a server and domain name to buy the system. Here economic feasibility table are given below:

Serial no	Sector	Cost (BDT)
1	Software	50,000/=
2	Hardware	62,000/=
3	Hosting	2,000/=
4	Others	16,500/=
Total prices		130,500/=

Software cost:

Serial No	Name	License	Price (Yearly)	Total Price (BDT)
1	Microsoft office	1 year	10,000/=	10,000/=
2	Browser	Free	00/=	00/=
3	Operating system	1 year	25,000/=	20,000/=
4	Xmapp	Free	00/=	00/=
5	PHP strom	1 year	15,000/=	10,000/=
6	Adobe dream weaver	1 year	15,000/=	10,000/=
Total=				50,000/=

Hardware cost:

Serial no	Name	Quantity	Price (Yearly)	Total Price (BDT)
1	Asus laptop	1	60,000/=	60,000/=
2	Router	1	2,000/=	2,000/=
Total=				62,000/=

Hosting cost:

Serial no	Name	Package	Price (Yearly)	Total Price (BDT)
1	Domain	1 year	15,00/=	15,00/=
2	Business shared hosting	Business shared hosting	5,00/=	5,00/=
Total=				2,000/=

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6.1.2 Technical feasibility:

The automated system uses PHP and JavaScript. Lots of data and files are lost in the manual process. However, after a new introduction, all operations are much easier to see and manage with automated processes. I have created a program that can be used in a web browser and in the control panel. These projects reflect the technical issues listed below, which I will use in the project.

Software:

- ❖ Microsoft office
- ❖ Browser
- ❖ Operating system
- ❖ Xmapp
- ❖ PHP strom
- ❖ Adobe dream weaver

Hardware:

- ❖ DCL laptop (intel corei 3, 4 GB Ram, 1 tera byte)
- ❖ Router

6.1.3 Operational feasibility:

With this system, different types of organizations can dynamically manage their interior design. There is a user named admin in this system. Here admin can manage customers, upload product descriptions, delete, edit, manage product descriptions, set up blogs where customers can comment, etc., show intern cv, manage designer schedule, manage product order, manage packages etc. Also admin can take all decision about the interior design company. Here I will provide an enhanced operating capability for the system:

- ❖ Easily added all product.
- ❖ Easily accessible of the system.

- ❖ Easily update blogs.
- ❖ Maintenance of the system easily.

6.2 Cost Benefit Analysis

This statistical analysis truly shows that the current industry is unreliable. Currently, for all online jobs, one day is required for all online jobs. The use of this structure will benefit the user. Below is an estimate of the costs and benefits of the proposed structure:

SL No	Sector of expenditure	Year 1	Year 2	Year 3	Year 4	Total
1	Software cost	50,000/=	-	-	-	50,000/=
2	Hardware cost	78,000/=	-	-	-	78,000/=
3	Hosting	15,00/=	15,00/=	15,00/=	15,00/=	6,000/=
4	Office cost	20,000/=	20,000/=	20,000/=	20,000/=	80,000/=
5	Staff cost	30,000/=	30,000/=	30,000/=	30,000/=	120,000/=
6	Development Cost	5,000/=	5,000/=	5,000/=	5,000/=	20,000/=
7	Others cost	18,000/=	18,000/=	18,000/=	18,000/=	90,000/=
	Total	202,500/=	74,500/=	74,500/=	74,500/=	444,000/=

Total Earn:

SL No	Sector of expenditure	Year 1	Year 2	Year 3	Year 4	Total
1	Earning from E-commerce	90,000/=	100,000/=	110,000/-	130,000/=	430,000/=
2	Earning from personal adds	-	10,000/=	50,000/=	80,000/=	140,000/=
3	Earning from google	50000/=	60000/=	90000/=	120000/=	320,000/=
	Total	140,000/=	170,000/=	250,000/=	300,0000/=	890,000/=

Total revenue:

SL No	Sector of expenditure	Year 1	Year 2	Year 3	Year 4	Total
1	Total Earning	140,000/=	170,000/=	250,000/=	300,000/=	890,000/=
2	Total expenditure	202,500/=	74,500/=	74,500/=	74,500/=	444,000/=
	Total revenue	**342,500/=**	**244,500/=**	**324,500/=**	**374,500/=**	**1,334,000/=**

Using cost analysis, a group can make big bucks every year. This income increases every year. So analyze projects. In the four five years, the revenue will be 1,334,000/=. So I think this program is profitable.

6.3 DSDM is good or not for the project:

During development, language procedures follow DSDM. This rule will continue follow. The original developers developed this technique early on and made it easier to integrate with the end user. Since my project is educational, DSDM is a great helper for my project. DSDM functions are similar to the systems I am hosting. Therefore DSDM is suitable for the project.

Chapter 7-Foundation

7.1 Overall Requirement List

Software engineering has two types of requirements which are functional requirement and non-functional requirement. Here some requirements are given below:

7.1.1 List of functional requirement:

❖ **Product setup:**

Admin can manage the product details. He can add a product, delete a product, edit product details, update the products, check products etc. Also, the customer can show all product and buy.

❖ **Order setup:**

User can easily choose their product with add cart and can order confirm. Admin can manage the order process. Here admin can shows which are pending and complete order status. Also, update the product status as pending, delivered, ready to ship, shipped, received and cancelled.

❖ **Blog setup:**

Admin can manage blogs. He can write any blogs. Update their company details with the blogs. Also, he can comment on these blogs. Here customer can easily write any comment and like the blogs. Shows the customers comments and reply to their comments. Here can upload any pdf, images etc.

❖ **Designer schedule setup:**

Admin can manage designer works schedule. He can update their workplaces. Here gives the designer workplace, time, date and work duration.

❖ **Report check:**

Admin can check monthly reports. Here he can show profits and losses. And maintains its company reports.

❖ **Internship:**

If an intern wants to upload their CV they can easily it. Admin can show intern CV and check this. If their CV has requirement fill-up then he chooses and gives a chance.

❖ **Packages setup:**

Admin can manage interior packages. Here can choose the requirement which the customer wants. He can update their packages. Here gives all information which is included in these packages. Also, customer can choose their interior packages.

❖ **Rating**

The customer shows their website and works with their company. Customer can be rating about company works.

❖ **Search:**

Customer can search company product which they want. Here they can show all information about the product.

❖ **Portfolio:**

Here customer can show their company portfolio. The portfolio can help to the idea about their interior design.

7.1.2 List of nonfunctional requirements:

❖ **Validation/ verification:**

The website works with validation/verification. Here Customer can input their information with verification.

❖ **Security:**

The website works with security. Here customer can easily trust their website. Because security is most important for any website.

❖ **Responsive:**

Responsive is most important for a website. If the website isn't responsive then the customer can face any problem. A responsive website can use for mobile, laptop and any other devices.

❖ **Reliability:**

The system can give unexpected results when we invisibly press keys. Reliability, on the other hand, refers to the fact that the system must provide services 24 hours a day, 7 days a week. So when we look at our system from this perspective as reliable as possible.

❖ **Flexibility:**

The system must be flexible. As if a customer can easily work with the system. The system is all information must be detailed.

❖ **Testability:**

The proposed system must be testable. Here can easily check all features. As if admin, designer and customer can easily work with the systems.

7.2 What Technology to be implemented:

In this peak period, various types of enhancements are used to improve platform performance. These advances have been made for so many reasons.

Client/ server application:

One of the innovations is the client or server application and web application. To keep clear records of clear standards exchange by organization or group. Client or server applications are used. This is very valuable for any organization. This application was selected by the client. Additionally, people can use this software on different devices in the same seconds. This software runs very fast with minimal security. Client/ server application are given below:

➢ It is first installed on the user's computer.
➢ In the meantime, it can't get too many users.
➢ Expensive.
➢ Robust

Web application:

Web applications are PC dependent and use the web application framework. The app will be ready to use another device in about the same seconds.

➢ This app does not require any other software to perform the basic functions.
➢ Absence of user constraints and ability to operate quickly.
➢ This app is located in the drive URL.
➢ No need for installation.
➢ Access easily.
➢ Faster works.

7.3 Recommendations and Justifications:

To find the best solution for the proposed system, we have previously discussed the different types of applications and responsibilities, as well as the main advantages of the proposed system. In contrast, a web server means that the web application is compatible with the system we offer. Access from anywhere via an internet connection, cost-effective, no need to install on any device, quick and easy updates, and much more. Therefore, it is clear that a web server application is best suited for the system we are proposing.

Chapter 8-Exploration

8.1 Old Full System Use Case:

The exploration section has shown the use case diagram, activity diagram and prototypes. The use case diagram can represent the full system. Here it can help to know about their website. Here can know about users work. The old system use case is given below:
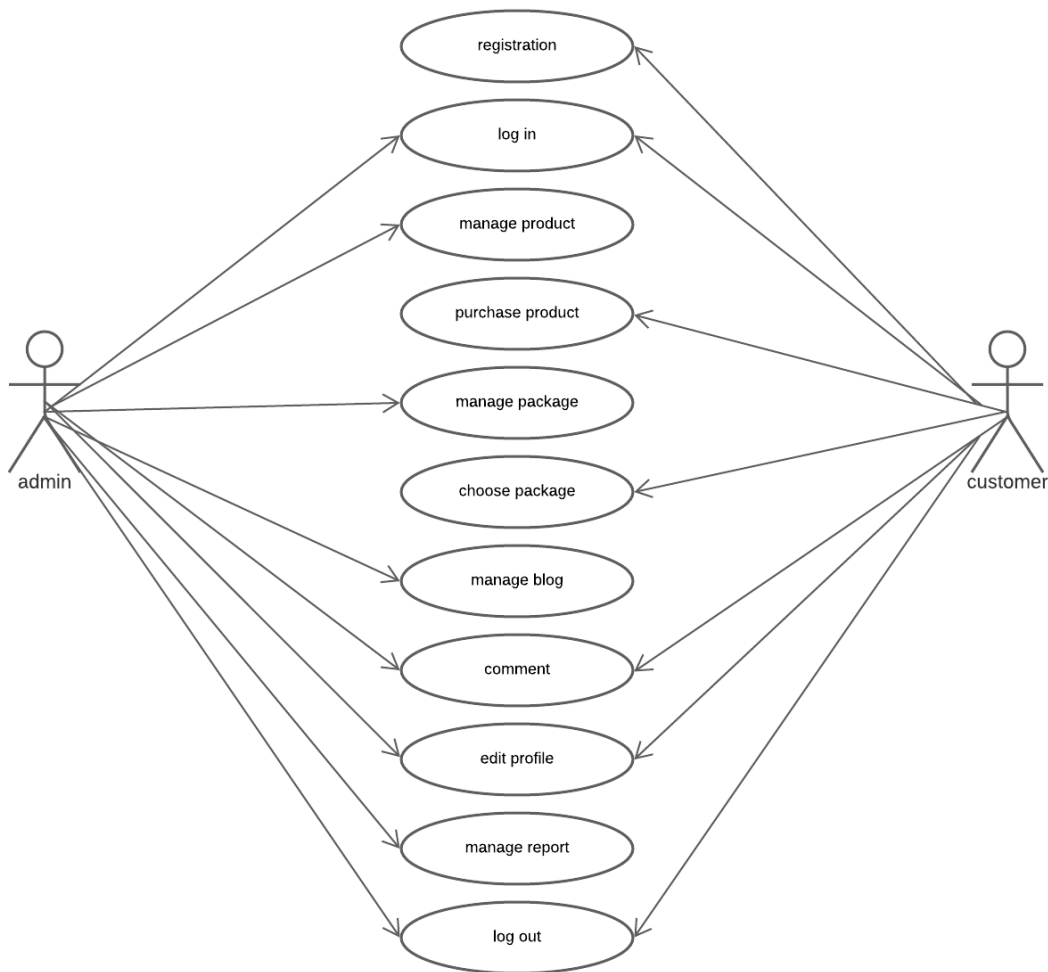
10This is the project old system use case diagram.

8.2 Old system full activity diagram:

Activity diagrams are great for shaping system workflows. It also captures the performance diagrams of these systems and describes the migration from one system to another. This particular usage is not available on other records. The activity diagram is visual work for the system. Here the old system activity diagram is given below:

Admin activity diagram:
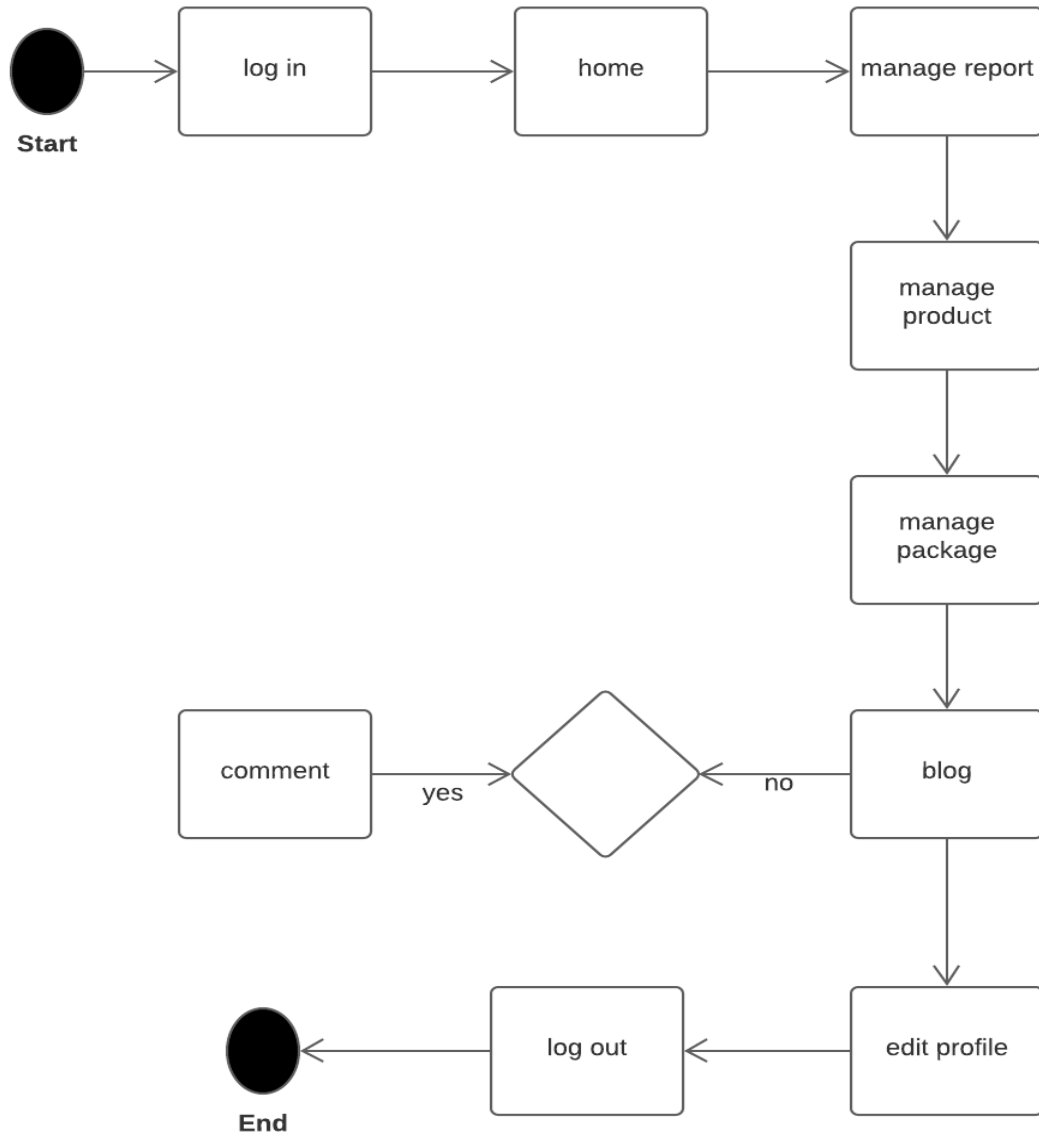
11 This is the project old system admin activity diagram.

Customer activity diagram:

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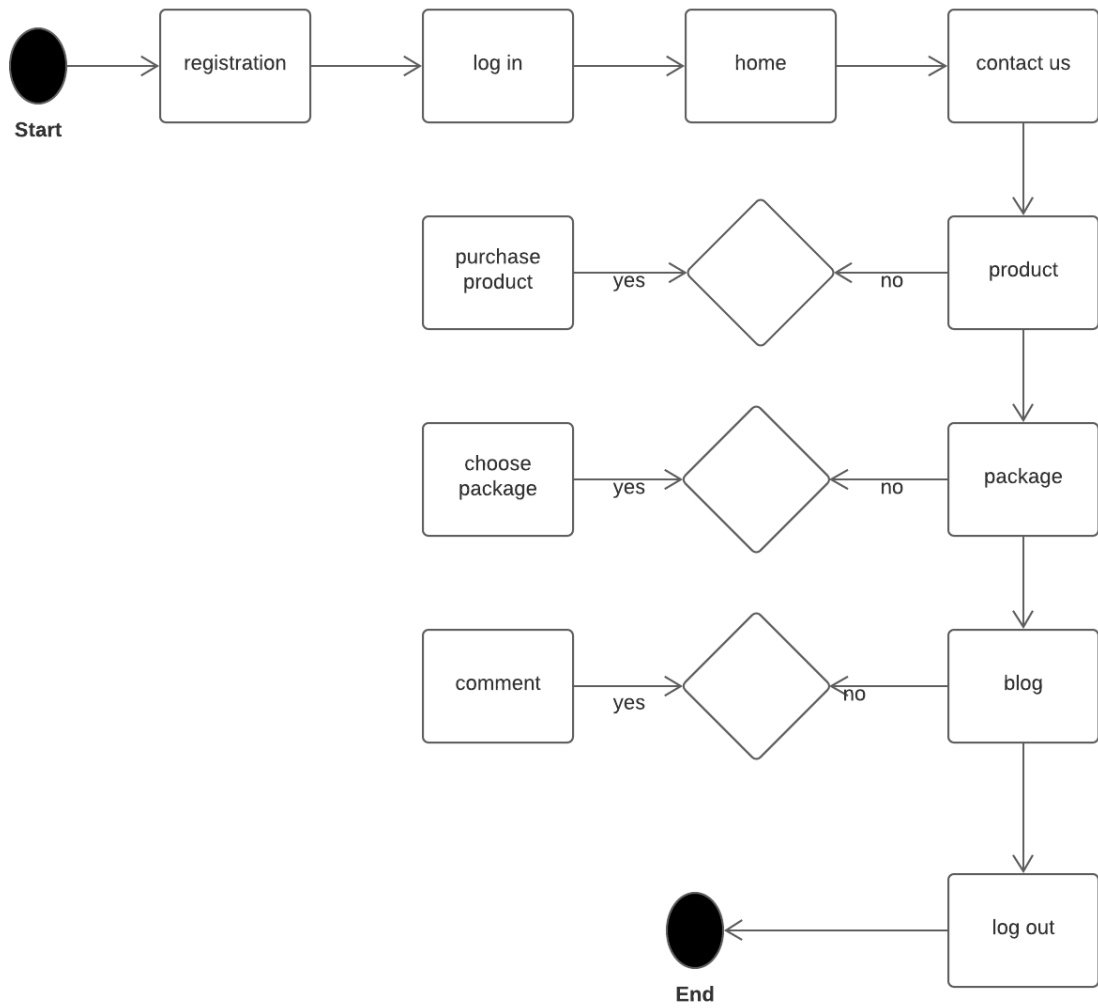
12This is the project old system customer activity diagram.

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8.3 Prioritized Requirement List (PRL):

MoSCow:

MoScow method is part of the Prioritized Requirement List. It works for software development, project management and business analysis. This will help you to prioritize services and understand needs.

Moscow means must have, Should have, could have and would have. Here MoSCow Features are given below:

SL Nu.	MoSCow	requirement
1	Must have	➢ Product order process. ➢ Search the product.
2	Should have	➢ Registration ➢ Login ➢ Choose package ➢ Reports generate ➢ Manage worker schedule ➢ Manage product ➢ Manage package ➢ Manage the order process ➢ Manage portfolio ➢ Manage blogs ➢ Manage contacts ➢ Comments
3	Could have	➢ Upload CV ➢ Like
4	Would Have	➢ Rating

8.4 Prototype of new system:

Before evaluating the benefits it must clearly explain what the process is a prototype. A prototype is a robust design model that is at the forefront of the development of the original design model. This is done to show not only the shape of the future website but also the map of the website, its relationship to the larger website. Prototyping is a method that aims to reduce the time required to create a website by focusing on key marketing elements. Here the new system prototype is given below:

13This is the home page prototype design.

14This is the product prototype design.

HOME   PRODUCT   PACKAGES   PORTFOLIO   BLOGS   INTERN   user

Our package

Our package:

Package details:

Book now

Our Package:

Package details:

Book now
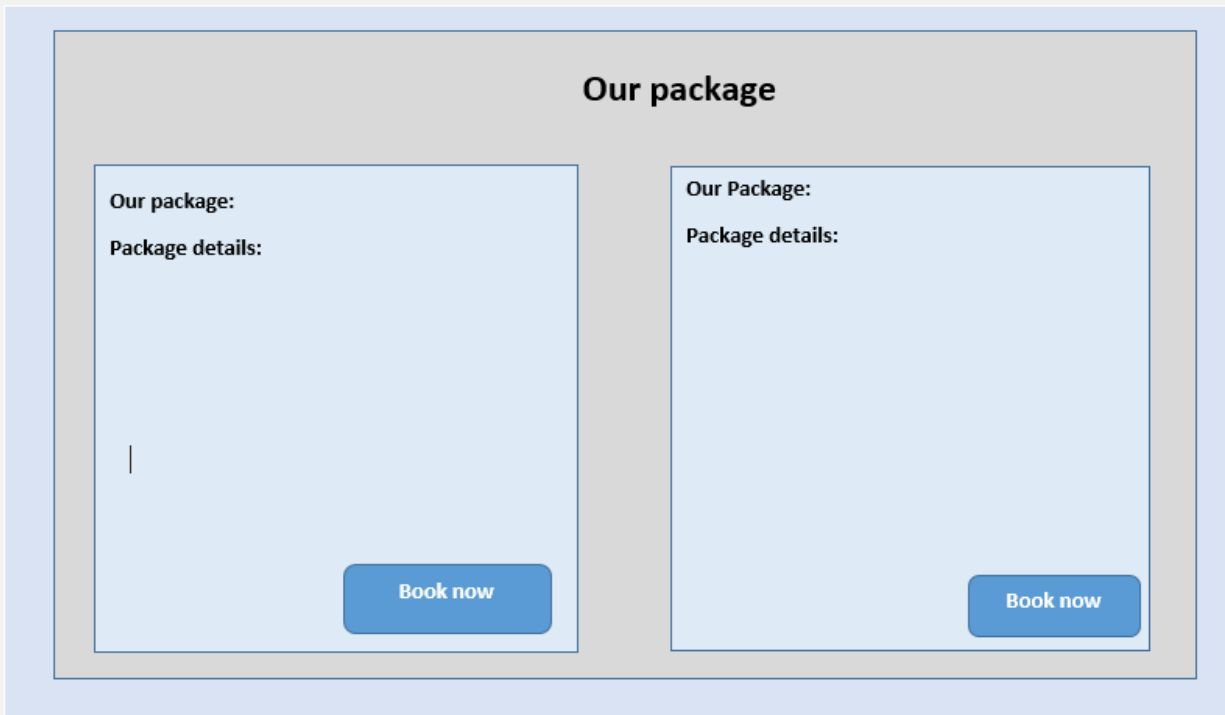
15This is package prototype design.

INTERIOR DESIGN

HOME   PRODUCT   PACKAGES   PORTFOLIO   BLOGS   INTERN   user

Product details   Your cart

Product name:

Product status:

Product price:

Quantity:

Enter Quantity

Add to cart

Rating
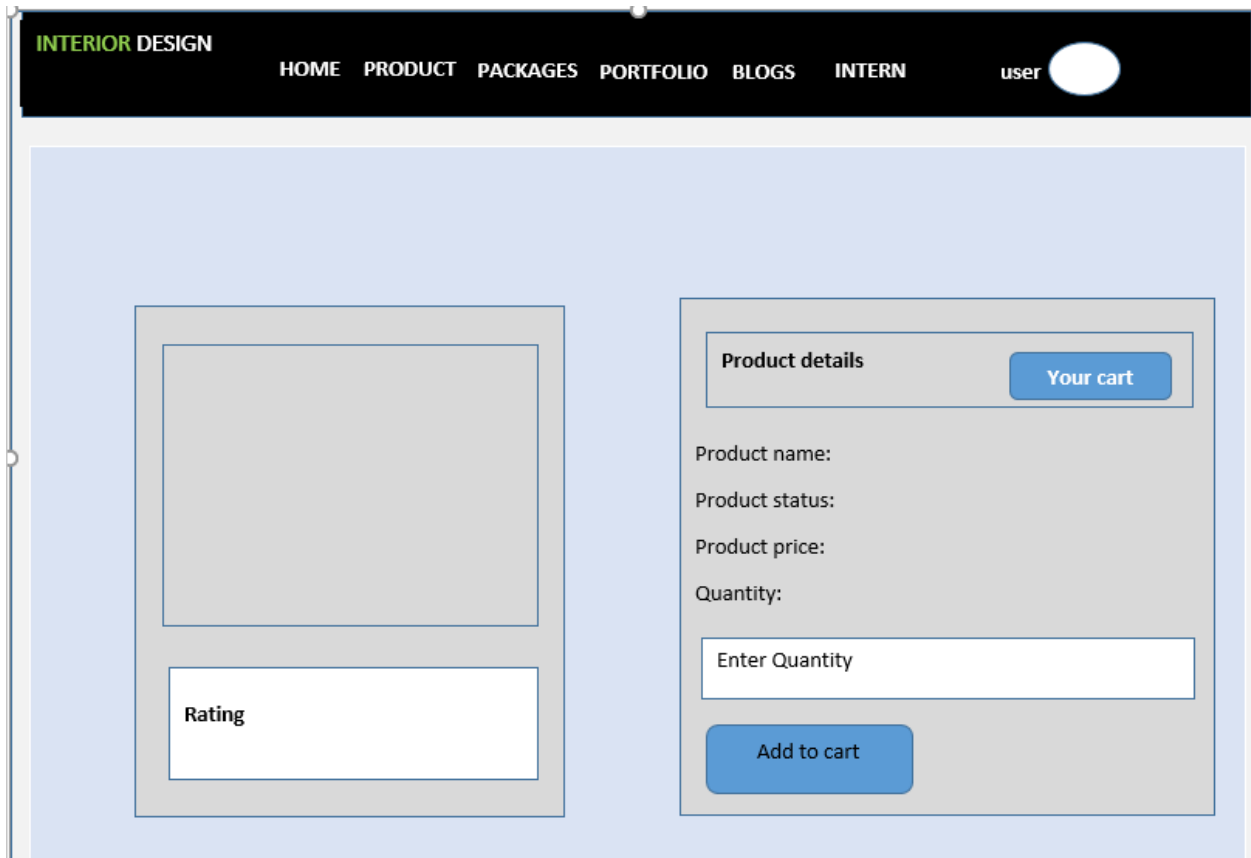
16This is the blog prototype design.
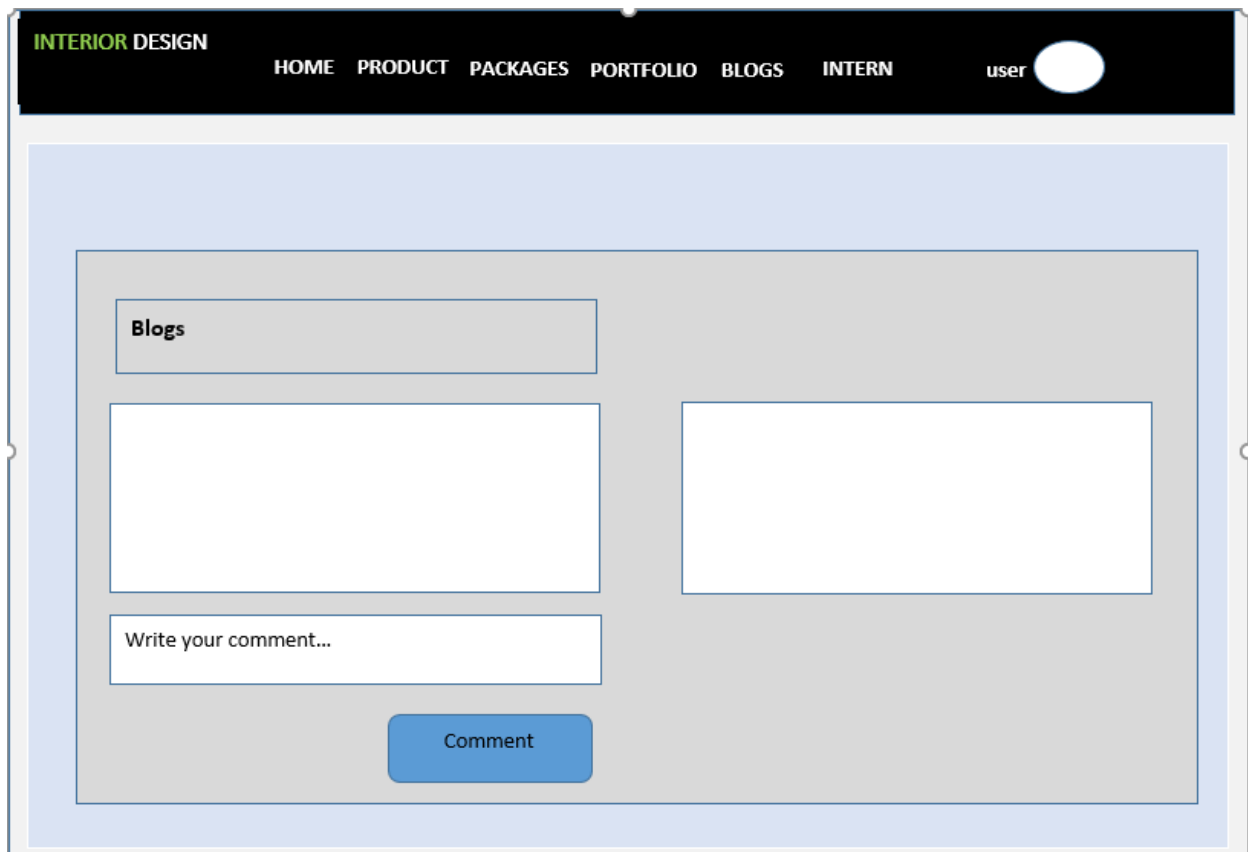
17This is the blog comment and like prototype design.

Chapter 9-Engineering

9.1 New System Modules:

The system I offer has a wide variety of modules depending on the needs of the users. The main trends and models of the proposed system are presented below. These modules provide the best feature of the new system and the unique capability of the new system.

9.2 New system Use case:

registration

log in

manage product

search product

purchase product

manage package

choose package

manage portfolio

show portfolio

manage blog

comment/like

manage work schedule

show work schedule

edit profile

manage report

rating

log out

admin
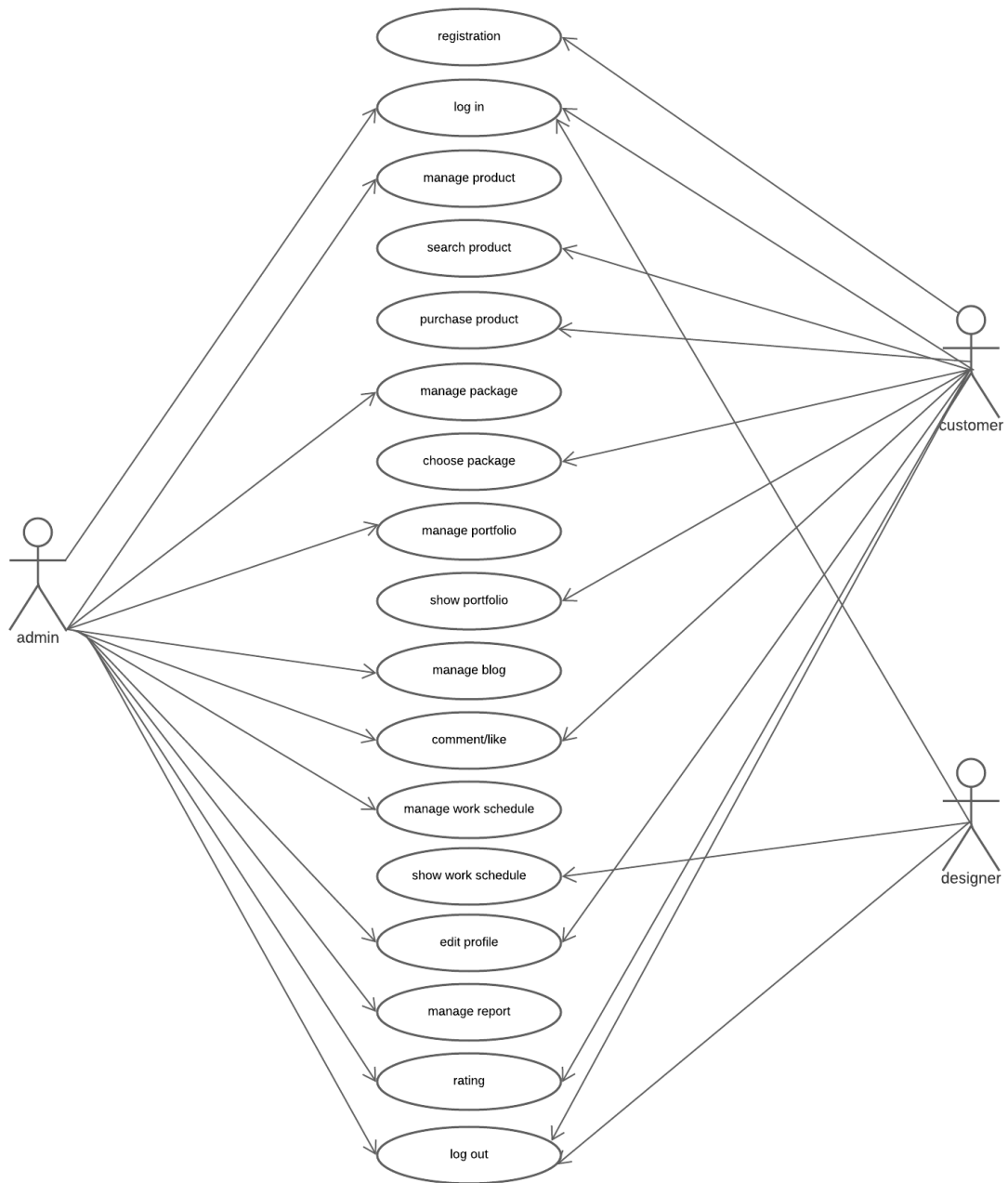
customer

designer

18This is the new system use case diagram.

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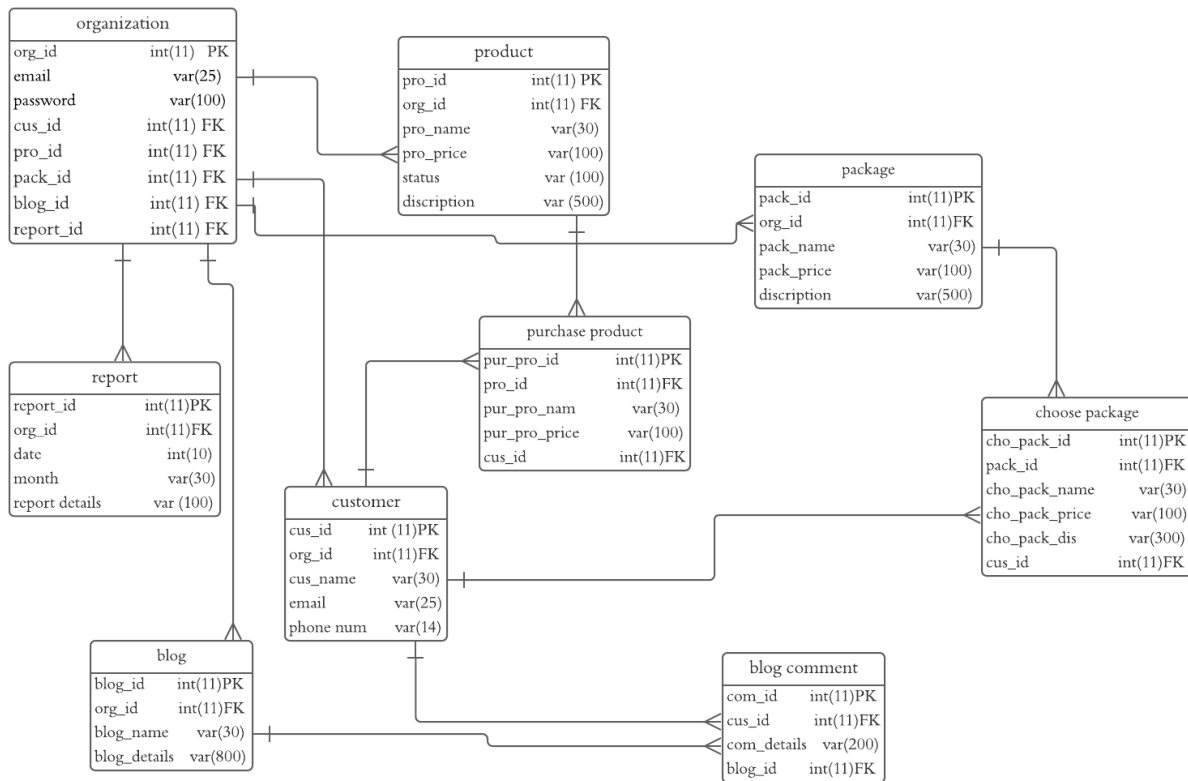
9.3 ERD Diagram:

19This is the project ERD diagram.

9.4 System Interface Design / Prototype:
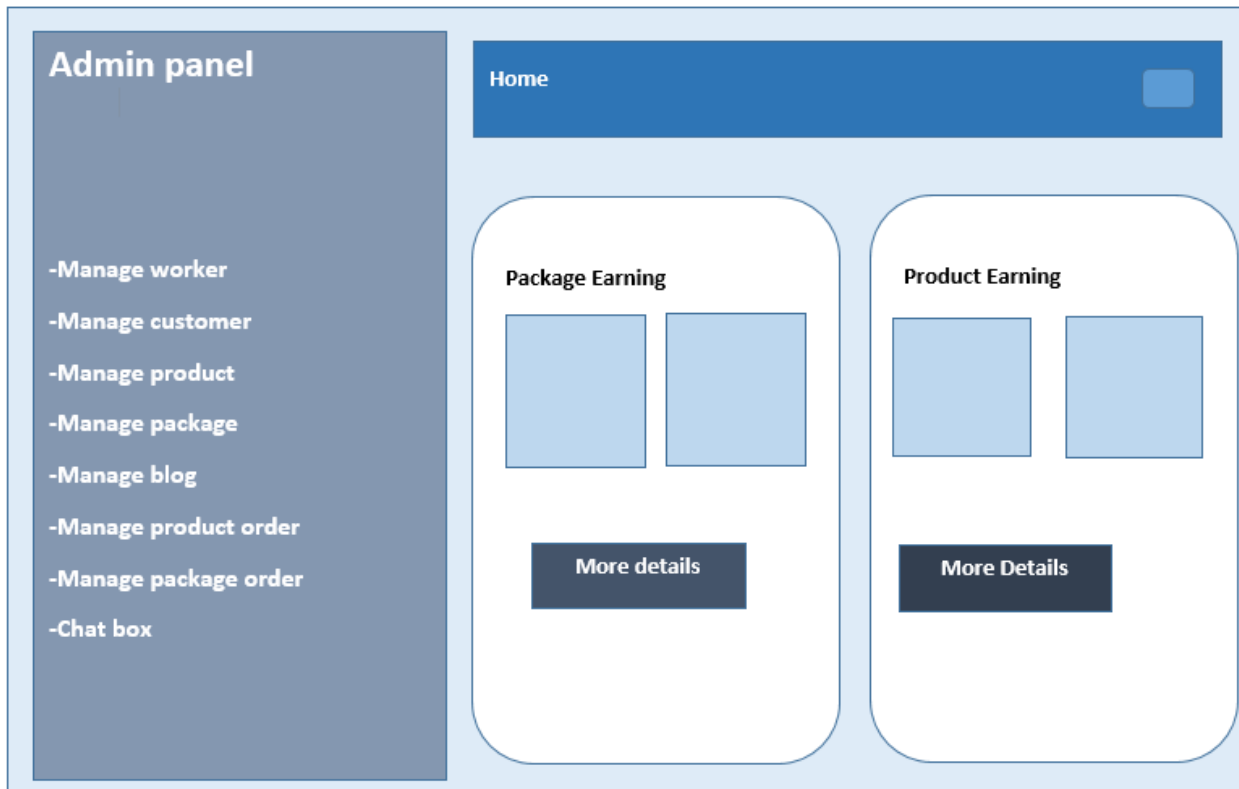
20This is the admin page prototype design.

21This is the manage blog prototype design.

22This is the package prototype design.

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23This is the manage blog prototype design.

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Admin panel

-Manage worker

-Manage customer

-Manage product

  ➢ Add product
  ➢ Manage product

-Manage package

-Manage blog

-Manage product order

-Manage package order

-Chat box

Add new product

All product

Product Name:

Status:

Product Price:

Product Images:

Product description:

Add product
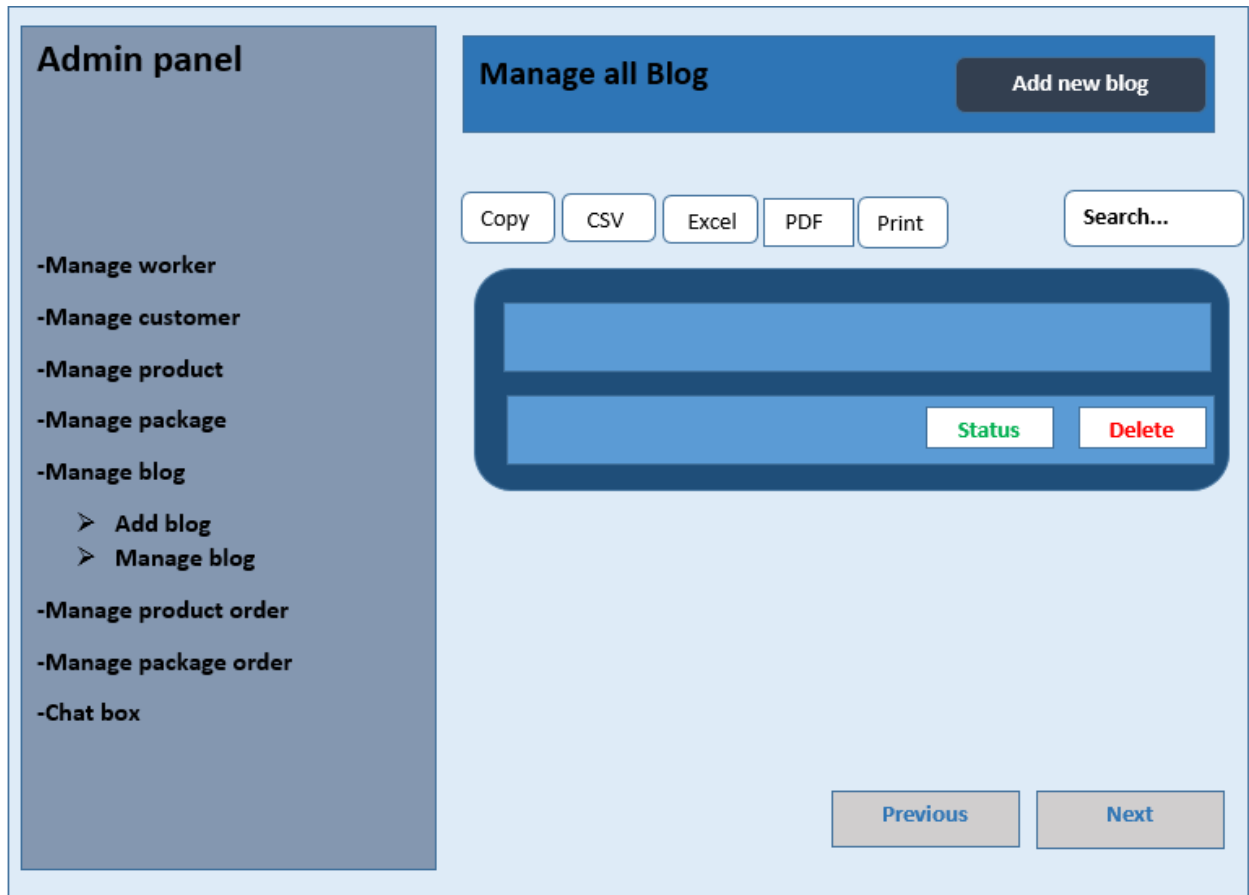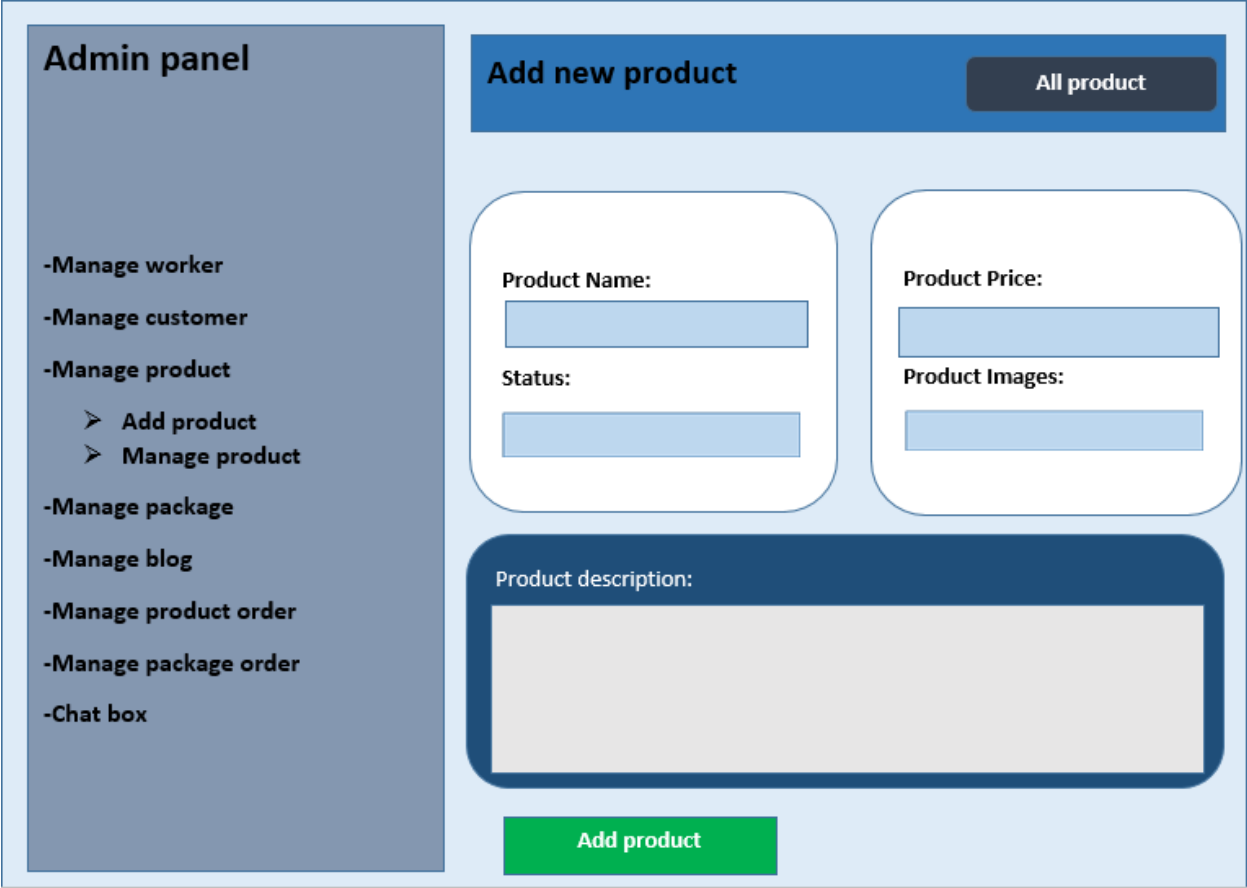
24This is the manage product prototype design.

Admin panel

Assign worker

-Manage worker

-Manage customer

-Manage product

-Manage package

-Manage blog

-Manage product order

-Manage package order

- ➤ Pending order
- ➤ Complete order
- ➤ Assign worker

-Chat box

Work comlete | + Assign worker
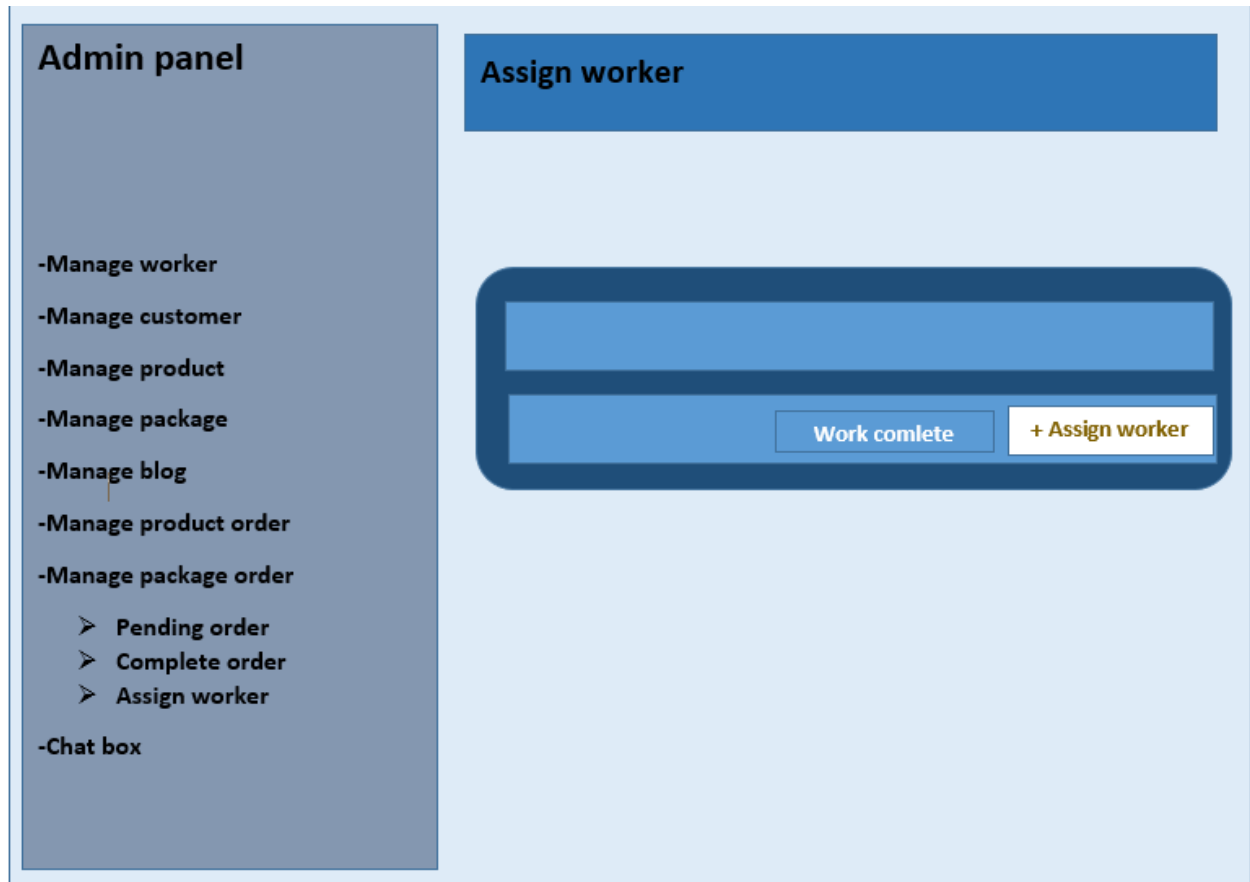
25This is the assign worker prototype design.

Admin panel

-Manage worker

-Manage customer

-Manage product

-Manage package

-Manage blog

-Manage product order

➢ Pending order
➢ Complete order

-Manage package order

-Chat box

All complete product order

| Copy | CSV | Excel | PDF | Print |

Search...

Deivered   view

Previous   Next
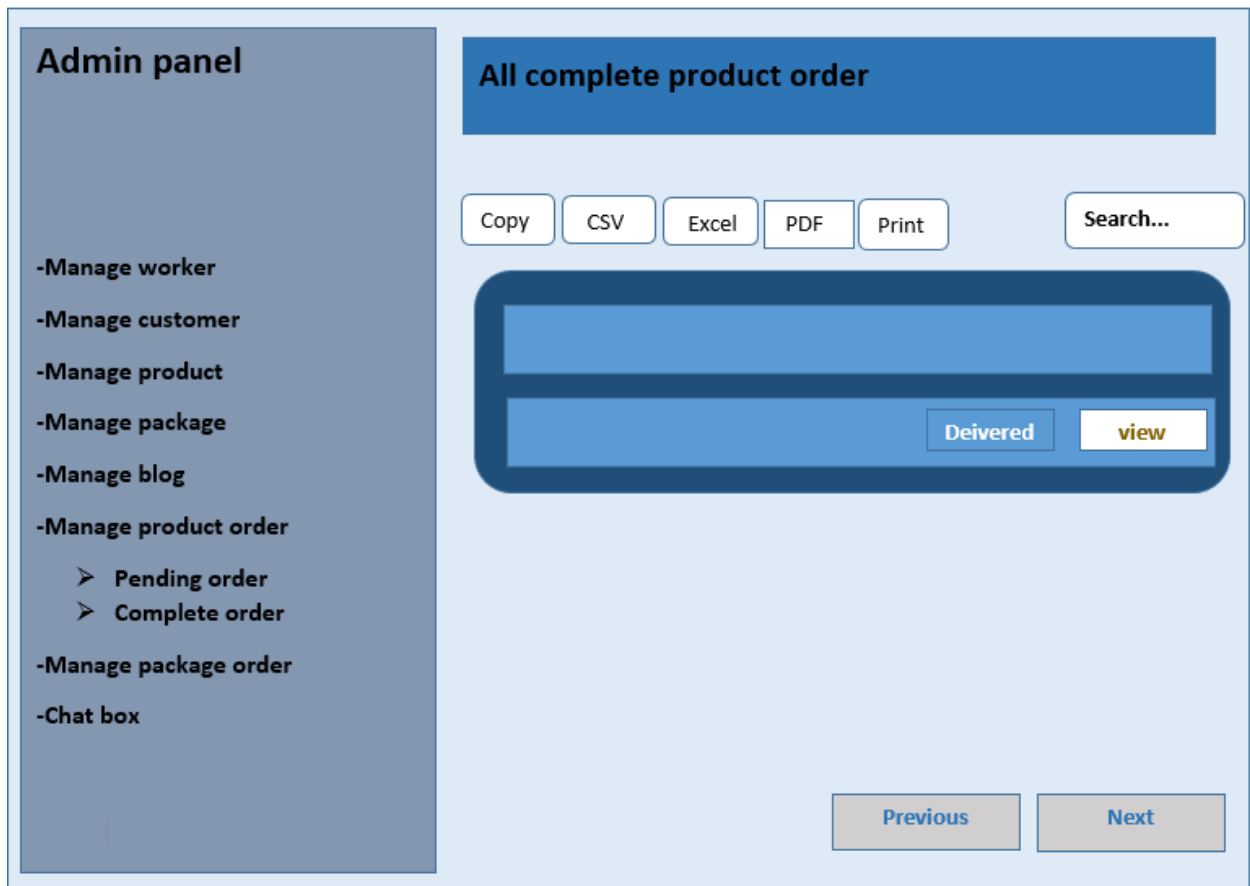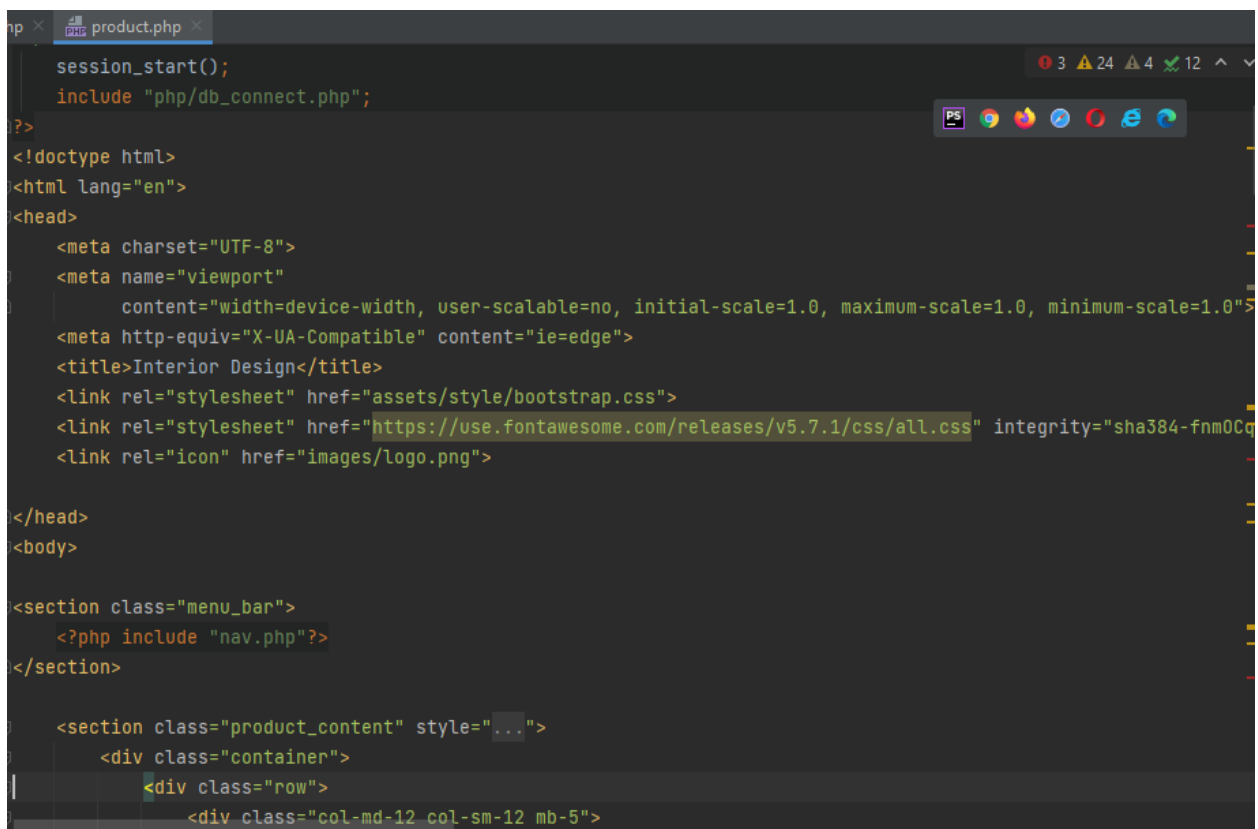
26 This is the order product prototype design.

Chapter 10-Deployment / Development

10.1 Core Module Coding Samples:

Deployment/development begins with this chapter once all analyzes have been completed. I divided my work into small and specific parts, and then it was very easy to develop all these tasks. To develop the suggested framework, I used the programming languages PHP, HTML, CSS, JavaScript, JQuery. Below are some examples of some of the codes:

Manage Products:

```php
session_start();
include "php/db_connect.php";
?>
<!doctype html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport"
          content="width=device-width, user-scalable=no, initial-scale=1.0, maximum-scale=1.0, minimum-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Interior Design</title>
    <link rel="stylesheet" href="assets/style/bootstrap.css">
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.1/css/all.css" integrity="sha384-fnmOCq
    <link rel="icon" href="images/logo.png">

</head>
<body>

<section class="menu_bar">
    <?php include "nav.php"?>
</section>

    <section class="product_content" style="...">
        <div class="container">
            <div class="row">
                <div class="col-md-12 col-sm-12 mb-5">
```

```php
<section class="product_content" style="...">
    <div class="container">
        <div class="row">
            <div class="col-md-12 col-sm-12 mb-5">
                <h3 class="text-center mt-5 mb-5">Our Products</h3>

                <div class="mt-4">
                    <?php
                    //search product and find search result
                        if (isset($_POST['search']))
                        {
                            $searchKey = $_POST['src'];
                            $sql_s = $connect->query( query: "SELECT * FROM products WHERE  (product_name LIKE

                            $rows = $sql_s->num_rows;

                        }
                    ?>
                    <form action="" method="post">
                        <div class="form-group input-group col-md-6 col-sm-12">
                            <input type="text" name="src" placeholder="Search Product Here..." class="form-cont
                                echo $_POST['src'];} ?>">
                            <button type="submit" name="search" class="btn btn-success"><i class="fa fa-search"
                        </div>
                    </form>
                </div>
```

html > body > section.product_content > div.container

```php
        if (isset($_POST['search'])== true) {
            if ($rows > 0) {
                while ($product_search = mysqli_fetch_assoc($sql_s)){?>
                    <div class="col-md-4 col-sm-12 float-left mt-4">
                        <div class="card">
                            <img src="images/<?php echo $product_search['product_image']?>" class="card-img-top" style
                            <div class="card-body">
                                <h5 class="text-center"><?php echo $product_search['product_name'];?>
                                    <sup>
                                        <span style="...">
                                            <?php
                                            $status = $product_search['status'];
                                            if (($status) == '0'){?>
                                                <label class="text-success">Available</label><?php
                                            }
                                            if (($status) == '1'){?>
                                                <label class="text-danger">Out Of Stock</label><?php
                                            }
                                            ?>
                                        </span>
                                    </sup>
                                </h5>
                                <p class="text-justify">
                                    <?php
                                    $product_id = $product_search['product_id'];
                                    $desc = $product_search['product_description'];
```

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```php
<?php
    $product_id = $product_search['product_id'];
    $desc = $product_search['product_description'];
    $strcut = substr($desc, offset: 0, length: 200);
    $desc = substr($strcut, offset: 0, strrpos($strcut, needle: ' ')).'....'.'<a href="single_product.php?product='.$pro
    echo $desc;
?>
<p>

<div class="text-center">
    <?php
    // get average
    $query = "SELECT ROUND(AVG(rating),1) as averageRating FROM product_rating WHERE postid=".$product_id;
    $avgresult = mysqli_query($connect,$query) or die(mysqli_error());
    $fetchAverage = mysqli_fetch_array($avgresult);
    $averageRating = $fetchAverage['averageRating'];

    $sql2 ="SELECT postid, COUNT(userid) AS USER FROM product_rating WHERE postid =  '$product_id'";
    $user = mysqli_query($connect, $sql2);
    $get_user = mysqli_fetch_assoc($user);

    if($averageRating <= 0){
        $averageRating = "No rating yet.";
    }
    ?>
    <label class="font-weight-bold text-center">Avarage Rating: </label><br/>
```

```php
    <?php
    // get average
    $query = "SELECT ROUND(AVG(rating),1) as averageRating FROM product_rating WHERE postid=".$product_
    $avgresult = mysqli_query($connect,$query) or die(mysqli_error());
    $fetchAverage = mysqli_fetch_array($avgresult);
    $averageRating = $fetchAverage['averageRating'];

    $sql2 ="SELECT postid, COUNT(userid) AS USER FROM product_rating WHERE postid =  '$product_id'";
    $user = mysqli_query($connect, $sql2);
    $get_user = mysqli_fetch_assoc($user);

    if($averageRating <= 0){
        $averageRating = "No rating yet.";
    }
    ?>
    <label class="font-weight-bold text-center">Avarage Rating: </label><br/>

    <span class="font-weight-bold " id='avgrating_<?php echo $postid; ?>'><?php echo $averageRating; ?
    </div>
</div>
<div class="card-footer border">
    <span class="font-weight-bold">Price: <?php echo $product_search['product_price'];?></span> <span class
</div>
</div>
</div>
```

```php
            <div class="text-center">
                <?php
                // get average
                $query = "SELECT ROUND(AVG(rating),1) as averageRating FROM product_rating WHERE postid=".$products['pr
                $avgresult = mysqli_query($connect,$query) or die(mysqli_error());
                $fetchAverage = mysqli_fetch_array($avgresult);
                $averageRating = $fetchAverage['averageRating'];

                $sql2 ="SELECT postid, COUNT(userid) AS USER FROM product_rating WHERE postid = '$products[product_id]
                $user = mysqli_query($connect, $sql2);
                $get_user = mysqli_fetch_assoc($user);

                if($averageRating <= 0){
                    $averageRating = "No rating yet.";
                }
                ?>
                <label class="font-weight-bold text-center">Avarage Rating: </label><br/>

                <span class="font-weight-bold " id='avgrating_<?php echo $postid; ?>'><?php echo $averageRating; ?> Bas
            </div>
        </div>
        <div class="card-footer border">
            <span class="font-weight-bold">Price: <?php echo $products['product_price'];?></span> <span class="float-ri
        </div>
    </div>
```

```html
<section class="fotter bg-dark">
    <div class="container">
        <div class="row">
            <div class="col-md-12 col-sm-12">
                <p class="text-center text-white pt-1" style="...">This site is Copy Wright By @<b> <i>Interior D
            </div>
        </div>
    </div>
</section>
<script src="assets/js/jquery.min.js"></script>
<script src="assets/js/bootstrap.js"></script>

</body>
</html>
```

27This is the manage product code.

10.2 Possible problem break down:

To enable the development process to be carried out, all the difficulties in the development process are divided into smaller problems. Very effective for creating

timelines and completing tasks over time. The system I recommend has many incredible features. The system must be broken. Other things, the development of the whole system will be difficult. Here the breakdown development process is as follows:

Create Database:

- ➢ Analysis of the system data.
- ➢ The system database create.
- ➢ Creates ERD.
- ➢ Identify the primary key and foreign key.
- ➢ Creates query.

Front-End designing:

- ➢ The prototype sketching on paper.
- ➢ Design with html, css, Javaskript and bootstrap.
- ➢ Link all the pages.
- ➢ Responsive to the system.

CRUD for the system:

- ➢ Adding product, update the product, delete the product.
- ➢ Adding packages, update packages, delete packages.
- ➢ Adding blogs, update blogs, delete blogs.

Admin management:

- ➢ Manage the reports.
- ➢ Manage the blogs.
- ➢ Manage the products.
- ➢ Manage the packages.
- ➢ Manage the portfolio.
- ➢ Manage the worker's schedule.
- ➢ Manage the chat box.
- ➢ Manage the intern CV.

Customer manage:

- ➢ Buy product.
- ➢ Order the product.
- ➢ Search the product
- ➢ Likes the blogs.
- ➢ Comment on blogs
- ➢ Choose the packages which they want.
- ➢ Show the portfolio
- ➢ Gives Rating
- ➢ Update profile

Designer Management:

- ➢ Show the work schedule
- ➢ Update profile

Chapter11-Testing

There is no choice but to look at the type of product. Further testing may be required during the next examination. This article provides detailed answers to the information and other methods. These sensors help detect errors in the system and improve stability and system performance.

11.1 Test case:

It describes the types of test case and testing. Testing is an important part of software development to ensure that all requirements are met. It is used to differentiate between actual results and expectations. There are many tests such as unit test, module test, integration test, acceptance test, security test etc. Examples of standards for each test case are set out below:

11.2 Unit Testing:

Unit testing is an essential part of any project. Here, unit tests will verify that the project code is working properly. The project examined reorganizations and improvements to improve quality. Here some unit testing example are given below:

Integration testing	Test class	Designed by A.H.M SHAREAR		
Data source:	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected Outcome	Actual Outcome
1.1	Here users fill up the registration form.	When the user fills the form then they can show a login successful massage.	Shows successful massage.	Shows a user profile.
1.2	Admin adds a new product.	Must be fill up all products form.	Here shown successfully added a new product.	Shows newly added product.

28This is the new user registration from.

29This is the user profile.
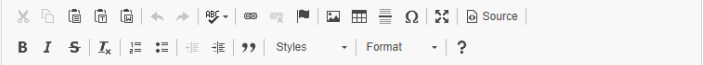
30Here adds the new product.

Our Recent Product's

Sufa Set Available

tetst description tetst description tetst description tetst....Read More

Avarage Rating:

3.0 Based on 1 user

Price: 10555

Add To Cart

table lamp Available

Read More

Avarage Rating:

No rating yet. Based on 0 user

Price: 7000

Add To Cart

31Here used add to cart for buy the product.

11.3 Module testing:

Modules testing are defined as rules, standards, classes, or types of software that analyze systems and programs. It is recommended that you test the small size of your internal system instead of testing all applications. The module testing results are as follows:

Module testing	Test class	Designed by A.H.M SHAREAR		
Data source:	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected Outcome	Actual Outcome
2.1	Enter product price.	Must be enter package price.	Shows a wrong massage.	Shows the actual massage.
2.2	Enter email.	Must be enter email.	Shows a wrong massage.	Shows the actual massage.
2.3	Enter the correct value.	Here enter valid information massage.	Shows a wrong massage.	Shows the actual massage.
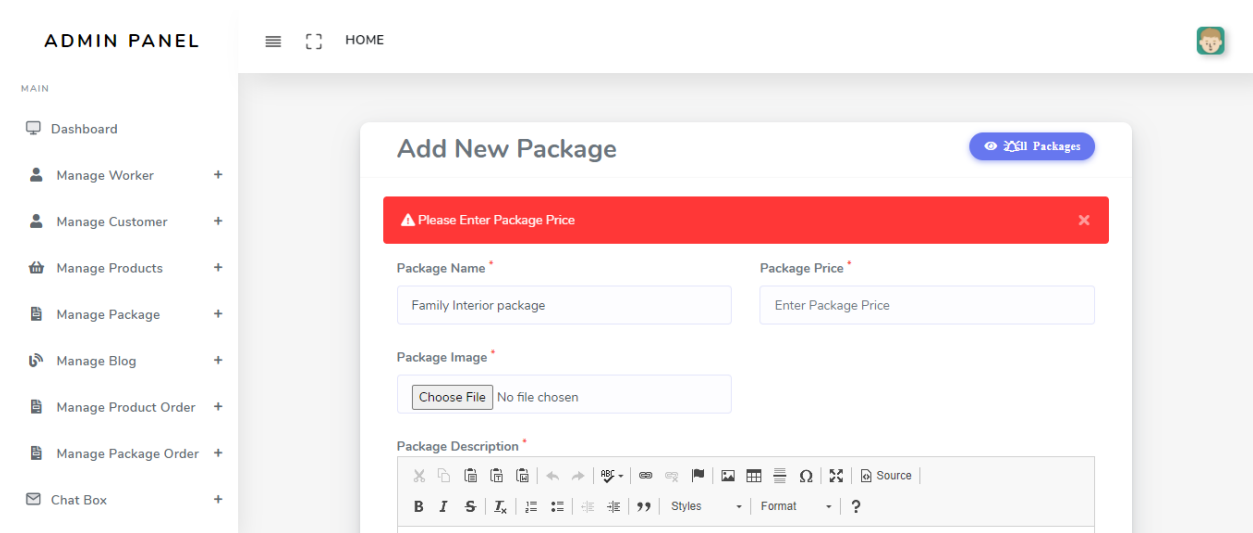
32Here shows massage for enter the package price.

33Here shows massage for enter the email.

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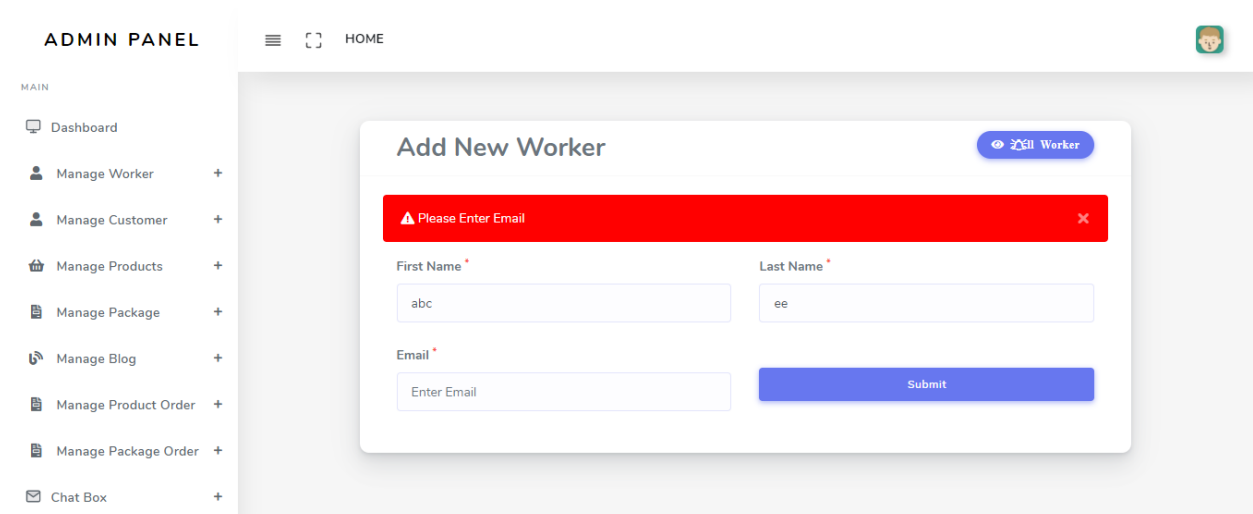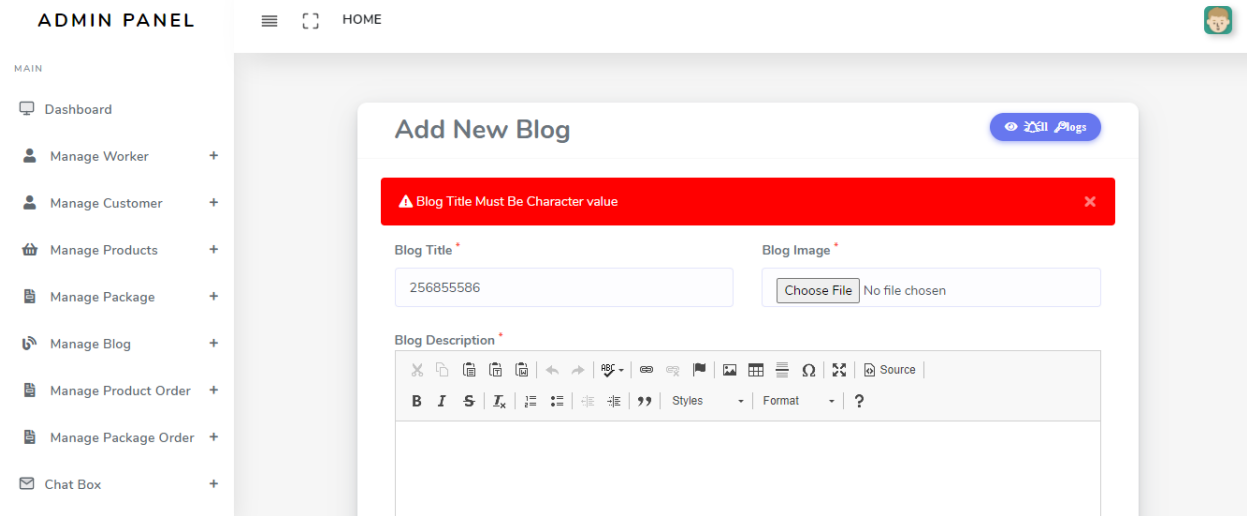
34Here shows massage for enter the blog details.

11.4 Integration Testing

Integrated testing works to validate small unit programs. The archive integration test is relevant because this test is designed to identify the following design problems: The following integration test is given below:

Integration testing	Test class	Designed by A.H.M SHAREAR		
Data source:	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected Outcome	Actual Outcome

3.1	Enter the right information.	Must enter email and right password.	Shows a wrong massage.	Shows the actual massage.
3.2	Purchases the product.	Must be login then they can purchase the product.	Shows login massage.	Shows the actual massage.
3.3	Here shows the product add cart massage successfully.	Must add the product for the purchases and use add cart.	Shows the product add cart massage successfully.	Shows successful massage.
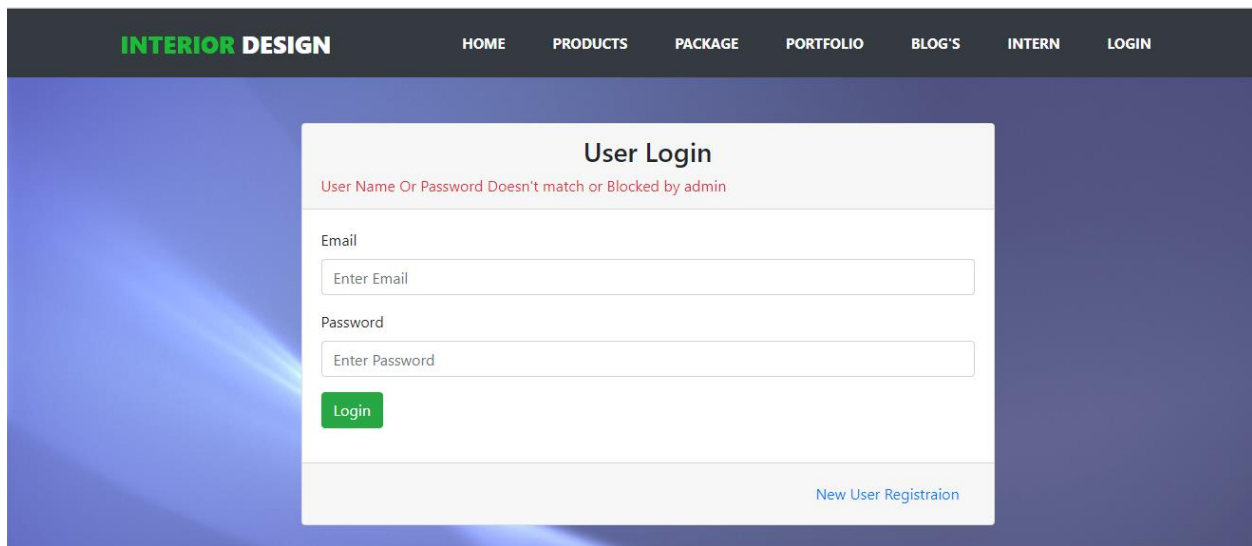
35Here shows massage for enter the wrong details.

36Here shows massage for login.

37Here shows the used add to cart option for buy the product.

Chapter 12-Implementation

12.1 Training:

An important element of development is training. To keep up with the system and user training. It needs to apply through training for system users. Consumers can easily understand the system and navigate it through training. Here some training types are given below:

SL No	User	Training sector	Duration	Comment
1	Admin	Create/ edit/ delete/ read (Product/ package)	1.5 hour	Here admin can easily understand maintains the product or package.
2		Checks reports	30 min	Here admin can understand how to check the reports.
3		Order process	30 min	Here admin can understand how to manage the order process.
4		Blogs	30 min	Understands the blogging process
5		Manage schedule	40 min	Understands the designer schedule process.

6		Manage customers	30 min	Understands how to manage customers.
7		Comments	20 min	Understands how to comments on any blogs.

12.2 Big bang:

In particular, it works to shut down an existing system and open up a new system. The earliest option. After completing the test, install the new system. It takes a long time to send information from the old system to the new one. It can also be dangerous because information could be lost or destroyed by the new system. It is about managing the page.

➢ **Pilot:**

This is the process of implementing the system for testing purposes. In the process, some organizations have executed the agreement after a certain period of time, and if all aspects of the system work well, the final installation of the system will be performed.

➢ **Parallel:**

This is a systematic approach to the old system, and the old system acts as a backup of the new operating system.

12.3 Recommended implementation process

I think it's possible to set the stage for a pilot project because it's a process of implementing the system in many parts of the organization for the purpose of a pilot project. If all the functions in the system are working properly, the system will be finally activated for use.

Chapter 13-Critical Appraisal and Evaluation

In this section, I have discussed critical analysis. The percentage of successful and unsuccessful projects is discussed here. Must be satisfied. This part requirement not met and discussion about here. Further project development, potential guidance I must meet the requirements I have assessed in this area.

13.1 – Objective that could be met

Objectives that have been successfully implemented in the project through expansion called "objective met" have been achieved.

13.1.1 Success rate against each objective

Success rate against each objective has three parts which are given below:

- ➢ Academic objectives
- ➢ Business objectives
- ➢ Personal objectives

Academic objectives:

- The system must be user-friendly.
- Whether the appropriate methodology is used for this system
- Feasibility study
- Risk assessment
- Database design and development
- Analyze and document properly to create a complete system
- Must be Standard documentation for everyone
- Must be understandable documentation for everyone

Business objectives:

- Must be easy.
- Must be a proper view.
- Product purchase.
- Product sale
- Show reports.
- Must show product status.
- Manage the order process.

Personal objectives:

- Must be system validation.
- Must be system verification.
- Must be secure the system
- Robust
- Must be error-free.
- Proper documentation.

13.1.2 How much better could have been done:

- Live chat option.
- If a designer could update their own portfolio.
- Overall rating.
- Contacts email with customers

13.1.3 How better is the features of the solution?

- Responsive to the whole system.
- Absolutely it should be completely
- Must be efficient and smooth
- Must have performance parameters

- Choices should have options to take care of it easy
- The whole system secured.

3.1.4 Which features couldn't be touched

- Rating on the product
- Designer works schedule
- Setting budget range

Chapter 14-Conclusion

14.1 Summary of the project

I created an "Interior Design Management System" to simplify the interior system. A system of the interior management system is not good here. The main goal of my project is to build an Interior management system that will make it easy to manage an organization. I use PHP for software development. I use HTML, CSS to design my web project. I'm using the PHP language. Because it is open and easy to use in PHP. PHP is a full-featured, service-based writing language designed for a variety of browsers and applications. As an expert in PHP website development, it is safe, fast and reliable, and offers many other features that make it accessible to many people. Consider what makes PHP the most widely used programming language for business websites. There are many benefits to using PHP. That's why I use PHP to upgrade my system.

14.2 Goal of the project

The main goal of this Interior design management is a web-based system. First, the organization has followed the paper-based systems. Here admin can face many difficulties. Admin can't focus on their goal. He can't manage their product. These reasons organization wants to online-based works. They want all procedure must be an online platform. It can save them time. Here all product can easily manage. Here admin can show their monthly reports. Customer can purchase their product and search for any product. Here admin manages all organization things. The online management system can ease our life. So I prefer the interior design management system must be followed by dynamic ways.

14.3 My experience:

After doing the work, I learned a lot about how to collect data, how to complete tasks in a timely manner, how to solve problems and overcome them. It was hard for me to open everything by hand, but it was a good opportunity for me to use it to my advantage. I met all the costs and time. I hope you find this information about this project very useful for my future work. I want to thank the Almighty for giving me strength and mind, as well as the heart of my process for his great support.

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Appendices:

Test Scripts

Requirements Catalogue:

Admin:

- ✓ home
- ✓ manage product
- ✓ manage order product
- ✓ manage package
- ✓ manage order package
- ✓ manage portfolio
- ✓ manage blog
- ✓ manage reports
- ✓ manage user profile
- ✓ manage worker schedule
- ✓ chat box
- ✓ cv

User:

- ✓ registration/login
- ✓ update profile
- ✓ product order
- ✓ choose package
- ✓ shows portfolio
- ✓ intern cv drop
- ✓ shows blog
- ✓ like/comment
- ✓ search product
- ✓ chat box
- ✓ shows worker profile
- ✓ rating

Worker:

- ✓ login
- ✓ shows work schedule

Use case description:

Unit test	Test class	Designed by A.H.M SHAREAR		
Data source: Admin login	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected Outcome	Actual Outcome
1	Login form fill-up.	User name: admin@gmail.com Password: admin	Login successful.	Login successful.

Unit test	Test class	Designed by A.H.M SHAREAR		
Data source: Admin login	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected Outcome	Actual Outcome
2	Login form fill-up.	User name: porag123@gmail.com Password: porag	Login successful.	Login successful.

Unit test	Test class	Designed by A.H.M SHAREAR		
Data source: Admin login	Object: Test case functionality	Tested by: A.H.M SHAREAR		
Test case:	Testing Description	Tasks	Expected	Actual

			Outcome	Outcome
3	Login form fill-up.	User name: x@worker.bd Password: 1234	Login successful.	Login successful.

User Guide

Manage worker

- ✓ Add worker schedule
- ✓ Manage worker schedule
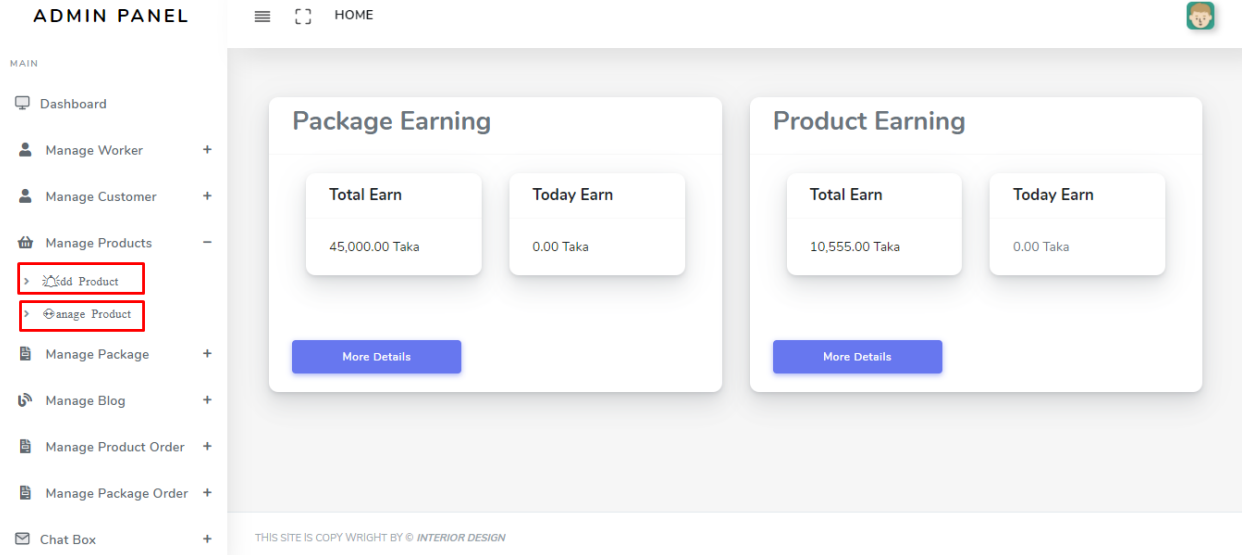
Manage product

- ✓ Add product
- ✓ Manage product
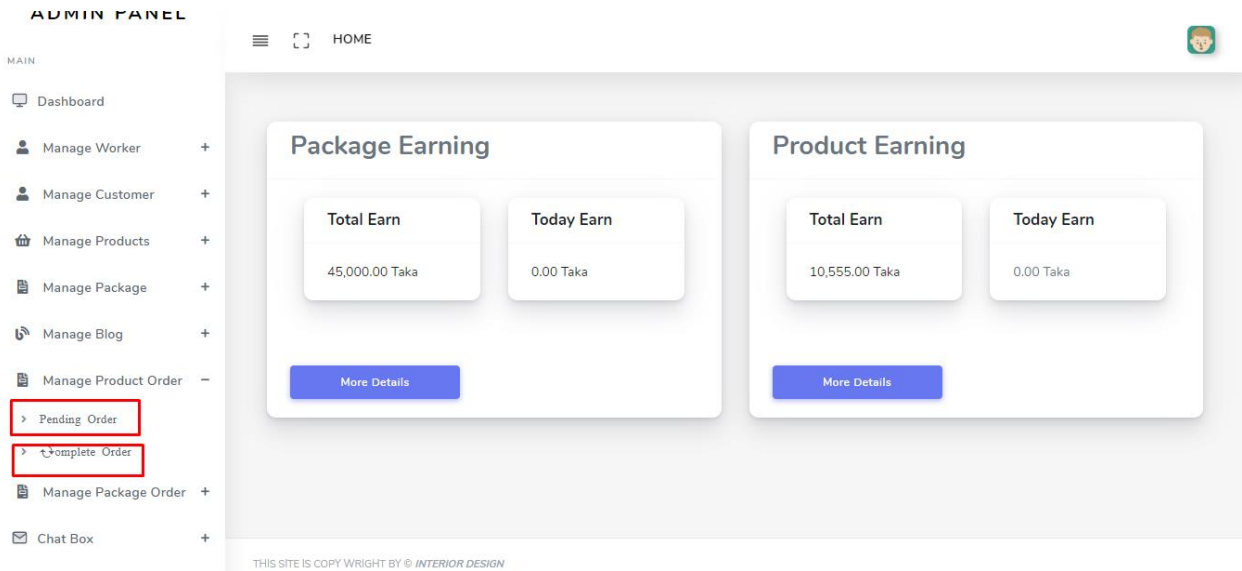
Manage product order

- ✓ Pending order
- ✓ Complete order
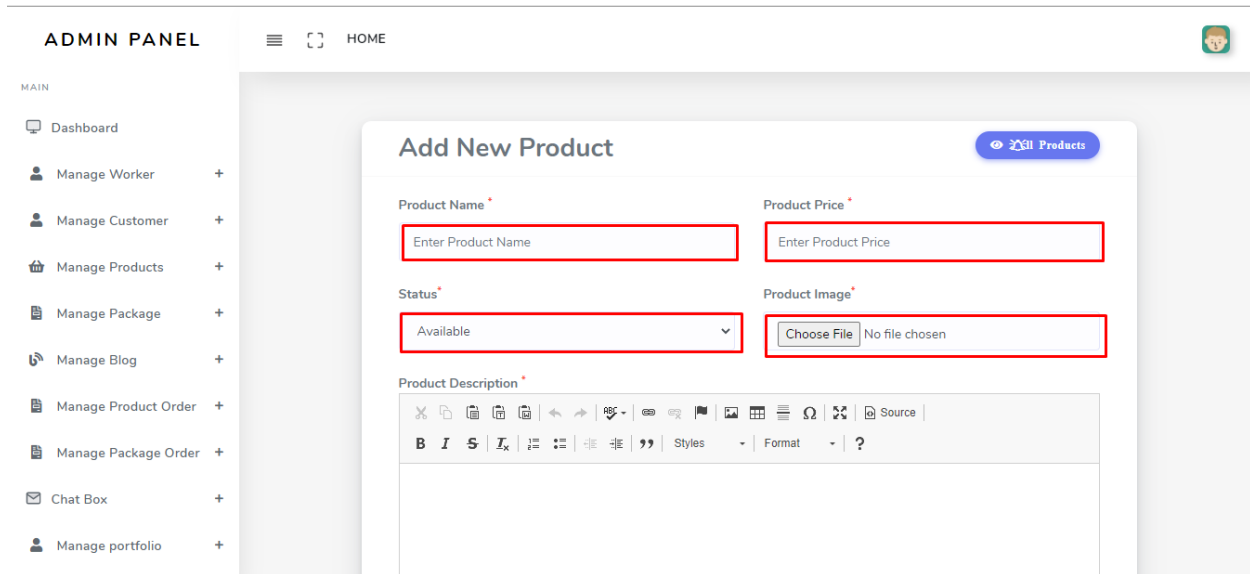
Add new product

✓ Enter product name
✓ Enter product price
✓ Enter status
✓ Upload images
✓ Product description

Search product
✓ Enter product name

Reports

✓ Check reports

Search

✓ Select month for reports

System Code

Figure 1.1: Database connection

```php
</style>
<body class="back_image">



<section class="menu_bar">
    <?php include "nav.php"?>
</section>

    <div class="container">
        <div class="row">
            <div class="col-md-8 mx-auto mt-5 mb-5">
                <div class="card mt-5">
                    <div class="card-header">
                        <h3 class="text-center">User Login</h3>
                        <?php

                        //global variable
                        global  $connect;

                        //login system
                        if (isset($_POST['btn'])) {
                            $email = $_POST['email'];
                            $password = $_POST['password'];
```

```php
                            $has = hash( algo: 'md5', $password); //hash password to md5
                            if ($email == ''){
                                echo "<span class='text-danger'>Please Enter Email</span><br/>";
                            } elseif ($password == ''){
                                echo "<span class='text-danger'>Please Enter Password</span><br/>";
                            }else{

                                $sql = "SELECT * FROM users WHERE email = '$email' AND password = '$has' AND status =

                                $result = mysqli_query($connect, $sql);

                                //check user exist or not
                                if (mysqli_num_rows($result) > 0) {
                                    $data = mysqli_fetch_assoc($result);

                                    if ($data['role'] == 'user') {
                                        $_SESSION['user'] = $data['email'];
                                        echo "<script>document.location.href='users/index.php'</script>";
                                    } elseif ($data['role'] == 'admin') {
                                        $_SESSION['admin'] = $data['email'];
                                        echo "<script>document.location.href='admin/index.php'</script>";
                                    } elseif ($data['role'] == 'worker') {
                                        $_SESSION['worker'] = $data['email'];
                                        echo "<script>document.location.href='worker/index.php'</script>";
                                    }
```

```php
                                    }
                            }else {
                                echo "<span class='text-danger'>User Name Or Password Doesn't match or Blocked b
                            }
                        }
                    }
                    ?>
                </div>
                <div class="card-body">
                    <form action="" method="post">
                        <div class="form-group">
                            <label>Email</label>
                            <input type="email" name="email" placeholder="Enter Email" class="form-control">
                        </div>
                        <div class="form-group">
                            <label>Password</label>
                            <input type="password" name="password" placeholder="Enter Password" class="form-cont
                        </div>
                        <div class="form-group">
                            <input type="submit" name="btn" value="Login" class="btn btn-success">
                        </div>
                    </form>
                </div>
                <div class="card-footer">
                    <div>
```

```php
                <div class="card-footer">
                    <div>
                        <a href="registration.php" class="nav-link float-right">New User Registraion</> </a>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div>
<section class="fotter bg-dark">
    <div class="container">
        <div class="row">
            <div class="col-md-12 col-sm-12">
                <p class="text-center text-white pt-1" style="...">This site is Copy Wright By @<b> <i>Interior Des
            </div>
        </div>
    </div>
</section>

    <script src="assets/js/jquery.min.js"></script>

    <script src="assets/js/bootstrap.js"></script>
</body>
```

Figure 1.2: login code


```php
<?php include "layouts/header.php";?>
<body>
<div class="loader"></div>
<div id="app">
    <div class="main-wrapper main-wrapper-1">
        <div class="navbar-bg"></div>
        <nav class="navbar navbar-expand-lg main-navbar sticky">
            <?php include "layouts/nav_bar.php"?>
        </nav>
        <div class="main-sidebar sidebar-style-2">
            <?php include "layouts/side_bar.php"?>
        </div>
        <!-- Main Content -->
        <div class="main-content">
            <section class="section">
                <div class="section-body">
                    <div class="col-md-12 col-sm-12 mt-5 mb-5">
                        <div class="card">
                            <div class="card-header">
                                <h3>Assign Worker</h3>
                            </div>
                            <div class="card-body">
                                <?php
                                if(isset($_SESSION['error'])){
                                    echo "
```

```php
25              echo "
26                          <div class='alert alert-danger alert-dismissible'>
27                            <button type='button' class='close' data-dismiss='alert' aria-hidden=
28                            <h4><i class='icon fa fa-warning'></i> Error!</h4>
29                            ".$_SESSION['error']."
30                          </div>
31                        ";
32                    unset($_SESSION['error']);
33                  }
34                  if(isset($_SESSION['success'])){
35              echo "
36                          <div class='alert alert-success alert-dismissible'>
37                            <button type='button' class='close' data-dismiss='alert' aria-hidden='tru
38                            <h4><i class='icon fa fa-check'></i> Success!</h4>
39                            ".$_SESSION['success']."
40                          </div>
41                        ";
42                    unset($_SESSION['success']);
43                  }
44                  ?>
45                  <div class="table-responsive">
46                      <table class="table table-bordered">
47                          <thead>
48                              <tr class="text-center">
49                                  <th>#</th>
50                                  <th>Package Name</th>
```

```php
45      <div class="table-responsive">
46          <table class="table table-bordered">
47              <thead>
48                  <tr class="text-center">
49                      <th>#</th>
50                      <th>Package Name</th>
51                      <th>Customer Name</th>
52                      <th>Invoice Number</th>
53                      <th>Order Status</th>
54                      <th>Assign Now</th>
55                  </tr>
56              </thead>
57              <tbody>
58              <?php
59
60              $i= 1;
61              $get_all_package = $connect->query( query: "SELECT * FROM users, packages, package_book WHERE package_book.p
62
63              while ($row = mysqli_fetch_assoc($get_all_package)){?>
64
65                  <?php
66                  if ($row['status'] >= '2'){?>
67                  <tr class="text-center">
68                      <td><?php echo $i++;?></td>
69                      <td class="text-capitalize"><?php echo $row['package_name'];?></td>
70                      <td class="text-capitalize"><?php echo $row['first_name'].' '.$row['last_name'];?></td>
```

Figure 1.3: Assign worker schedule

Figure 1.4: Chat

Figure 1.5: Product invoice

```php
if (isset($_GET['package']))
{
    $package_id = $_GET['package'];

    $sql = "DELETE FROM packages WHERE package_id = '$package_id'";
    $res = mysqli_query($connect, $sql);

    $_SESSION['success'] = 'Package Deleted successfully';
    header( header: 'Location: manage_package.php');
}
```

Figure 1.6: Delete package

```html
?>
<form action="" method="post">
    <div class="form-group input-group col-md-5 float-right">
        <select name="src" class="form-control">
            <option>------Select Month-------</option>
            <option value="1">January</option>
            <option value="2">February</option>
            <option value="3">March</option>
            <option value="4">April</option>
            <option value="5">May</option>
            <option value="6">June</option>
            <option value="7">July</option>
            <option value="8">August</option>
            <option value="9">September</option>
            <option value="10">October</option>
            <option value="11">November</option>
            <option value="12">December</option>
        </select>
        <button type="submit" class="btn btn-info" name="search" value="Submit"><i class="fa fa-search"></i> Sear
    </div>
</form>
```

Figure 1.7: Search month for shows product monthly reports

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```
<section class="menu_bar">
    <?php include "nav.php"?>
</section>


    <div class="container">
        <div class="row">
            <div class="col-md-8 mx-auto">
                <div class="card" style="...">
                    <div class="card-header bg-info">
                        <h3 class="text-center text-uppercase text-white">Internship Area</h3>
                    </div>
                    <div class="card-body">
                        <div>
                            <h5>Please Login First.... <span class="float-right"><a href="login.php" class="text-de
                            <p class="text-center">
                                <img src="images/restriction.jpg" style="...">
                            </p>
                            <h5 class="text-center">
                                Access Restriction For Guest User...
                            </h5>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div>
```

Figure 1.8: Intern

```
?php
  if (isset($_POST['search'])== true) {
      if ($rows > 0) {
          while ($product_search = mysqli_fetch_assoc($sql_s)){?>
              <div class="col-md-4 col-sm-12 float-left mt-4">
                  <div class="card">
                      <img src="images/<?php echo $product_search['product_image']?>" class="card-img-top" style="
                      <div class="card-body">
                          <h5 class="text-center"><?php echo $product_search['product_name'];?>
                              <sup>
                                  <span style="...">
                                      <?php
                                      $status = $product_search['status'];
                                      if (($status) == '0'){?>
                                          <label class="text-success">Available</label><?php
                                      }
                                      if (($status) == '1'){?>
                                          <label class="text-danger">Out Of Stock</label><?php
                                      }
                                      ?>
                                  </span>
```
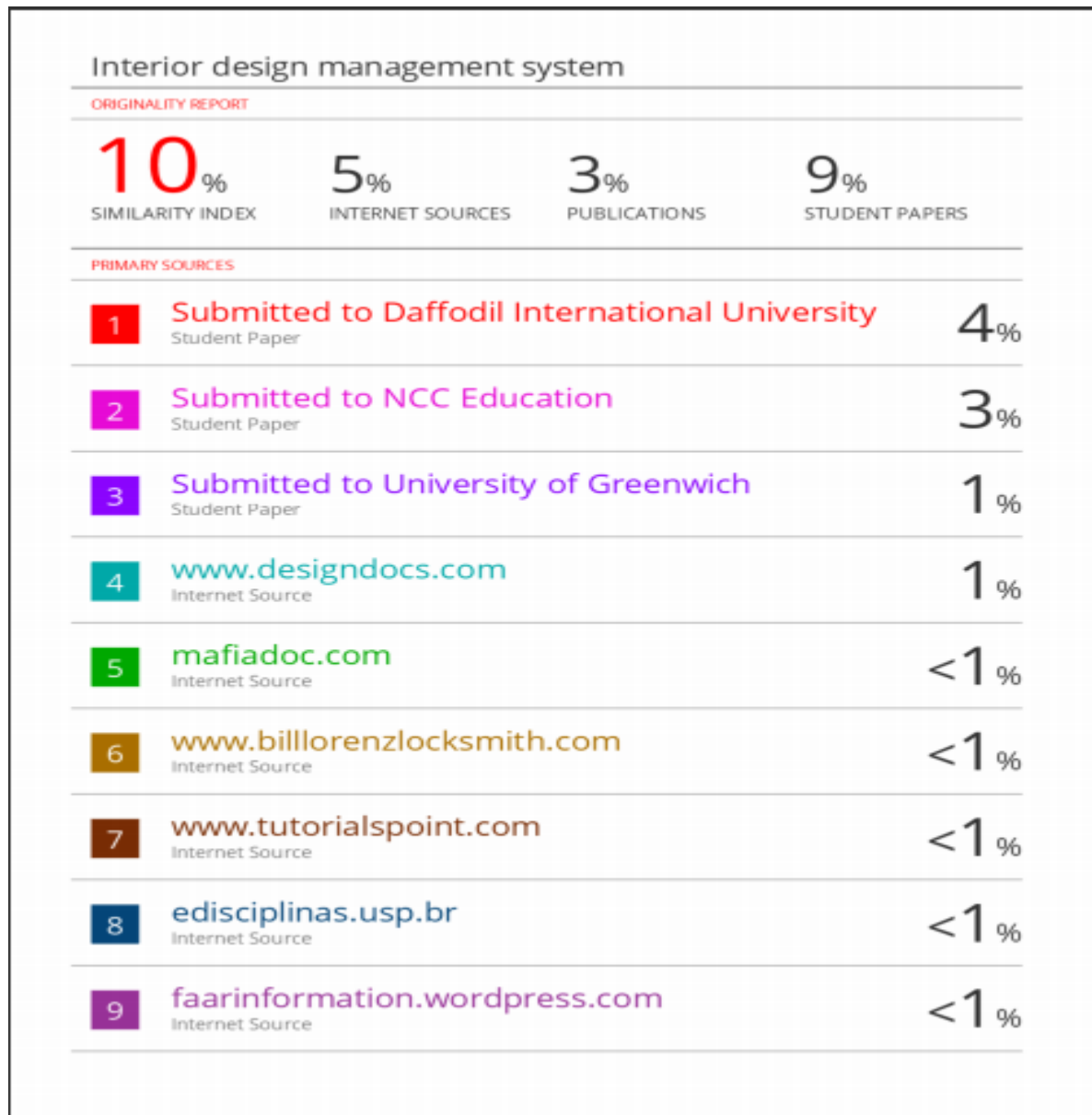
Figure 1.9: Product search

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