**PORTFOLIO MAKER**

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This Report is submitted to the Department of Computer Science for Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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**DHAKA, BANGLADESH**

**MAY 2018**



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## APPROVAL

Our project title "**Portfolio Maker"** submitted by **Abdur Rauf Raihan, Susmita Chakraborty, Farha Binte Farid** to the Department of Computer Science and Engineering in Daffodil International University under the supervisor **Most. Hasna Hena.** Our project accepted as a satisfactory for the partial fulfills requirements for Daffodil International University. The presentation is held in 5th may 2018.

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# DECLARATION

.

We hereby declare that, this project has been done by us under the supervision of **Most. Hasna Hena, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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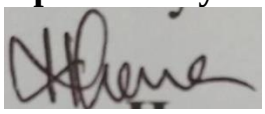

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# ABSTRACT

This project is made for making portfolio in easier way. Users who want to create his/her portfolio in this web application have must be login in this system. There is a sign up option for create new user id. After signing in user have to input required data to complete user portfolio. By login in the system he can update his previous data at any time. User can also select a layout for their portfolio. Other visitors can see the user's portfolio. The full control of this system will remain the hand of admin. If user wants, he can remove any user from the system.

MySQL relational database is used in the whole project. For database connectivity with mysql database we used phpin the backend. Javascript, jquery is used for making our application enough interactive. The system is tasted and reviewed fro satisfactory performance. In future we will add more layouts for our user that they can make more lightweight portfolio from our application.



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# CHAPTER 1

# Introduction

## 1.1 Introduction

We are living in the modern world. Our life depends on technology. Every day we have to familiar with new thing. We can't make ourselves confidence to reach the goal without having vast of knowledge of some special area. We are the students of "Faculty of Science Information technology" especially in the CSE program "Daffodil International University" so that only academic education is not enough for us to do something.

As a part of CSE program, this project gives us opportunity to have satisfactory knowledge about the challenges of Portfolio Maker web application. The assignment is to help the user to make their own portfolio for personal need.

Our study gave the opportunities to make us enable to realize the challenges of web based application looking for Portfolio and make it easy to the user. Portfolio Maker fulfill the requirement of the needy users.

## 1.2 Motivation

Knowledge has no limitation. By doing our project, we realized that. We explore our skills. It was a great chance to build our carrier. In future when we will work on other web site, that Experience will help us a lot. This project helps us to increase knowledge of web based application. It makes us more confident. We provide a user better portfolio site. our portfolio site is very user friendly.



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## 1.3 Objectives

Our world is getting digitalized day by day. Our life depends on technology. Our achievement of common objectives to complete a specific purpose in mind graduation has been done. We worked together on Portfolio Maker application (web based) and certain period to submit a report paper on the general purpose. It was challenging for us to indentify the ways to achieve our goal. Analysis the current status of this process and we had to face problems and then solve the problems.

## 1.4 Expected Outcome

The user who need to make their own portfolio with no cost or no hard work, our web application will help them . User needs to create their account with proper information, then user can log in . User just needs to choose the sample template and gives their information. finally portfolio will ready . They don't need any coding or huge time. Other user can see that portfolio and they can use it for their personal work . Teachers, photographers, businessman can use this website.

## 1.5 Report Layout

Looks is the most important part for anything we present. So report layout is very important to represent our project report. We try to represent our project in a report paper according to chapter by chapter. Every information about project describes here. There are 1 to 6 chapters where represents from initial to final development process. Chapter 1 we discuss only our project introduction, chapter 2 depends on background, chapter 3 represents requirement model, chapter 4 is design part, Chapter 5 represent implementation and testing , chap 6 we discuss conclusion and our future scope. We add some references where we take help to complete our project.



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# CHAPTER 2

# Background

## 2.1 Introduction

People have to learn small things before doing a big achievement. Success always depends on hard work. We have done a satisfactory project that will be helpful. We completed our cse course, all previous knowledge need to fulfill our project . Portfolio Maker is a web based application so we need to study web engineering , database , system analysis and design. We are very grateful to our course teacher . They make us understood about basic knowledge of this course .we have done simple class project during that time . All the knowledge, information, practice make us confident to complete this project.

## 2.2 Related work

Before doing our project, we have done few projects.

- Hospital management system.
- Online house rental system.
- Online bus ticket.
- Meal management system.

## 2.3 Comparative studies:

At first we get knowledge from our course and course teacher. In database management system we learnt how to connect with database how php worked etc. In system analysis, we were familiar with use case model, diagram, primary key, and secondary key, ER diagram and final web based course was web engineering. We learnt derails about web application, how to make a responsive website. We worked with HTML.CSS, JAVASCRIPT, BOOTSTRAP, MYSQL, PHP. We also did our project .beside our course books; we took help from various website [1] .



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## 2.4 Scope of Problems

The main problem we had to face is manipulating user with their data. Which data of which user this was a major problem of our application because we had to view the user data by a specific user portfolio. At last we have overcome the problem.

## 2.5 Challenges

There was a great challenge to viewing the specific user portfolio from a large number of portfolio. But we took the challenge and solve the problem. For solving this we made a unique user id of every user then when we get request to show a user's portfolio then we pull the by the user unique id.

We have shortlisted some challenges. They are given below

- Must have to use valid email to register and login.
- UX and UI.
- Security
- Performance



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# CHAPTER 3

# Requirement Specification

## 3.1 Business Process Modeling

Business process modeling refers to map out regular business process and find ways to improve them. Process modeling software gives an analytical representation and makes them more efficient. Sometimes process modeling uses Business Process Modeling Notation that is a standard method of illustrating processes with diagram. It can be easily understood by both IT and business managers.

There are some benefits of business process modeling.

- Everyone can understand how the system works.
- Provides consistency.
- Controls the whole process.
- Identifies redundancies.
- Eliminates inefficiencies.
- Gives a clear starting and ending of the process.
- Helps users group similar process together and anticipate how they operate.
- Analyzes how things are right now and
- How they should be carried out to achieve better result.

The modeler is one of the most important things in BMPS. We should spend a lot of time to learn it before committing to buy a suite.

Great modeling tools should be:

- Easy to learn for the business department.
- Simple for IT to communicate with other department.
- Less expensive.
- Have workflow editor tools with graphics interface.



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- Capability of simulating workflow before implementing.

Business process modeling of our application is given bellow:

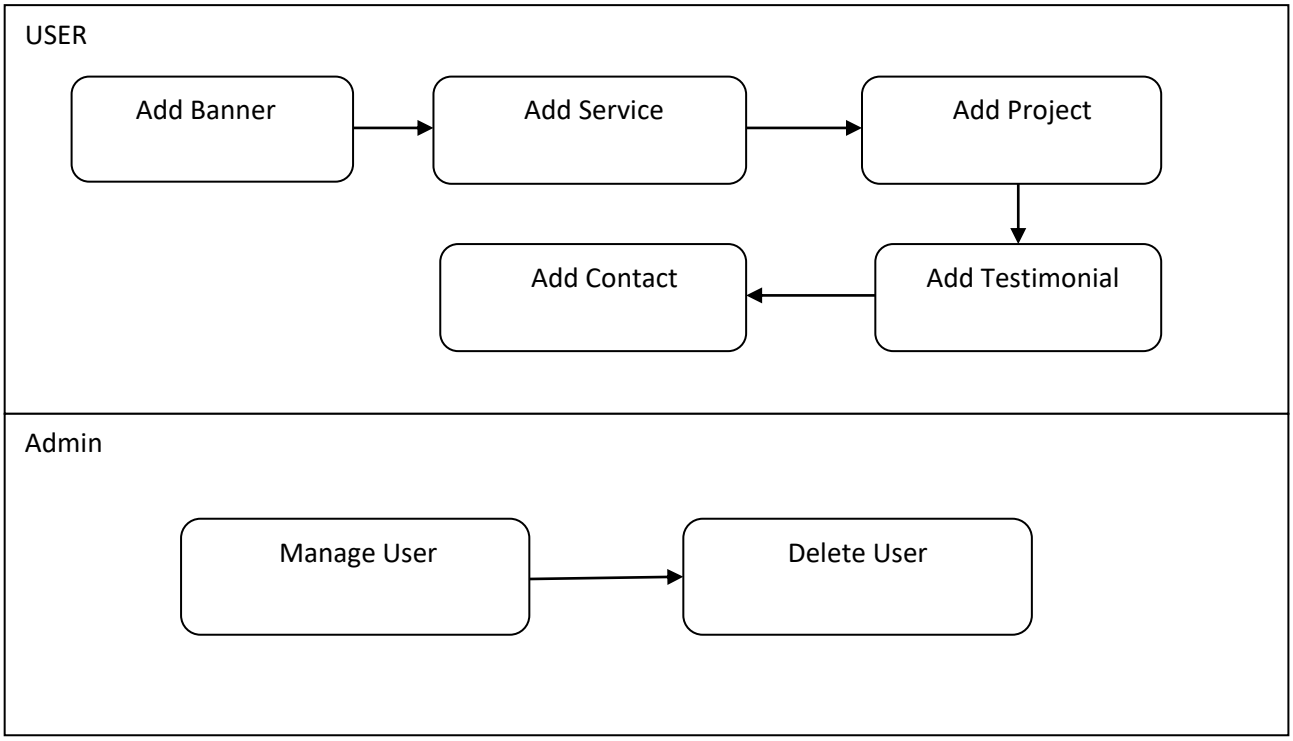


Figure 3.1: The business process model of our application.

## 3.2 Requirement Collection and Analysis

There are various requirements in data collection for implementation in system and data analysis. Some of them are given below:

- Need valid e-mail to register
- Require valid password to log in.
- Require valid email to send information.
- Need valid email to contact with other users.
- Needed passport size recent photograph.



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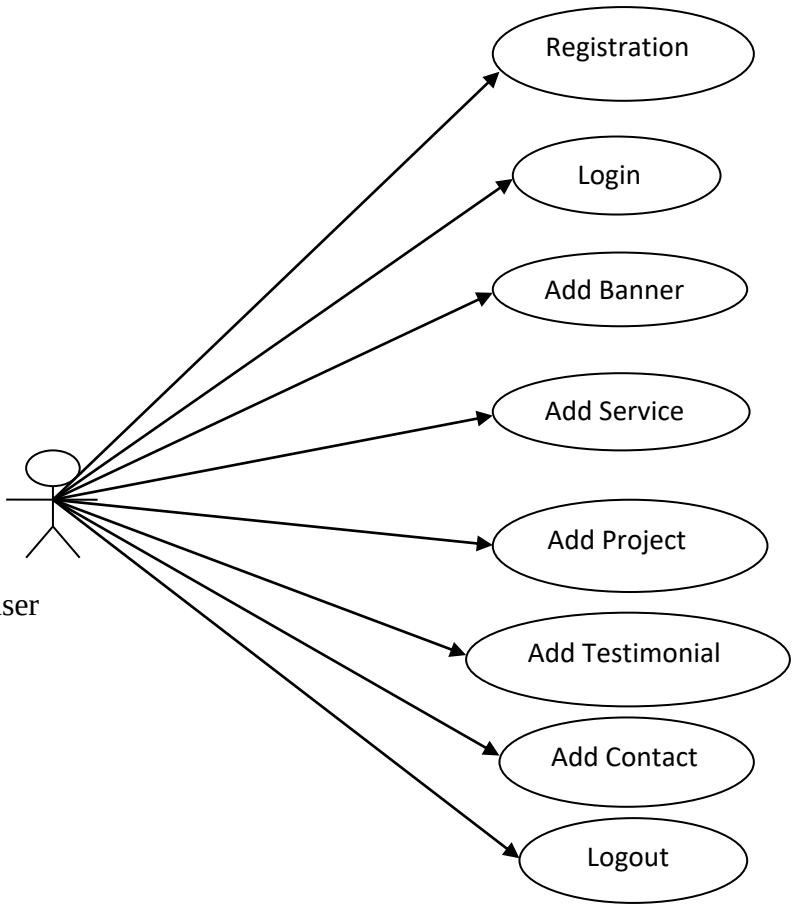
## 3.3 Use Case Modeling and Description

Use case model describes the functionalities of the proposed system. It represents a unit interaction between human and system. It is a single unit of meaningful work such as register to the system, log in and create order is all use cases. The most important role of use case model is to provide a vehicle used by customers or developers which discuss the functionalities and system behavior. Use case is related to actor. An actor means human or machine entity that interacts with the system and does meaningful work.

In use case we have two user which is admin and user. Admin can see user data and can also edit and delete them. Then user can upload their data like banner, project, portfolio, service, testimonial etc. The visitor can only see their data.



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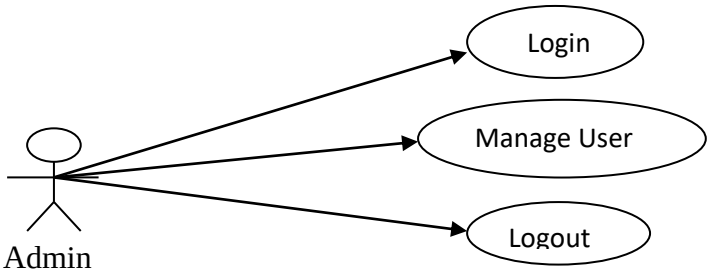


Figure 3.2: The full use case model of our application.

## 3.4 Logical Data Model

A logical data model refers to describe the data in details, without regard to how they will be physical implemented in the database. It is the technique of representing data architecture and organization in a graphical way. It provides information about various entities and relationship. There are some features of logical data model.

- Having all entities and relationships among them.
- Includes all attributes for each entity that is specified.
- Primary key is specified for each entity.
- Foreign keys are also specified.
- This levels normalization occurs.

Logical data modeling does not provide any information related to how the structure is to be implemented. It is a technology-dependent model of data which is developed from the initial structure.

The steps for designing the logical data model are:

- It individualizes primary keys for all entities.
- Figure out the relationship between different entities.
- Search all attributes for each entity.



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- Solve many to many relationships.
- Normalization.

Here we create our proposed logical data model to represent the system.

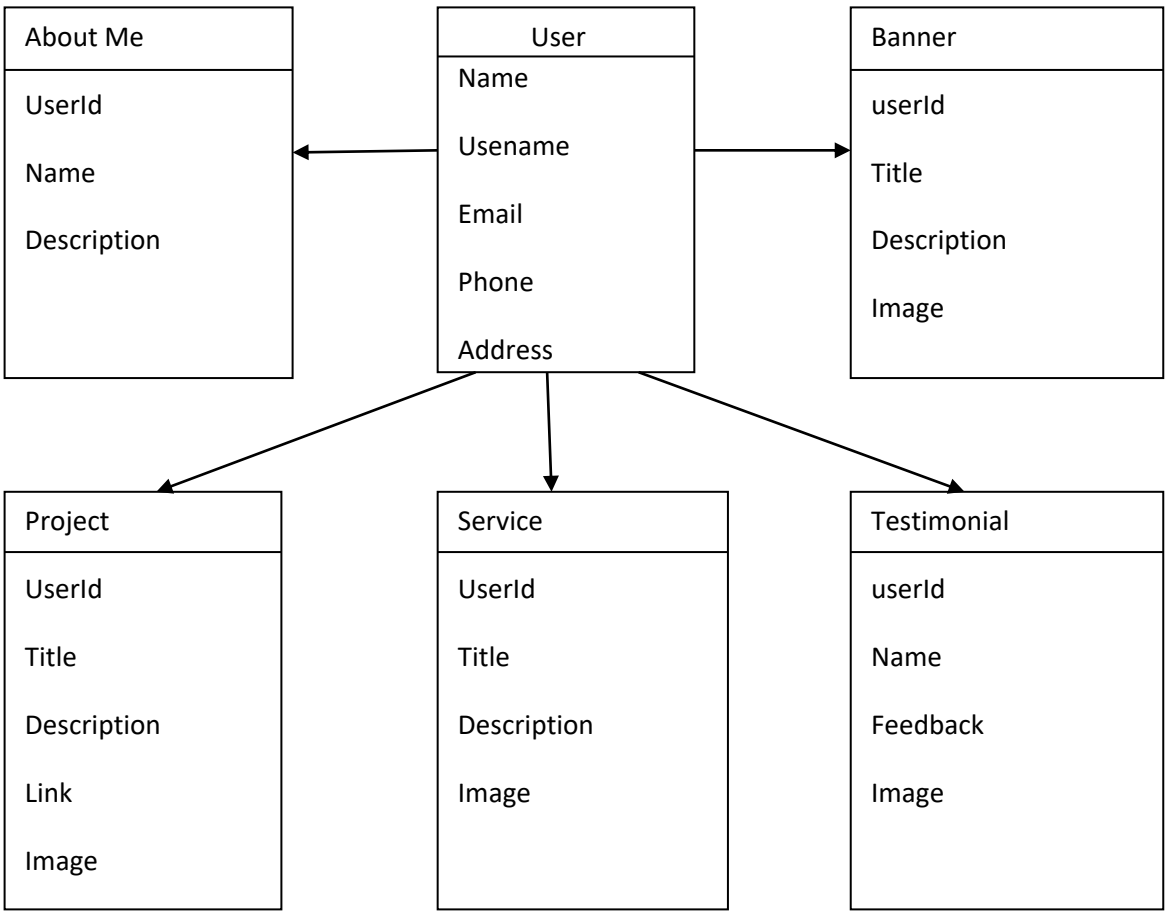


Figure 3.3: Complete Data Model of Our System.



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## 3.5 Design Requirement

To design our site, we use lots of material. Some of them are given below:

- HTML: It is the standard markup language to create web pages. HTML describes the structure of the web pages. Elements are represented by tag.
- CSS: It means cascading style sheet.CSS describes how HTML elements are displayed on the screen. There are some advantages of using CSS.
    - Save the time.
    - Load the page faster.
    - Easy to maintain.
    - Multiple device compatibility.
    - Off line browsing.
    - Platform independence.

- Bootstrap: bootstrap is a huge collection of code that is written by HTML, CSS, Java scripts. It helps the developers or designers to quickly build a responsive web site.
- PHP: It means Hypertext Preprocessor. In web programming, php is a script language that is freely available. We use php to build our project.
- Pixie: We can match color by using pixie software. It tells us the values of that color in the range of different format.
- Photoshop: by using Photoshop we make our logo.



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# CHAPTER 4

# Design Specification

## 4.1 Front-end-Design.

We have found the best way is to build out the front end in whatever tools the front end engineers are using. In our case, that's Angular Material. So we built out a style guide using Angular Material that shows the various elements that comprise most of our applications: lists, buttons, form elements, tables, etc [4]. I used off-the-shelf Angular Material elements as much as possible with minimal overrides to accommodate branding or specific uses. The front end-team is encouraged to copy my HTML and CSS. If we mark something up as a table, for example, there's a good usability reason for that, and it shouldn't just be built with a bunch of div to approximate the look of a table.

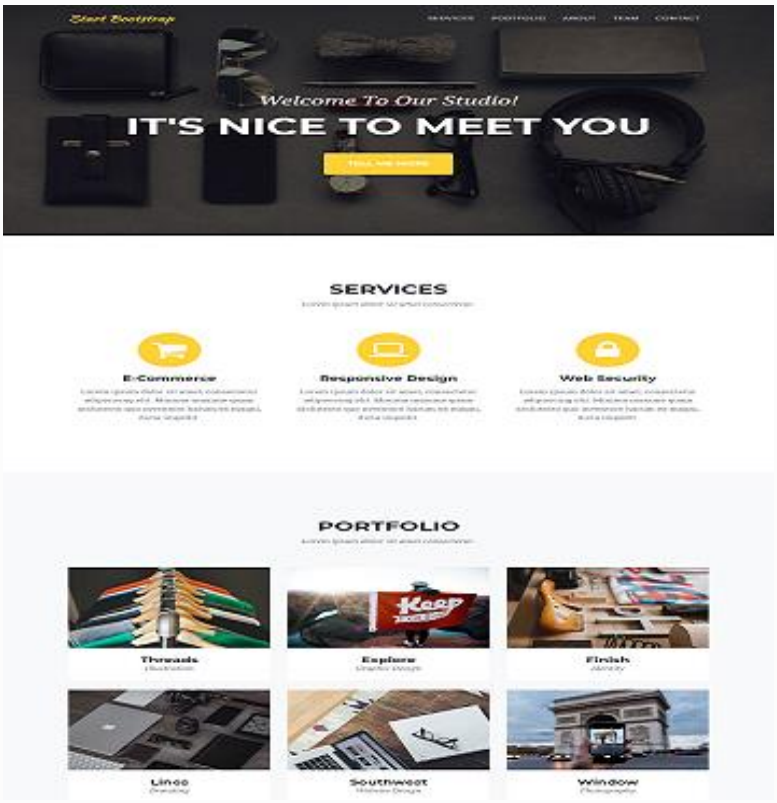


Figure 4.1: The front-end view of our application



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## 4.2 Back-end-Design

For designing back-end of our application we use a template and which is most popular free admin template [3]. We use the menu of that template to navigate the total back-end design of our system. In this back-end system user can manage their data by adding and deleting specific information.

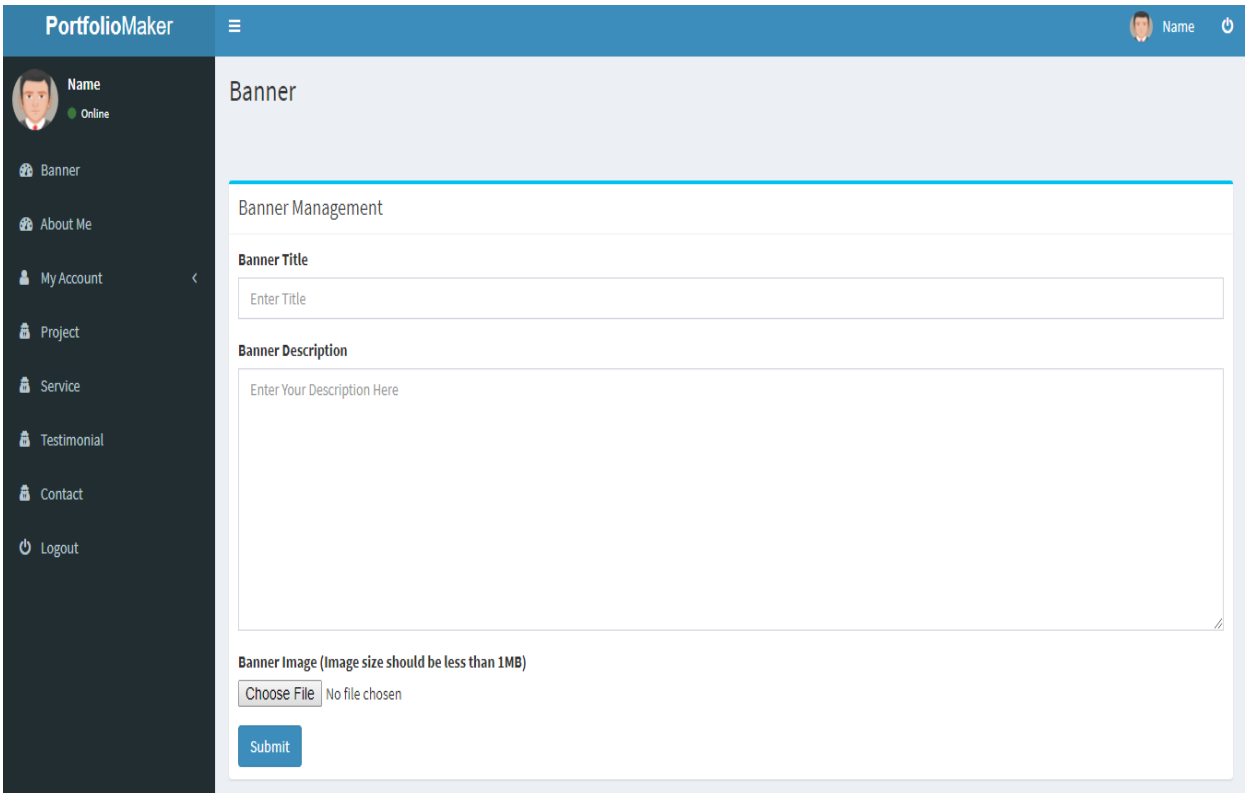


Figure 4.2: The back-end view of our application.



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## E-R Diagram

E-R diagram means Entity relationship diagram. The entity relationship data model is based on a perception that consists of a set of basic objects called entities, and of relations among these objects. It was developed to facilitate database design by allowing the specification of an enterprise schema, which represents the overall logical structure of a database. This is shown in following figure 5.4.

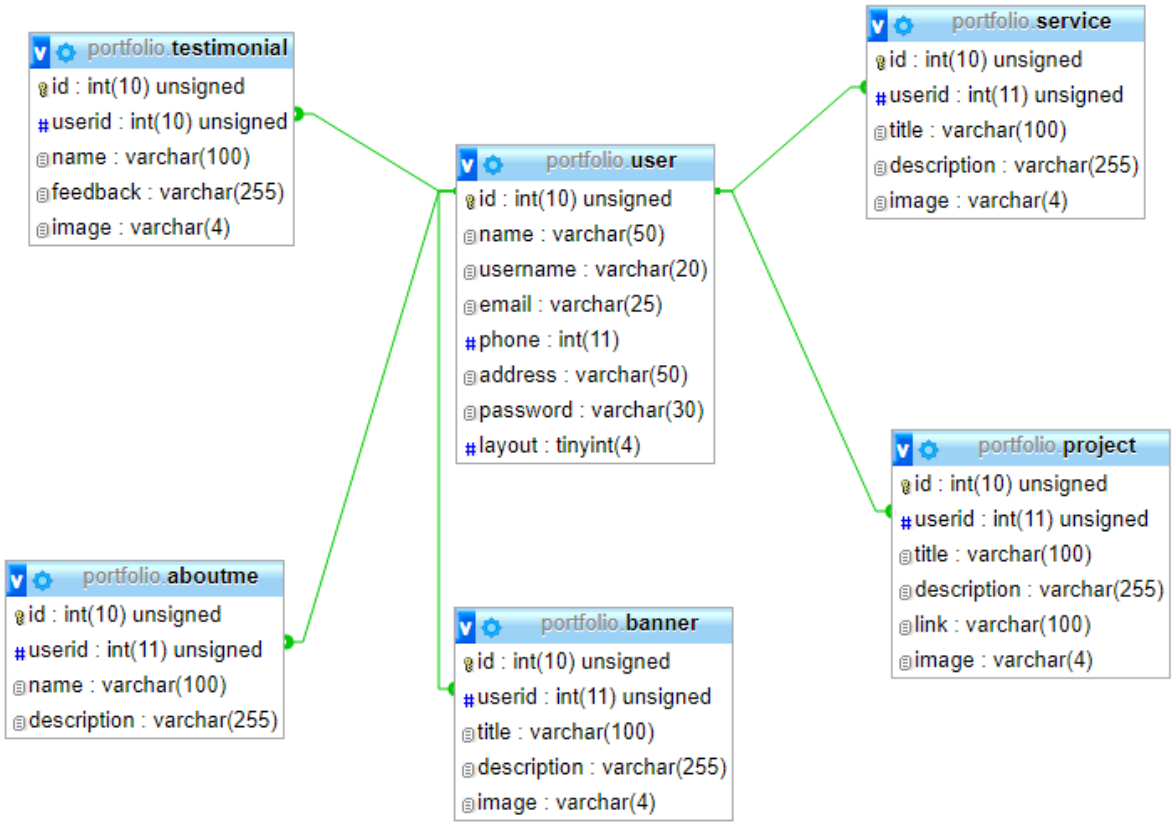


Figure 4.3: E-R Diagram



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## 4.3 Interaction Design and UI

Interaction design focuses on creating engaging interfaces with well thought out behaviors. Understanding how users and technology communicate with each other is fundamental to this field.

UI means user interface. It is the most important part in the application. Because first of all users see the total view. View should be attractive, flexible and effective so that users may like our application. Here we see some UI views in our proposed system.

## Banner

It is the view of banner section. Here user can make their banner. They create a title name and then write a description of the banner. It can 252 characters. After that choose a file and submit.

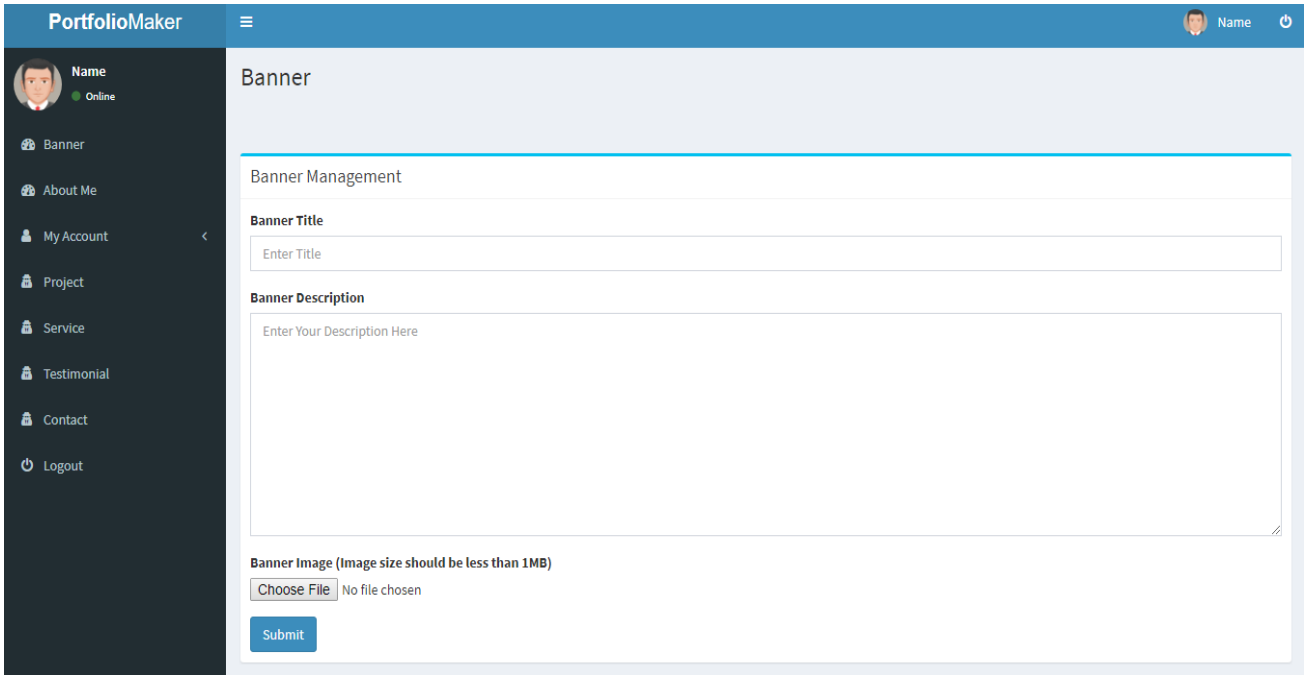


Figure 4.4: Back-End UI of banner section.



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## About Me

It is the information of the user who has their own portfolio site. First of all enter user's name then write a description about user's. Then click to the submit button.

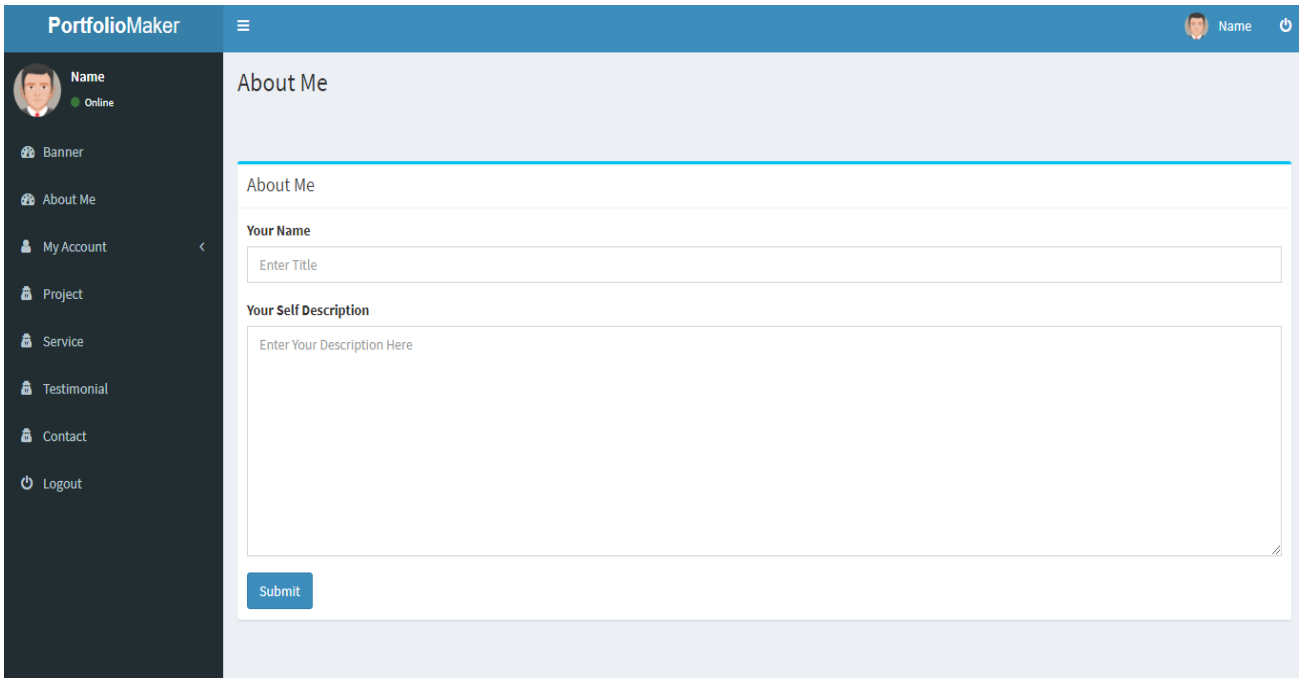


Figure 4.5: Back-End UI of about me section.



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## Recent projects

If user did any project before then user would add his project. User may choose file, it should be less than 1 MB.

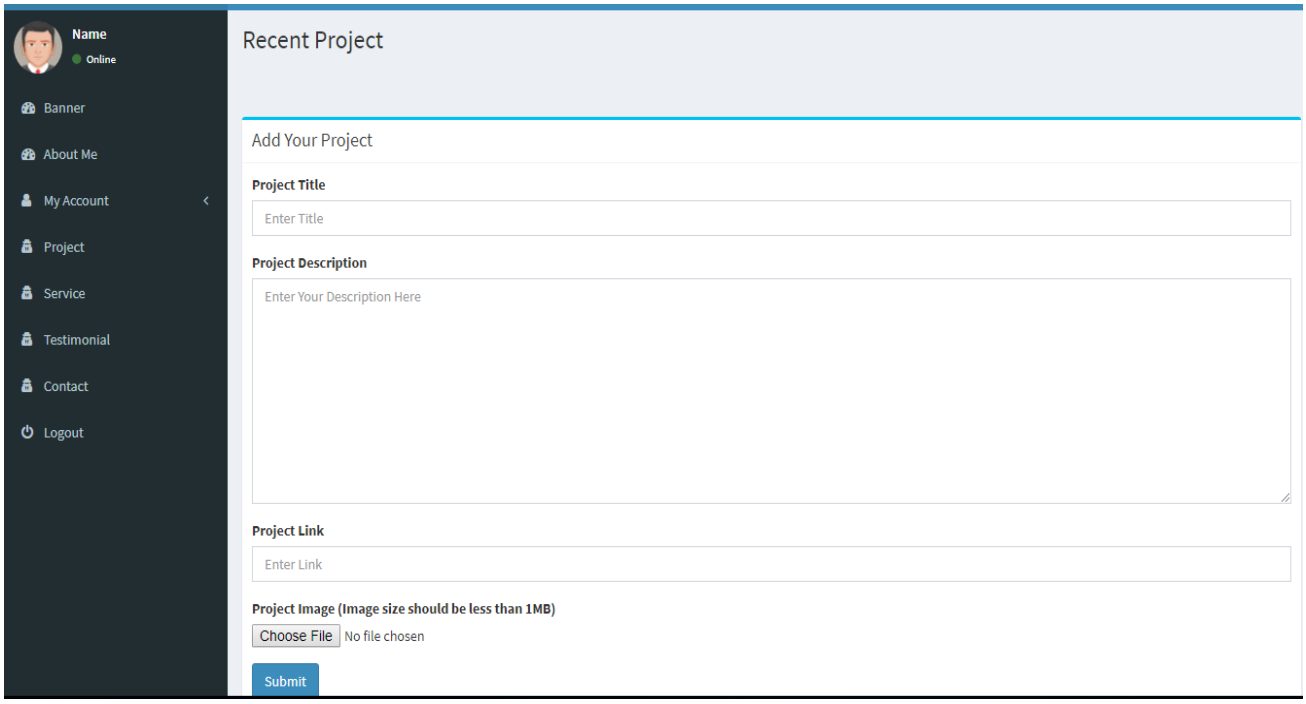


Figure 4.6: Back-End UI of Project section.



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## Service

What type of service user can provide. There give details and descriptions. And can also choose file.

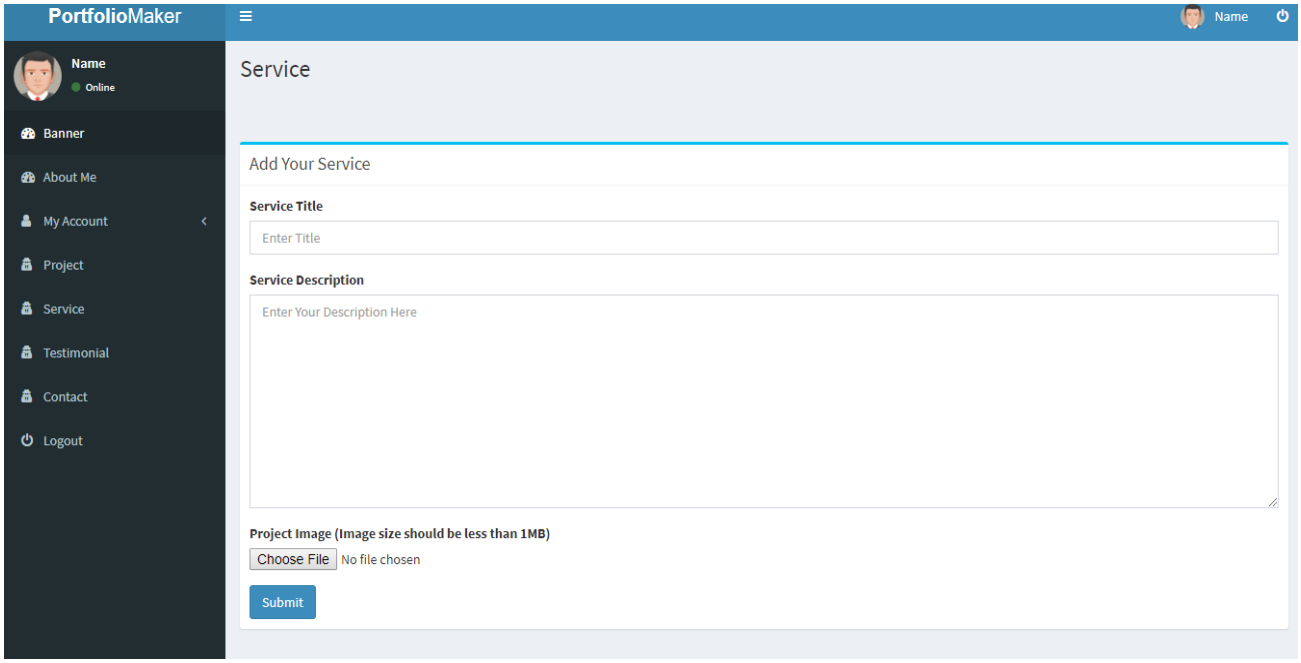


Figure 4.7: Back-End UI of service section.



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## Testimonials

Testimonial is the feedback of other users. It can be good or bad. User can put clients name and description in the box.

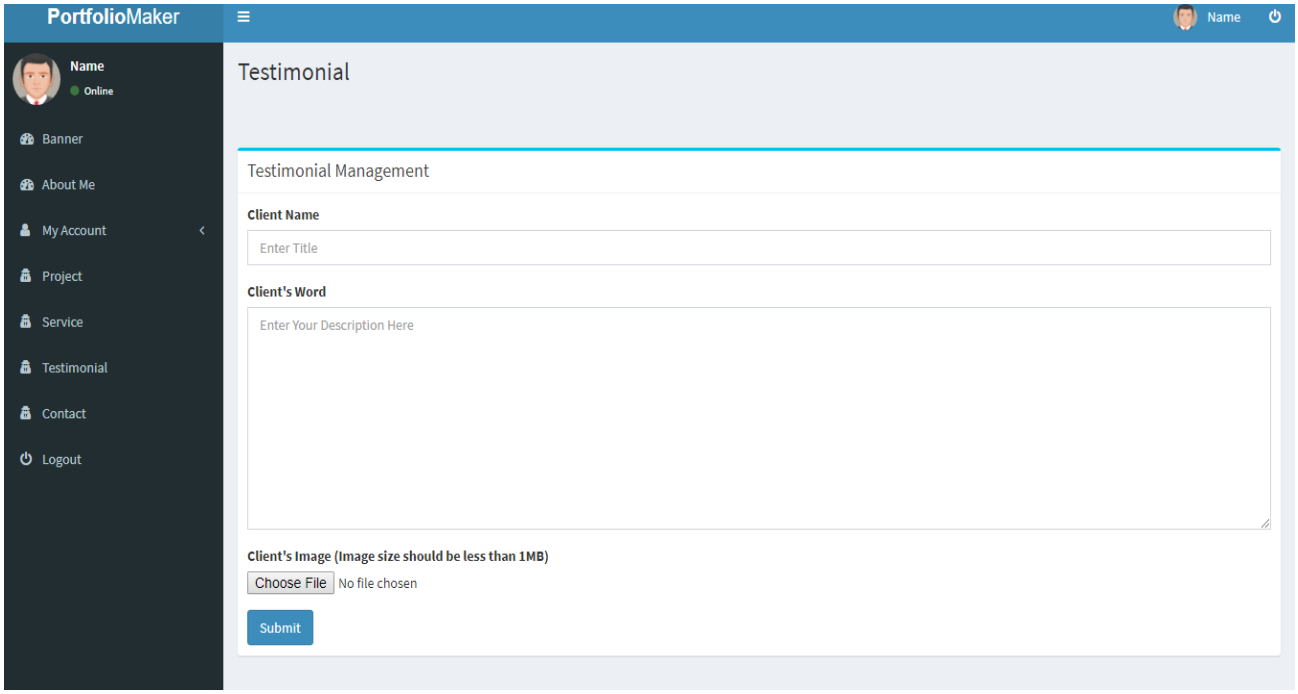


Figure 4.8: Back-End UI of testimonial section.

## 4.4 Implementation Requirement

Our application runs with the help of apache and MySQL server database system and PHP. This is the most popular and used server in the world.

We have needed some configuration requirements.

- Needed to install apache web server.
- Install MySQL server.
- Needed apache with configured PHP.
- Needed google API.



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# CHAPTER 5

# Implementation and Testing

## 5.1 Introduction

We are already done the requirement in chapter 5, now it's time to implement those in real life environment stage. Different strategic decision should be made for successful implementation of the project. The system should be reviewed time to time for checking that the implementation will successful and also prevent the error.

## 5.2 Implementation of Database

For implementing database we use phpmyadmin tool. We create table and their entity by using phpmyadmin. We follow the database normalization process for reducing the redundancy of our database. We design the database with the best practice of making database that's why we got the effective database for our application.

## 5.3 Implementation of Front-end-Design

For implementing front-end we use html5, css3, bootstrap3, javascript and jquery. By the help of html and bootstrap we made the structure of our application and by the help of css we design our application. With the help of javascript and jquery we made our application more interactive from any other application [2].

## 5.4 Implementation of Interaction

For implementing the interaction of our application we use the javascript front-end language and jquery which is a library of javascript. By the help of javascript we made a effective change of the interaction of our application. Jquery is one of the most popular libraries of javascript for making any kind of interactive application.



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## 5.5 Testing Implementation

System Testing is the testing of a complete and fully integrated software product. Usually software is only one element of a larger computer based system. It is the activity that can be planned driven systematically [5]. A complete and effective system depends on testing. So testing is more important to build a project.

## 5.6 Test Results and Reports

This is the final step in testing. In this the entire system was tested as a whole with all forms, code, modules and class modules. This form of testing is popularly known as Black Box testing or system tests [6].

Black Box testing methods focus on the functional requirement of the software. That is, Black Box testing enables the software engineer to derive sets of input conditions that will fully exercise all functional requirements for a program. Black Box testing attempts to find errors in the following categories; incorrect or missing functions, interface errors, errors in data structures or external database access, performance errors and initialization errors and termination errors [7].



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# CHAPTER 6
# Conclusion and Future Scope

## 6.1 Discussion and conclusion

We can conclude by saying that looking for Portfolio is an online centralized web portal which helps people and any other users to make their own portfolio in quick time. And also keep track of user's status.

This system helps the admin to check the database when he wants and it is very flexible for the business issues and any users to retrieve the data. People can contact with the user who have their profile through phone no or email id.

We design our site so well and attractive that users feel effective to use .To implement this project we used PHP, JavaScript as the technology. MYSQL was used as back-end database science it is one of the most popular open source database.

The development of the project has given us a huge knowledge about how to develop a website and connection of database to access data. Web pages are modified to provide the user online Portfolio Maker system application. That is a great success for us and it makes us more confident to do another successful professional work.

## 6.2 Scope for further development

In future we can add some more layout for the user as they can make more lightweight portfolio for them. We can make a system that a user can edit their layout from front-end. We can generate a pdf file for user that they can use the pdf as their professional cv.



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[8] Knowledge of integration testing available at<<http://softwaretestingfundamentals.com/integration-testing/>> last accessed on 29-03-2018 at 10.40 P.M




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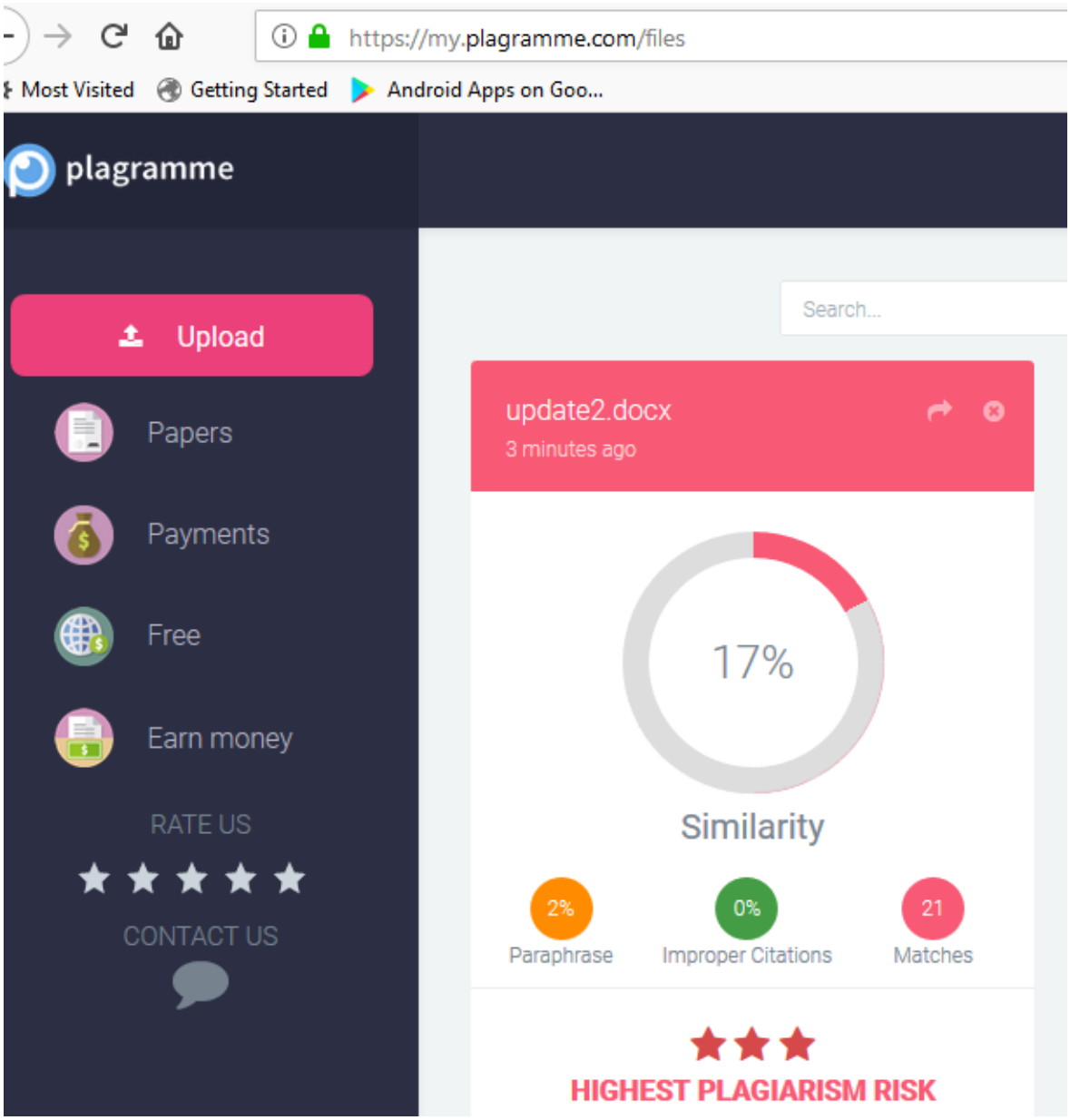


Figure: check plagiarism



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