"DIU Biggapon" a Web application based advertisement website for Daffodil International University

BY

Hafizur Rahman ID: 191-15-12367

AND

Samia Dewan Ria ID: 191-15-12333

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Dr. Sheak Rashed Haider Noori

Professor & Associate Head Department of CSE Daffodil International University

Co-Supervised By

Md. Sanzidul Islam Lecturer

Department of CSE Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH JANUARY 2023

APPROVAL

This Project titled "DIU Biggapon" a Web application based advertisement website for Daffodil International University, submitted by Hafizur Rahman, ID No. 191-15-12367 and Samia Dewan Ria, ID No. 191-15-12333 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on *January 29, 2023*.

BOARD OF EXAMINERS

Chairman

Dr. Touhid Bhuiyan Professor and Head Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

0 29.01 23

Arif Mahmud Assistant Professor Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

29.01.23

Saiful Islam Assistant Professor Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Ram 29/01/23

Dr. Shamim H Ripon Professor Department of Computer Science and Engineering East West University Internal Examiner

Internal Examiner

External Examiner

i.

DECLARATION

We hereby declare that, this project has been done by us under the supervision of Dr. Sheak Rashed Haider Noori, Professor, 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.

Supervised by:

Dr. Sheak Rashed Haider Noori Professor & Associate Head Department of CSE Daffodil International University

Co-Supervised by:

Md. Sanzidul Islam Lecturer Department of CSE Daffodil International University

Submitted by:

Samia

Samia Dewan Ria ID: -191-15-12333 Department of CSE Daffodil International University

is

Hafizur Rahman ID: -191-15-12367 Department of CSE Daffodil International University

ü

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Dr. Sheak Rashed Haider Noori, Professor & Associate Head**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "*Field name*" to carry out this project. His endless patience ,scholarly guidance ,continual encouragement , constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Supervisor**, **Dr. Sheak Rashed Haider Noori** and Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

With the easy access of the internet our life turned upside down. It created a great revolution in communication. now we can easily order pizza, Burger and grocery things by using the internet. We can also buy and sell many new and old things like phone, house rent, car rent etc. by using different websites Daffodil International University is one of the largest and top rank university in Bangladesh. There were three campuses (permanent, Dhanmondi, Uttara) but in 2022 they totally shifted students to permanent campus now the total number of students is 21,752. Number of teachers and staff is approximately 2000. So there is a huge community increase in just 5 or 6 months. So there are some issues like renting a house and buying any necessary things like phones, beds, tables, chairs etc. For this reason we planned a solution for this problem. now here we come to our project . Our development system is a web application which aims at helping the whole community of Daffodil International University. We developed front-end design using HTML, CSS, Bootstrap and Java Script. And Developed Backend using PHP, SQL, Laravel Framework. we hope this project will help all students, teachers, staff and the overall community of Daffodil International University.

TABLE OF CONTENT

CONTENTS PAGE Board of examiners i Declaration ii Acknowledgement iii Abstract iv

CHAPTER

Chapter 1: Introduction	1-4
1.1 Introduction	1
1.2 Motivation	2
1.3 Objectives	2
1.4 Expected Outcomes	3
1.5 Project Management and Finance	3
1.6 Report Layout	3
Chapter 2: Background	5-6
2.1 Introduction	5
2.2 Related Works	5
2.3 Comparative Studies	5
2.4 Scope of the Problem	6
2.5 Challenges	6
Chapter 3: Requirement Specification	7-14
3.1 Business Process Model and Notation	7
3.2 Use Case Diagram	8
3.3 UML Diagram	12

3.4 Requirement Collection and Analysis	12
3.5 Logical Data Model	13
3.6 Design Requirement	14
Chapter 4: Design Specification	15-24
4.1 Front-end Design	15
4.2 Back-end Design	23
4.3 Interaction Design And UI	24
4.4 Implementation Requirements	24
Chapter 5: Implementation and Testing	25-28
5.1 Implementation of Database	25
5.2 Implementation of Back-end	25
5.3 Implementation of Front-end Design	26
5.4 Test Implementation	26
5.5 Test Result and Reports	28
Chapter 6: Impact on Society, Environment	29
6.1 Impact on Society	29
6.2 Impact on Environment	29
6.3 Ethical Aspects	29
6.4 Sustainability Plan	29
Chapter 7: Conclusion and Future Scope	30-32
7.1 Discussion and Conclusion	30
7.2 Limitations of Our Application	30
7.3 Scopes for Future Developments	31
REFERENCES	33

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1.1: Business Process Model and Notation	7
Figure 3.2.1: Use Case Diagram	8
Figure 3.3.1: UML Class Diagram	12
Figure 3.5.1: Design Requirements	13
Figure 4.1.1: Screenshot of Home page for Biggapon	15
Figure 4.1.2: Screenshot of Home page for Biggapon	16
Figure 4.1.3: Screenshot of Registration page for Biggapon	17
Figure 4.1.4: Screenshot of Login page for Biggapon	17
Figure 4.1.5: Screenshot of Profile page for Biggapon	18
Figure 4.1.6: Screenshot of Dashboard page for Biggapon	19
Figure 4.1.7: Screenshot of Dashboard page for Biggapon	20
Figure 4.1.8: Screenshot of Dashboard page for Biggapon	21
Figure 4.1.9: Screenshot of Dashboard page for Biggapon	22
Figure 4.1.10: Screenshot of Payment page for Biggapon	22
Figure 4.1.11: Screenshot of Change Password page for Biggapon	23
Figure 5.2.1: Implementation of back-end	25

LIST OF TABLES

TABLES	PAGE NO
Table 3.2.1: Use case Description for Sign Up	9
Table 3.2.2: Use case Description for Log In	9
Table 3.2.3: Use case Description for Premium Ads	10
Table 3.2.4: Use case Description for Normal Ads	10
Table 5.4.1: Test Cases	26

CHAPTER 1 INTRODUCTION

1.1 Introduction

Recently, a large number of students from our university relocated from Dhanmondi to Ashulia. Students from throughout Bangladesh come to this location. The accommodation that the authorities offer is insufficient. All students cannot have access to hostel accommodations at universities. Moreover, a lot of our students were from rural areas. Finding a home to live in a new area is a major burden for students. We developed this community plan after encountering the same issue, allowing any DIU student to discover a listing for a student-only property to rent. Additionally, students like us will promote this need for a new roommate. People who formerly shared a rented home may encounter issues, such as the necessity for a new roommate. When they need new housemates, they can use this community. It is typical for us to require a lot of necessities in order to live somewhere. When a student graduates, what happens to the items? Both the cost and carrying those items are challenging. Instead, it would be fantastic if we could sell those items. We are able to sell those items to our pupils by using this community. Additionally, students can purchase inexpensively, benefiting both parties. In essence, we developed this strategy to help our kids experience less stress. For instance, they may simply sit in Chandpur and look for a place to live. One can communicate with the owner using the massaging option. Not only this students can also contact as address will be given with contact number and confirm by sitting home. They can also consult with the person if any information needed as a number will be given. Another great option is to upload a picture of the house or the product. The system is built in such a way that one can easily advertise the product. Not only that they can find a to-let. This system is basically helping new students more like a community.

1.2 Motivation

Up until the 11th semester, we are still enrolled at the Dhanmondi campus. But all of a sudden, word spread that our campus would be completely moved to Ashulia campus. Earlier to the 12th semester. It was reported as panicking. The distance between Dhaka and Ashulia is fairly great. We find it extremely challenging as senior students. Time is crucial, yet we waste so much of it on travel that it greatly harms our careers. Also we feel like it is a great loss for our juniors. Facing all this situation we thought why not build a system that can solve these issues. First we study for the system to be able to build this system. After finishing all necessary study we get the hope for building this. We all feel like there should be more options rather than just finding lining place. For example we will definitely need many regular things to live. After finishing graduation, what will we do? This system can also help here. We thought we must add a selling option. Finally finishing the initial step we are able to go forward.

1.3 Objective

The project's main motive is to ensure students some extra benefits in this new area which will give them the facility to search for hostels or to-lets. There are some objective behind the project.

- First of all we need the data of students who are living away from home and review the facts and requirements, then determine the system requirements.
- Then we need to design the model. This is a web based application we will design the Front-end using Bootstrap[11], HTML[10], CSS[9], JavaScript[12]. For Back-end we will use PHP[3].
- Finally we need to test if the system is working perfectly.

1.4 Expected Outcome

This web application will help students to find accommodation by seeing advertisements which are also posted by students.

- It will remove students' hassle of searching living places. Also compare the accommodation price of different places.
- Final year students can sell their daily used necessary things which freshers can use. Students can buy second hand products in cheap.

1.5 Project Management and Finance

We have a plan to launch our project next month. For this we have been planning for a budget, a timeframe, and a set of objectives for the group to meet. Still there is no organization, it's a small project for our university. We are ready to handle all the technological improvements, globalization, and other reasons that can occur after launch. We are all a set with tools, strategies, and approaches to satisfy the demands of a project. Our initial capital is five thousand taka for buying domain and hosting .

1.6 Report Layout

We have divided our development project into seven chapters. Introduction, Background, Requirement Specification, Design Specification, Implementation, Testing and Conclusion.

In Chapter one we have to explain about Introduction, Motivation, Objective, Expected Outcome, Project Management and Finance, Report Layout.

In the second Chapter, We talked about Introduction, Related Work, Comparative Studies, Scope of the Problem and Challenges. Third chapter is about Business Process Model and Notation, Use Case Diagram, UML Class Diagram, Requirement Collection and Analysis, Logical Data Model and Design Requirements.

In four chapters we discussed Front End Design, Back-End Design, Interaction Design and UI and Implementation Requirements.

Chapter five is about Implementation of Database, Implementation of back-end, Implementation of Front-end design, Testing Implementation and Test Results and Reports.

The sixth chapter is about Impact on Society, Impact on Environment, Ethical Aspects, Sustainability Plan.

Last chapter discusses Discussion and Conclusion, Limitations of Our Application, Scopes for Future Developments.

CHAPTER 2 BACKGROUND

2.1 Introduction

DIU Biggapon is a community-based website or web application that is a solution for students of Daffodil International University who are living far from their families. This is a solution for students who are living far from their families. For every fresher it's an extra puzzle to search for a suitable place for living. He or she doesn't have to physically search for a place. Besides this students also need to sell many products, mainly the last year students. From this site students can search for accommodation. Also they can buy or sell daily use-able products.

2.2 Related Work

There are many types of advertising sites, but none of them really met our needs. The closest one is a famous Bangladeshi Website 'Bikroy.com'[1], which suggest products to a user based on their search. Though this is a very popular site but this site has some lacking. One of a common problem is sometimes it provides misleading products. A user is not only going to buy a product by just recommendation. Artificial Intelligence generated recommendations are not always suitable. Sometimes a human touch is needed. You need to have a vast of options with regular views and good reviews to attract both buyer and seller. And the customers always need to know the true information about the products they are going to buy. That's why we are going to introduce our fully customized blog site, where public can read articles and registered users can post, comment and share about products. This is a way where users experience will be much better by interacting with each other.

2.3 Comparative Studies

To build this project first of all we have studied other related work. We carefully notice the features available and the features are needed for our projects. We have to learn UI design for our project. For the front-end we have to study HTML[10], CSS[9], JavaScript [12] and for the back-end we choose to study PHP[3] and Laravel[4]. Also for storing data we learn MySQL[5].

2.4 Scope of the Problem

Web application user needs a lot of guidance initially. Since there are lots of product by categories and varieties, sometimes users get confused and lose their patience. So they need proper direction to improve their user experience. But it's never easy to provide a proper suggestion for a user. So, we need to provide the interface user friendly. For example, one of a well-known University of Bangladesh called Daffodil International University. This University has three campuses in different places of Dhaka far from each other. The students need to switch the campuses and dormitories frequently for their study purpose. As a human, all students have some basic needs and need to purchase a lot of things for daily life. As a clean user friendly informative advertising web application is this we can promote this website for their needs with thousands of options.

2.5 Challenges

The main problem is to spread these facilities among the students. Collect data from them and manage them properly. Also the community is very huge. How to make this application more smooth so that the motive of this project becomes full fill. Here we have to manage the advertisement as the basis of argent or regular. Removing already existing advertisements is also a big challenge.

CHAPTER 3

REQUIREMENT SPECIFICATIONS

The requirement specifications means how the system is built. To develop a project we require some models such as business process model and notation, use case diagram, UML diagram and ER diagram.

3.1 Business Process Model and Notation

This graphical representation shows the application commencement on the home page. From here we can see logged-in users have the facilities of accessing several features. In this system logged-in users can post advertisements . Users can also edit their account.

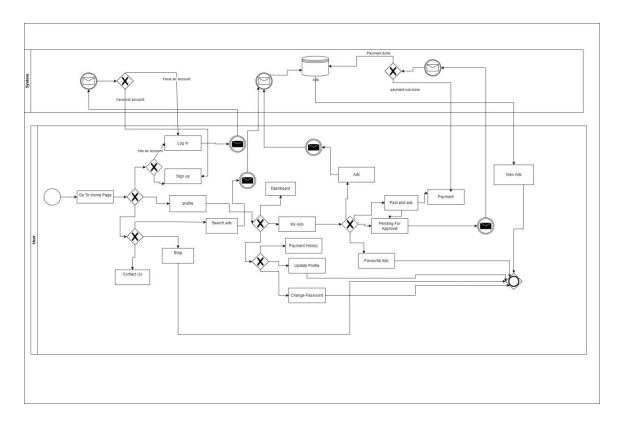


Figure 3.1.1: Business Process Model and Notation

3.2 Use Case Diagram

This use case diagram helps to understand the behavior of the project from the perspective of the user end and also from admin end. Seeing this use case diagram in figure 3.2.1, we will have an overall view of the system. Here we can see that logged in users have only

access to some features. Also admin have access to some restricted features. Lastly there are available public features for any users .

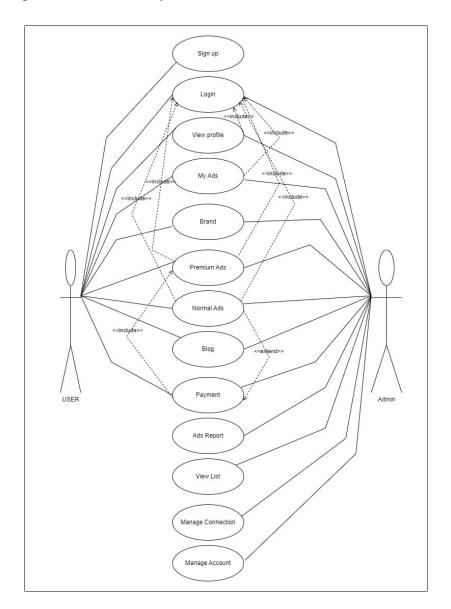


Figure 3.2.1: Use Case Diagram

Table 3.2.1: Use of	ase Description	for Sign Up
14010 3.2.1. 050 0	use Description	ioi bign op

Use case name	Sign up
Actor	Students
Precondition	N/A
Internal Path	 1.Enter First Name 2.Enter Last name 3.Enter Email 4.Enter Password 5.Enter Confirm Password 6.Gender 7.Click Sign Up Button
Exceptional Path	 1.First Name can't be blank 2.Last Name can't be blank 3.Must be valid email. 4.Strong Password 5.Confirm Password have to match password.

Table 3.2.2: Use case Description for Log In

Use case name	Log In
Actor	Students
Precondition	N/A
Internal Path	1.Enter Email 2.Enter Password

Exceptional Path	1. Must be valid email.
	2. Valid Password

Table 3.2.3: Use case Description for Premium Ads

Use case name	Premium Ads
Actor	Students
Precondition	N/A
Internal Path	 1.Enter Category 2. Enter Brand 3. Enter Title 4. Enter Description 5. Enter Address 6.Payment 7. Enter Country 8.Select premium
Exceptional Path	N/A

Table 3.2.4: Use case Description for Normal Ads

Use case name	Normal Ads
Actor	Students

Precondition	N/A
Internal Path	 1.Enter Category 2. Enter Brand 3. Enter Title 4. Enter Description 5. Enter Address 7. Enter Country 8.Select Regular
Exceptional Path	N/A

3.3 UML Class Diagram

This UML class diagram has two main classes User and Ads. Beside this the system also has some classes such as Dashboard, Profile, Notification, Payment. The figure 3.3.1, also shows the relationship between classes along with the association.

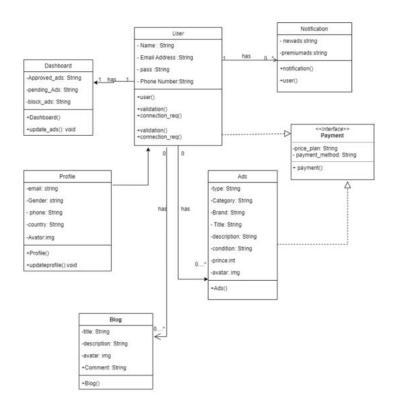


Figure 3.3.1: UML Class Diagram

3.4 Requirement Collection and Analysis

Most important requirement for the project, students who want to find a living place. Another thing that will improve our system is a decent amount of ads. Students need to give to-let advertisements in order for other students to see their ads and can have that facility. To show the overall project process we have used Business process model and notation, Use case diagram.

3.5 Logical Data Model

Logical data model refers to the entities and their attributes. In figure 3.5.1, the entity User, Admin, Profile, Dashboard, Notification, Ads, Payment. The profile has a one to one relationship with the user. Profile has attributes like Email, Gender, Phone, County, Avatar, isupdate. User can have many ads . User can also have many notifications. There is also a payment method . Dashboard is for seeing ads.

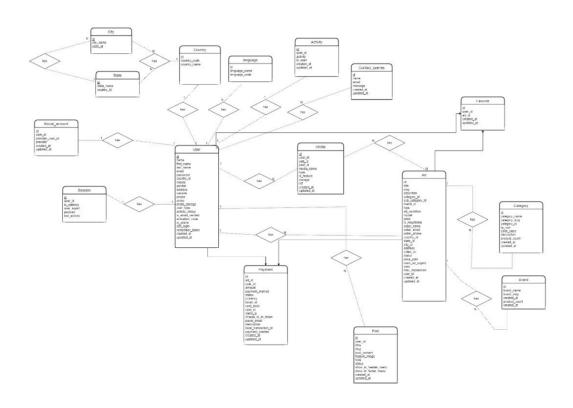


Figure 3.5.1: Design Requirements

3.6 Design Requirements

- We used Figma[13] to design the UI.
- We used Drawio[6], for drawing business process model, Use case diagram, UML diagram and ER diagram .
- We also use Gmail authentication for creating a register account.
- Also used database to list the user information.

CHAPTER 4

DESIGN SPECFICATION

4.1 Front End Design

We have designed a user-friendly interface for our project. The UI is done by Figma[13] online platform for design. For implementation we used HTML[10], CSS[9] and for interaction with the backend we have used JavaScript[12].

Home Page

We can see our home page in Figure 4.1.1 and Figure 4.1.2. From this page users can have a short knowledge of our page. When a user will log in or register they will be landed on their dashboard. Also anyone can see this home page without login. Here users see many categories with related icons.

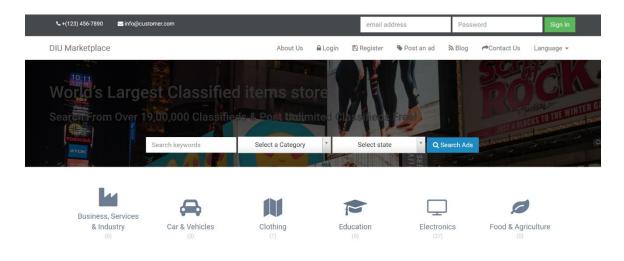


Figure 4.1.1: Screenshot of Home page for Biggapon

If we scroll down a little bit we will see many pictures for selling products along with home-to-let.

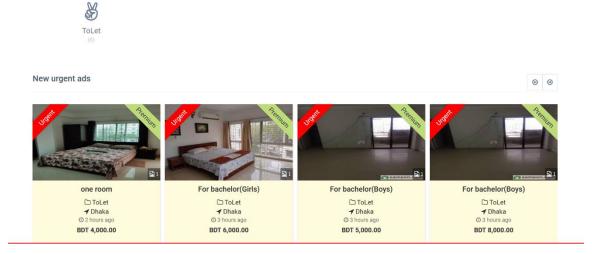


Figure 4.1.2: Screenshot of Home page for Biggapon

Registration Page

In Figure 4.1.3 we will see our registration page .Here users have to give some information to create an account. After providing First name, Last name, Email, Phone number, gender, Password etc. a verification code will be provided. After verifying the code, users have to log in. Also there is adoption if users already have an account then they don't have to register again.

	Sign up) OT Login
First Name		Last Name
Email Address		
Phone Number		
Select Gender		
Select a country		
Password		Confirm Password
I Agree		er , you agree to the Terms and Conditions e, including our Cookie Use.
	Re	gister

Figure 4.1.3: Screenshot of Registration page for Biggapon

Login Page

This is our Login page in Figure 4.1.4 of the website. Users can Login by providing an existing account email address and password. If a user provides the wrong password or email an alert message will be sent "Your email or password is incorrect. Also there is an option called remember me along with the forgot password option.

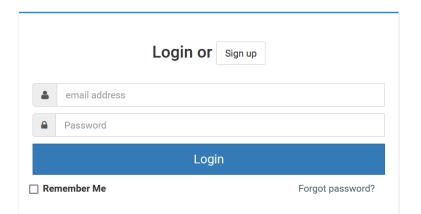


Figure 4.1.4: Screenshot of Login page for Biggapon

Profile page

In figure 4.1.5 we can see the profile page of a user. All information is given there . Also the user can edit his or her profile anytime.

Profile



Name	Samia Dewan
User Name	
Email	samia@gmail.com
Gender	Female
Mobile	
Phone	01879840719
Address	
Country	Bangladesh
Website	
Created At	26/12/2022 7:33 PM
Status	Active

🕑 Edit

Figure 4.1.5: Screenshot of Profile page for Biggapon

Dashboard

In figure 4.1.6 we show the dashboard of our website. When a user logs in he or she landed here. Here the user can see all his or her approved ads, pending ads and blocked ads. Also

users can post ads from here. Another thing is that users can also change their password form here.

& Dashboard ≮ My ads	Dashboard	ł	
Payments	1	0	Ο
& Profile	Approved ads	Pending ads	Blocked ads
Change Password			

Figure 4.1.6: Screenshot of Dashboard page for Biggapon

Post an ad

In figure 4.1.7, 4.1.8 and 4.1.9 is the post an ad page for the website. User can post ad from here. They have to select the category then mention the price with some other information and post it.

Post an ad

 Ad Info

 Category

 Brand

 Skip brand selection if you need

 Ad title

 Ad title

 To-100 character will be great title

 Ad description

 Ad description

 A description will help user to know details about your product

Figure 4.1.7: Screenshot of Dashboard page for Biggapon

	Price	BDT Pick a ge	Ex. 15000 ood price.	Negotiable	
Image					
Upload image					
Vid	eo URL	Video			
			tube or vimeo url, ex. http: v=video_id	s://www.youtube.com	
			eature only for modern the vill be disable in ad details	eme, if you set any video, then featur page	e
Location Info					
C	Country	Select	a country		Ŧ

Country	Select a country	¥
State		Ŧ
City		*

Figure 4.1.8: Screenshot of Dashboard page for Biggapon

Seller Info	
Seller name	Samia Dewan
Seller email	samia@gmail.com
Seller phone	01879840719
Address	Address
	Address line will help buyer to know about your location more specifically
Payment Info	
Price plan	ORegular OPremium
	☐ Mark as urgent
Payment Method	Stripe
	Save new ad

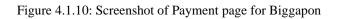
Figure 4.1.9: Screenshot of Dashboard page for Biggapon

Payment history

Figure 4.1.9 shows the payment history of users.

Payments

Ad	User	Amount	Payment Method	Status	Created At
Deleted Ad	Samia Dewan	13.00	stripe	initial	26/12/2022 7:46 PM
one room	Samia Dewan	13.00	stripe	initial	01/01/2023 7:18 PM



Change Password

Figure 4.1.10 shows the website page Payment. Here user can see his or her all transaction list.

Change Password

Old password *	Old password
New password *	New password
Old password confirmation *	Old password confirmation
	Change Password

Figure 4.1.11: Screenshot of Change Password page for Biggapon

4.2 Back-End Design

We have made sure that the database is secure, dependable, performant, and effective. This is why we went with PHP[3], Laravel[4] which works nicely with MySQL[5], for the backend. Additionally, PHP[3] is a very stable language. The module for our website are activity, ad, brand, category, city, country, favorite, language, media, password reset, payment, post, report ad etc.

4.3 Interaction Design and UI

- We have worked for a user friendly UI in addition to every one can easily understand the features. Everyone's first experience will be smooth.
- The system will auto update my admin.
- The project will get more proficiency when it will get more data. In future we can add machine learning algorithms to it.
- The requirement will be fulfilled when it will get more data. Depending on the data it will provide better service to users.

4.4 Implementation Requirements

The main implementation requirements are the front-end and backend. Also need good knowledge of MySQL[5] for database management. Another thing will be needed is Laravel[4] framework knowledge. Front-end will be done by using Bootstrap[11], HTML[10], CSS[9], JavaScript[12]. Using PHP[3] and MySQL[5] for properly manage the database.

Software Requirements

- Visual Studio[7]
- Figma[13]
- Any Web Browser

CHAPTER 5

IMPLEPENTATION AND TESTING

5.1 Implementation of Database

To store a large amount of data we have tried to ensure database security as many users' personal information will be stored here. Databases have to store a huge amount of data. As many students will frequently post advertisements. To handle this data we have used MySQL[5], an open-source relational database management system. We have selected PHP[3] for back-end which goes well with MySQL.[5]

5.2 Implementation of back-end

Our system will have to manage a pretty good amount of user data. Fast came the safety issue. We have ensured the database security, stability, Performance, and efficiency. For this reason we choose PHP[3], Laravel[4] for the back-end which goes well with MySQL[5]. Also PHP[3] is a strongly stable language. Another reason behind choosing this is to quickly load the website.

-	Structure 🗾 S	SQL	Searc	h 🗐 Q	uery 🚍	Export	📕 Impor	t P	Operations	68 F	Routines 💿 Ev	ents 3	6 Triggers
U	activities	83	Browse	M Structur	e 🤹 Search	зна Insen	m Empty	🔘 Drop	0	InnoDB	utt8_unicode_ci	16.0 Ki8	-
	ads	53	Browse	Je Structur	e 🗷 Search	3 Insert	🔛 Empty	\ominus Drop	34	InnoDB	utf8_unicode_ci	64.0 Ki8	-
0	brands	-	m Browse	🛃 Structur	e 🙉 Search	3 Insert	👷 Empty	Drop	10	InnoDB	utf8_unicode_ci	16.0 Ki8	-
	categories	云	Browse	M Structur	e 🔌 Search	- Insert	H Empty	🔵 Drop	112	InnoDB	utf8_unicode_ci	16.0 KiB	-
	cities	含	Browse	M Structur	e 🧃 Search	3-: Insert	me Empty	Drop	48,314	InnoDB	latin1_swedish_ci	2.5 Mi8	
	contact_queries	宫	Browse	Be Structur	e 🗷 Search	3 Insert	💭 Empty	Orop	3	InnoDB	utf8_unicode_ci	16.0 Ki8	
	countries	索	Browse	M Structur	e 👒 Search	3 Insert	🚍 Empty	😂 Drop	246	InnoDB	utf8_general_ci	16.0 Ki8	
0	favorites	宫	Browse	Je Structur	e 🎯 Search	3 Insert	📻 Empty	🔘 Drop	1	InnoDB	utf8_unicode_ci	16.0 Ki8	-
	languages	俞	Browse	M Structur	e 💐 Search	3-: Insert	👷 Empty	😑 Drop	1	InnoDB	utf8_unicode_ci	15.0 Ki8	-
	media	*	Browse	Caracter	e 💐 Search	3- Insert	HEmpty	🔘 Drop	55	InnoDB	utf8_unicode_ci	16.0 Ki8	-
0	migrations	\$	Browse	M Structur	e 📑 Search	3-: Insert	👷 Empty	😂 Drop	17	InnoDB	utf8_unicode_ci	16.0 KiB	-
D	options	53	Browse	Structur	e 🗷 Search	3 Insert	👷 Empty	Orop	104	InnoDB	utf8_unicode_ci	16.0 Ki8	-
0	password_resets	蒙	m Browse	M Structur	e 🙉 Search	3 Insert	👷 Empty	Orop	3	InnoDB	utf8_unicode_ci	48.0 Ki8	-
	payments	53	Browse	Je Structur	e 🤫 Search	3ª Insert	🔛 Empty	😑 Drop	27	InnoDB	utf8_unicode_ci	16.0 Ki8	-
	posts	食	Browse	M Structur	e 🤹 Search	- Insert	👷 Empty	Drop	8	InnoDB	utf8_unicode_ci	88.0 Ki8	
	report_ads	云	Browse	Bre Structur	e 🦂 Search	3.: Insert	Here Empty	Orop	2	InnoDB	utf8_unicode_ci	16.0 Ki8	-
	sessions	索	Browse	M Structur	e 💘 Search	3- Insert	🚍 Empty	😂 Drop	8	InnoDB	utf8_unicode_ci	16.0 KiB	-
	sliders	容	Browse	Je Structur	e 🞯 Search	3 Insert	戻 Empty	Orop	3	InnoDB	utf8_unicode_ci	16.0 Ki8	-
0	social_accounts	宫	Browse	M Structur	e 🗟 Search	3 Insert	👷 Empty	Drop	2	InnoDB	utf8_unicode_ci	16.0 KiB	
	states	*	Browse	C Structur	e 🍇 Search	3-: Insert	HEmpty	😡 Drop	4,119	InnoDB	latin1_swedish_ci	192.0 Ki8	-
0	users	☆	Browse	M Structur	e 🔤 Search	3-: Insert	👷 Empty	Orop	19	InnoDB	utf8_unicode_ci	32.0 Ki8	
_	21 tables	Sun	n			2002			53,088	InnoDB	utf8_unicode_ci	3.2 Mi8	0 B

Figure 5.2.1: Implementation of back-end

5.3 Implementation of Front-end design

This is a user-friendly website. We have designed a UI using Flutter. Implementation part is made by CSS[9], HTML[10], Bootstrap[11], and JavaScript[12]. This is a multiple page website. Moreover this is a responsive application. We can use it from laptops, mobile phones, tablets.

5.4 Testing Implementation

Only developing an application is not enough for publishing. Before publishing we have taken several tests to check the system is working properly. After checking all the possible unit tests we are now hoping our application is ready to publish. We have tested our application manually. We also did integration testing in all features.

No.	Test Input	Test Input	Expected Outcome	Obtained Outcome	Pass/Fail
1	User Registration	User must fill the all requirement for sign up.	Email verification	Sent Email Verification	Pass
2	Activate Account	Confirm verification through email.	Account Activated	Account Activated	Pass
3	User Log In	Fill Information using correct email and password	Successfully logged in	Successfully logged in	Pass
4	User Log In	Wrong email and password provided	Incorrect email and password provided	Incorrect email and password provided	Pass

5	User Log In	Account not created	Account not exist	Account not exist	Pass
6	Post Ads	Posting ads by giving all information requirement	Post successfully	Post successfully	Pass
7	Post Ads	Posting Without payment	Payment required	Payment required	Pass
8	Update Profile	Change some information of user	Successfully updated	Successfully updated	Pass
9	Blog	Post blog	Post Successfully	Post Successfully	Pass
10	Comment	Review your thoughts	Comment successfully	Comment successfully	Pass
11	Search	Find your category	Search successfully	Search successfully	Pass
12	Report	Inappropriate activity	Report successfully	Report successfully	Pass
13	Block	Harmful post	Blocked	Blocked	Pass
14	Favourite ads	Ad on favourite ads	Added	Added	Pass
15	Payment	Pay for advertisement	Paid	Paid	Pass
16	Pending for approval	Checked for approved	Approved	Approved	Pass

	Pending for approval	Not relevant Ads	Blocked	Blocked	Pass
--	-------------------------	------------------	---------	---------	------

5.5 Test Results and Reports

The system has passed several tests and outcomes with a satisfactory result. After seeing those results we can publish this application for students. Bug is a part of application as now we test the application manually there can be some issues which are hopefully fixed. Furthermore the application is ready to publish for students benefit.

CHAPTER 6

Impact on Society, Environment and Sustainability

6.1 Impact on Society

Our project is a community base project. The impact of this project on society is significant in a good way. As this project's main motive is to help the students. Helping and making student life easier is the motive. So all we give is a commendable impact on society. Moreover no vulnerable activities are allowed here.

6.2 Impact on Environment

As this is a web application. A web application can never harm the environment. Because there can be no illegal activity. If happens we will immediately report it.

6.3 Ethical Aspects

Ethical aspect is to make students' lives easy and also they can earn some money in an ethical way.

6.4 Sustainability Plan

To make sure our project can go long run in future we have to manage the advertisement properly. The more students will get friendly to it the more it will be used in future.

CHAPTER 7

CONCLUSION AND FUTURE SCOPRE

7.1 Discussion and Conclusion

The characteristics of the internet make web advertising a distinctive tactic. Today, it is nearly hard to find someone who does not use the internet. Due to the vast number of users worldwide, web advertising has a very high possibility of reaching its potential clients. The costs associated with web advertising are somewhat lower than those of traditional advertising strategies. In the end, this gives small businesses an opportunity to quickly increase their consumer base. This project will make an online buyer and seller journey easier, fun and lot more interesting without any impediment. The users have full control over advertisements in this application. A user will get to know about the products specification, current demand and able to compare with other products. They will get suggestion by website's blog to improve their choices. Those suggestions will be based on their current performance, weakness, categories, demand and supplies. This is a lot helpful for a seller and buyer, by getting a good suggestion on what to sell and buy. Moreover the user will be able to choose other users opinion, they can suggest, discuss to avoiding confusions. In addition, to make the users shopping more interesting and make sure they don't feel bored, they will be rewarded with the points. These points will used to exchange points with discount, which later they can use on purchasing goods. However, it lacks a very few things which will be added soon. Such as, there is no way to communicate with other users directly. Also the project can be improved by using some machine learning models. We'll be working on attaching such options and features to make the application more reliable, safe, stable and useful.

7.2 Limitations of Our Application

As with all applications, our application also has some limitations. We're working on these issues to make the application more useful. Some of the most significant drawbacks are:

- 1. This is a web application. So, the application can only be accessed from a web browser connected to the internet.
- 2. There is no way to communicate directly with other users.
- 3. There is no machine learning technology to search items through image.
- 4. Technical issues like website outages do happen frequently in internet. When this occurs, subscribers will no longer receive broadcast advertisements.
- Illegal/Invalid clicks happen when someone deliberately clicks on an ad just for their own personal gains. Sometimes the advertising networks can also ban your account as a result of a fraud click.

7.3 Scopes for Future Developments

We have goals to go past our constraints and improve and sustain the application. Scopes for future development are below:

- 1. For the users' convenience, we will create a mobile application that does not require a web browser. However, the online version will still be accessible.
- 2. We will introduce a messaging system. A user can communicate with other users to send direct messages.
- 3. To improve suggestions, we will use machine learning algorithms to Analyze user statistics and create more effective recommendations.
- We will add a forum for users where they can discuss various topics and problems. This section will be open to everyone, but only to subscriber users can add a topic, comment or reply.
- 5. Email marketing campaign will added soon, in order to reach the targeted registered user more often.
- 6. Audio search option will be introduced in future.
- 7. Image search will be the most effective way to look for products in future.
- 8. Social media influencers will join for product campaign in order to reach every type of buyer and seller.

- Video will remain the top strategy to attract the customers for next so many years. Video sections will be top priority things.
- 10. Augmented and Virtual Reality campaign will be introduced to offer customers an experience that better connects them to their brands and products.
- 11. In future this project is going to be available at not only in Daffodil International University but also whole country.

Customers are always convenient when it comes to web advertising. Web advertising mostly works instant. These future plans can be executed if proper support and resources are available.

REFERENCES

- [1] Bikroy.com, available at << https://bikroy.com/bn>>, last accesses on 30-10-2022 at 07:00 PM.
- [2] COMOPSER, available at << https://getcomposer.org/>>, last accesses on 14-10-2022 at 05:30 PM.
- [3] php, available at << https://www.php.net/>>, last accesses on 15-10-2022 at 01:00 AM.
- [4] Laravel, available at << https://laravel.com/>>, last accesses on 15-10-2022 at 10:00 PM.
- [5] MySQL, available at << https://www.mysql.com/>>, last accesses on 20-10-2022 at 11:00 PM.
- [6] Drawio, available at << https://app.diagrams.net/>>, last accesses on 10-12-2022 at 11:00 PM.
- [7] Visual Studio Code, available at<< https://code.visualstudio.com/>>, last accesses on 15-12-2022 at 09:00 PM.
- [8] stack Overflow, available at << https://stackoverflow.com/>>, last accesses on 30-12-2022 at 06:00 PM.
- [9] CSS, available at << https://www.w3schools.com/css/>>, last accesses on 01-09-2022 at 08:00 PM.
- [10] HTML, available at<< https://www.w3schools.com/html/>>, last accesses on 01-09-20222 at 07:00 PM.
- [11] Bootstrap, available at << https://getbootstrap.com/>>, last accesses on 03-09-2022 at 10:00 PM.
- [12] JavaScript, available at << https://www.w3schools.com/js/>>, last accesses on 17-09-2022 at PM.
- [13] Figma, available at<< https://www.figma.com/>>, last accesses on 01-09-2022 at 11:00 PM.

		24%	0%	19,	
SIMILA	ARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT	PAPERS
PRIMAR	Y SOURCES				
1	dspace.	daffodilvarsity.e	edu.bd:8080		17
2	Submitt Student Pape	ed to Daffodil Ir	nternational U	niversity	4
3	www.hit	echwhizz.com			1
4	Submitt Student Pape	ed to The Robe	rt Gordon Uni	versity	1
5	Submitt Banglad Student Paper		of Liberal Art	S	<1
6		ed to Southern ty - Continuing		ire	<1
7	Submitt Student Pape	ed to Far Easter	rn University		<1
8	www.litt	lemissartypants	s.com		<1

9	Submitted to Malta College of Arts,Science and Technology Student Paper	<1%
10	www.circlesurrogacy.com	<1%
11	Submitted to De Montfort University Student Paper	<1%
12	www.cpsbc.ca Internet Source	<1%

Exclude quotes On Exclude bibliography On Exclude matches < 10 words