E-commerce Based Agricultural Web Application

 \mathbf{BY}

Md. Shobuj ID: 182-15-11774 AND

Asif ahmed ID: 182-15-11772

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

Supervised By

Mst. Eshita khatun

Lecture
Department of CSE
Daffodil International University

Co-Supervised By

Dewan Mamun Raza

Lecture
Department of CSE
Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH AUGUST 2021

APPROVAL

This Project/Internship titled "E-commerce based Agricultural web Application", submitted by Md. Shobuj, ID-182-158-11774 and Asif ahmed, ID No: 182-15-11772 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment 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 09 September 2021.

BOARD OF EXAMINERS

Chairman

Dr. Touhid Bhuiyan Professor and HeadDepartment of CSE
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

- Vos

Dr. Md. Ismail Jabiullah Professor

Department of CSE Faculty of Science & Information Technology Daffodil International University Most. Hasna Hena Assistant Professor

Department of CSE Faculty of Science & Information Technology Daffodil International University

External Examiner

Dr. Dewan Md. Farid Associate ProfessorDepartment of CSE

Jahangirnagar University

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mst. Eshita khatun, Lecturer 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:

Eshita khatun

Lecturer

Department of CSE

Daffodil International University

Co-Supervised by:

Dewan Mamun Raza

Lecturer

Department of CSE

Daffodil International University

Submitted by:

Amoj

Md .Shobuj

ID: -182-158-11774

Department of CSE

Daffodil International University

Asif

Asif Ahmed

ID: -182-15-11772

Department of CSE

Daffodil International University

ACKNOWLEDGEMENT

First of all I would like to thank my lord Alhamdulillah and express my gratitude for making it possible for us to complete the final year project successfully.

We really grateful and wish our profound our indebtedness to **Supervisor Mst. Eshita khatun, Lecture**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "*E-commerce based Agricultural web Application*" 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 Dr. Touhid Bhuiyan, Professor 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, I would like to express my gratitude to the respect, whose love, strength, courage and motivation give us the courage to move forward.

ABSTRACT

Bazaar is an e-commerce based web application. That is not the only market where product can be bought and sold. There is an opportunity to train on agricultural work. Though this training, you will be able to produce healthy food starting from employment. Agriculture is the art and science of soil cultivation, crop cultivation and animal husbandry. This includes the preparation of plant and animal products for human consumption and their distribution in the market. Agriculture supplies most of the world's food and clothing. Cotton, wool and leather are all agricultural products. It also supplies wood for agricultural construction and paper products. By marketing the products produced for people of all these level, they will be able to earn good prices. From encouraging agricultural work though agricultural training to planting trees. To build a greed Bangladesh by planting green trees and shrubs.

Though our platform, alone with the development of the country, the product of the people of the country have been made beautiful. In the same way, the country and the nation can be improved through technology. In this way, engineering skills can be used to build self-employment and move the country and its product forward economically.

TABLE OF CONTENTS

CONTENTS	PAGE
Board of Examine	i
Board of Examiners	ii
Declaration	iii
Acknowledgements	iv
Abstract	vi
Table of content	vii
List of figure	viii
Lost of table	ix

CHAPTER

CHAPTER 1: INTRODUCTION	1-3
1.1 Introduction	1
1.2 Motivation	1
1.3 Objective	2
1.4 Expected	2
1.5 Report Layout	3
CHAPTER 2 : BACKGROUND	4-6
	4
2.1 Introduction	4
2.2 Related work	5
2.3 Comparative Studies	5
2.4 Scope of the Problem	5
2.5 Challenges	6
CHAPTER 3:	7-10
REQUIREMENTSPECEFICATION	
3.1 Introduction	7
3.2 Software Requirement	7
3.3 Framework, Language ,Tools	8
3.4 Hardware Requirement	8
3.5 Tools	9
3.5 Database	10
CHAPTER 4: DESIGN SPECEFICATION	11-24

4.1 Front-end Design	11
4.2 Implementation Requirements	23
CHAPTER 5: IMPLEMENTATION AND TESTING	25-27
5.1 Introduction	25
5.2 Implementation of Database	25
5.3 Implementation of Front-end Design	25
5.4 Implementation of Interactions	26
5.5 Test Results and Reports	27
CHAPTER 6: CONCLUSION AND FUTURE SCOPE	28
6.1 Discussion and Conclusion	28
6.2 Scope for Further Developments	28
REFERENCES	29
Plagiarism Report	30

LIST OF FIGURES

FIGURES	PAGE NO	
Figure 3.1: Business Process Modeling Diagram	9	
Figure 3.2: Use Case Diagram of General User's Activity	10	
Figure 4.1.1: Admin Panel Login	12	
Figure 4.1.2: User Registration Page	13	
Figure 4.1.3: Login Page of User	14	
Figure 4.1.4: Homepage of Website	15	
Figure 4.1.5: Admin Panel Dashboard Design	16	
Figure 4.1.6: All Categories	17	
Figure 4.1.7: Add Sub Category	18	
Figure 4.1.8: All Sub Category	19	
Figure 4.1.9: Create Admin	20	
Figure 4.1.10: Cart Page	21	
Figure 4.1.11: Website Shop Page	22	
Figure 4.3: Requirements of Implementation	23	

LIST OF TABLES

TABLES	PAGE NO
Table 5.5.1: Login Report	26
Table 5.5.2: Registration and verification Report	27

CHAPTER 1

Introduction

1.1 Introduction

Bazaar is an e-commerce based agricultural web application for core customers. Encourage agricultural work to create jobs. To produce new agricultural products by setting up agricultural farms through training on agricultural work. In order to market the products, we have the facility to buy and sell various products on this platform. This customer will be able to get plants and other related products sitting at home.

Agriculture is the art and science of cultivating the soil, growing crops and raising livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets. Agriculture provides most of the world's food and fabrics. Cotton, wool, and leather are all agricultural products. Agriculture also provides wood for construction and paper products. These products, as well as the agricultural methods used, may vary from one part of the world to another.

1.2 Motivation

Agriculture is the main driving force of our economy. Our famers are trying heart and soul to have us a meal. But it's a matter of regret that they are being deprived of getting their appropriate value. It's happening because they don't get the idea of appropriate price of their cultivated goods, even they fail to directly communicate with the resellers in the town. That's why they have to sell their products to the local mahazons within a lowest price. But the main profit is going to the pocket of those mahazons. We have

thought to reduce the gap between the root level farmers & the resellers and have finally come out with the idea of E- commerce based agricultural web application "Bazaar".

The rate of unemployment in Bangladesh is very high. The youth unemployment rate was estimated to be 10.6. Percent- with one in every 10 young people being unemployed. Most of them are illiterate. This platform will make opportunities to find job in according to their skill.

1.3 Objective

- ✓ To encourage people to do more agriculture work and plant different trees to ensure green Bangladesh.
- ✓ Motivating farmers for diversification of areas from traditional crops to commercial crops.
- ✓ To improve nutritional standards for betterment of health.
- ✓ To give proper idea and proper care in agricultural work through training.
- ✓ Ensuring proper product delivery to every customer.
- ✓ To provide product at every door step at a lowest possible price.
- ✓ Farmer to ensure a fair price for their produce.
- ✓ Reducing the level between farmer and consumers to reduce commodity prices.

1.4 Expected outcome

- Users will be able to take self-sufficiency on agricultural work.
- Sellers & farmers will get satisfactory price as well.
- Reduce the intermediate layers between farmers and consumers.
- Training facilities will encourage people to do more agricultural work and plant trees.
- We will contribute to make our country more green.
- We will be able to provide the best agricultural support to our users, thus we will be able to contribute to increase agricultural production a bit.

1.5 Layout of the Report

- ✓ Chapter one includes the motivation, objectives and goals of our system.
- ✓ Chapter two will have overall ideas of our project that shows managerial challenges and phases.
- ✓ In chapter three, we will discuss about the Software Requirement our system.
- ✓ Chapter four is on System Analysis.
- ✓ Chapter five has the system design and specification of the project.
- ✓ Chapter six will have Implementation, and Testing.
- ✓ And finally Chapter seven is on conclusion.

CHAPTER 2

Background Overview

2.1 Introduction

We were planning to implement a concept that would benefit lower class users to higher class users. We can see around us that the work is constantly being cut but the planting is not being done on time. A lot of the plants around me are dying because of the care and greenery and I know where the green Bangladesh is getting lost. Since then we have decided to do something different that will solve this problem. So we have to use the economic K to protect the country and at the same time. who is greed Bangladesh in agriculture with the merchant to play a parallel role on zero agricultural work From encouraging people to work in agriculture through training to taking care of agriculture

2.2 Related work

We created a platform that provides effective buying and selling of agricultural products. Ensuring healthy food.

We were planning to implement e-gardening functionality as well. There are few platforms those deals with this. Birikkho bajar, garden.com is among them.

We have included agricultural support center for the users. There are several apps with this functionality. Fosholi, plantix, krishoker janala, krishi doctor, e-krishok etc are some of them.

2.3 Comparative Studies

We were planning to create a platform Which range from shopping to products from the farmer to the gift of healthy food. Collects goods from farmers and sells them at minimum profit. While agriculture can encourage web training, it will not be able to pay the appropriate full price. Because they only train in agriculture Cannot arrange any kind of marketing of agricultural products.

We have included agricultural support center for the users. There are several apps with this functionality. Fosholi, plantix, krishoker janala, krishi doctor, e-krishok etc are some of them. Since these are mobile apps, users must have to install that app to their device to get support. As we know, most of our root level people don't have the ability to buy a device with better storage. So we are trying something web based supporting platform.

Though lot of platforms are performing our goals individually, there is no platform where users can perform all these tasks together. They have to use several platforms to get different service. So why not get them all done within single platform? We are combining all these functionalities together within a single platform.

2.4 Scope of the Problem

There is a huge opportunity to implement the scope of the problem within our platform. So here slowly we can come out with others as everyday products

We will. We can collect locally based specialty products at the lowest possible prices Distribute them to other areas with very little profit. Thus all products can be found Everywhere at very low prices.

Now we are looking at the agricultural support center. There is also a great opportunity to work here in the future.

We can gradually develop a video server so that users will have all the questions and problems they face. That way everyone will be aware of those problems. They will be able to get them

Apparently the solution in a very short time.

2.5 Challenges

- > Since we have to improve the farming of this platform.
- > Become financially self-sufficient through agricultural work.
- > To keep green Bangladesh alive.
- > Ensuring the right value and right value of virtue.
- > Provide healthy products.

CHAPTER 3

Requirement Specification

3.1 Introduction

Software requirements specifications an organized portrayal of a product framework to be made with its viable and non-utilitarian necessities. It may consolidate the usage occurrences of how clients will help out the product framework. The product prerequisite particular archive incorporates all vital necessities those are required for project improvement. To develop the framework we should have away from of what we planned to create. To accomplish this objective, we have persistently spoken with our focused on clients, we assembled their prerequisites, broke down them lastly build up a high proficient easy to use framework generally for the root level clients.

3.2 Software Requirement

We need to satisfy some base programming necessity to build up this framework. The decision of programming prerequisite is according to the accompanying. Our framework is primarily an electronic stage. We have built up a versatile well-disposed and all program upheld framework. Here we have used XAMPP as local server. We have used sublime text editor, Visual Studio Code as our code editors. We also have to use composer for Laravel functionality. We used JIRA (an online tool) to track our progress and to divide the tasks within the group members. When we were completed with all the tasks, we have to deploy it to cPanel.

3.3 Framework, Language, and Tools

We have used HTML5, CSS3, Bootstrap5, JavaScript, JQuery and Ajax as the front end technology. We have used Laravel (PHP framework) as the server side language of will handle the backend of our system. Here MySQL is used as relational database. Here we also needed XAMPP as local server. As the code editor we have used sublime text editor, Visual Studio Code. We needed composer for laravel functionality. We also have use needed

composer for laravel functionality. We also have used JIRA for monitoring our development process properly.

3.4 Hardware Requirement.

- ✓ Processor Dual Core (minimum)
- ✓ Hard Disk 50 GB
- ✓ Memory 1GB RAM

3.5 Tools

We have utilized a great deal of present day programming improvement instruments to build up our framework. We have attempted to follow to programming advancement life cycle (SDLC) however much as could reasonably be expected. To improve this site we utilized the accompanying devices:

- Xampp server.
- Sublime Text Editor
- JIRA
- Live Server.
- MySQL database.
- Chrome Browser.
- Visual Studio Code.
- Adobe Photoshop.

3.6 Database

Database is perhaps the main pieces of programming improvement. Database stores the client's information and shows them for client cooperation. So we were going to pick the most ideal alternative for database. Thus we pick MySQL as our framework's database. We broke down the undertaking prerequisites appropriately, at that point plan the product engineering, and afterward likewise plan our database design based on relational database

management system. We followed the database standardization methodology and attempted to keep our data set as much as straightforward.

3.7 Business Process Modeling

Business process modeling is in a word the graphical portrayal of what an arrangement of equipped for doing, what's are its potential results. Business measure displaying is truth be told the work process of a framework so the current cycle might be broke down, improved, and robotized. BPM is generally finished with the utilization of different kinds of graphical substance, for example, stream outlines, information stream charts, etc. The beneath figure is the general plan of action of our frameworks. It speaks to practically all the dataflow and working technique of our 3 sorts of clients: administrator, sellers and ordinary client.

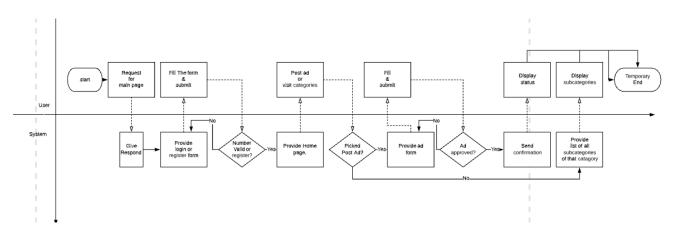


Figure 3.1: Business Process Modeling Diagram

User the system start show the main page give response to direct provide login or register from fill up and submit to provide home page. The categories and post status show and sub categories.

3.8 Use Case Modeling and Description

Use case chart mostly show an activities whole conditions and it assists with seeing how it's going on and what a definitive objectives of the task are. Also, we attempt to make this dependent on our site that how it functions.

Our framework has three distinct degrees of clients: Admin, Customer and Service supplier. The beneath connection speaks to the utilization case chart of our framework and how they associate with the framework.

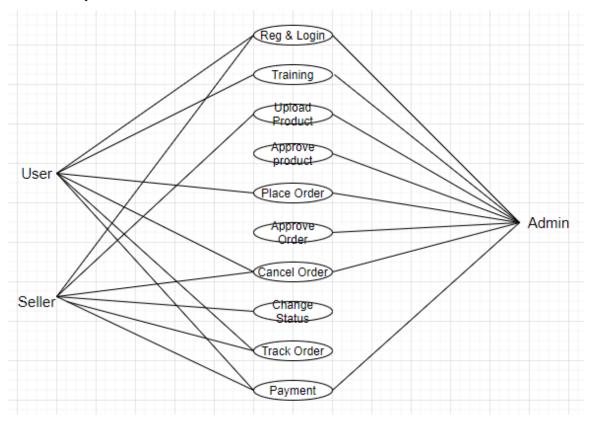


Figure 3.2: Use Case Diagram

Admin directly connected all activity and access all system. User connected Register, login, training, order, cancel order, track order, and payment. Seller at first registration and login then upload product, change status, payment.

Chapter 4

Design Specification

4.1 Front-end Design

Since our clients are generally the uninformed people, indeed root level client, we were survey to build up a framework that will be more easy to understand, simple to connect and appealing too. That is the reason we have utilized an extraordinary consideration while building up the front finish of our framework, were more engaged and cautious about not being so unpredictable while planning the UI of our framework. Our framework is responsive, have all program uphold and upgraded. That is the reason it doesn't need fast web to be stacked. We have used HTML5, CSS3, Bootstrap5, JavaScript, JQuery, Ajax Technology to develop the front end of our system. Below attachments are some of the representations of our system's front end.

Admin Login: Verified admins will be able to login the admin panel using their email & password. Admin can create new users.

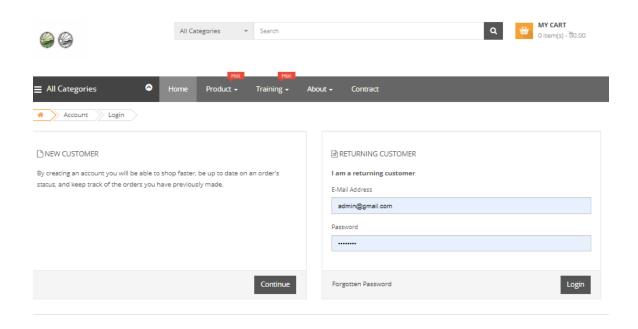


Figure 4.1.1: Admin Panel Login

User Registration: Both sellers and buyers can register using user registration form. Here the mobile number they provide will be their username to login. Sellers have to verify their identity through NID and will have to wait to login for admin's confirmation.

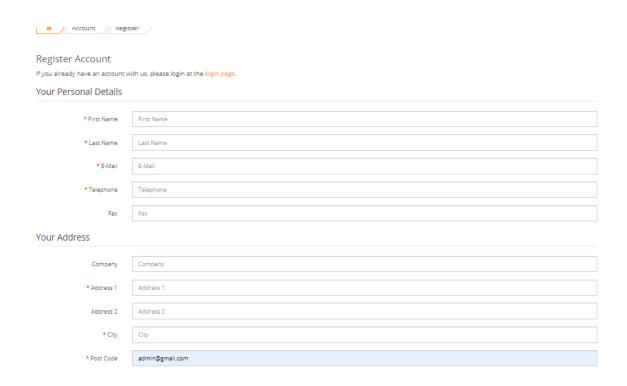


Figure 4.1.2: User Registration Page

User Login: User have to login to order product or to access the dashboard. After login, they will get access of so many functionalities. They will have to use mobile number as username to login.

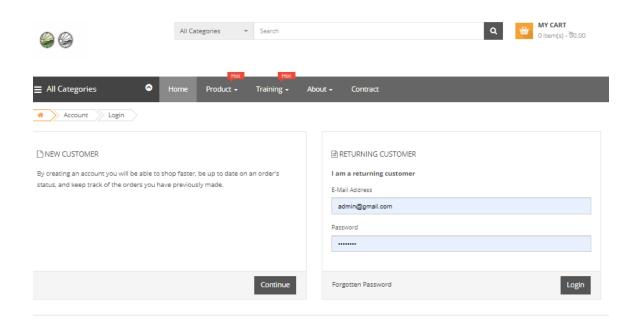


Figure 4.1.3: Login page of user

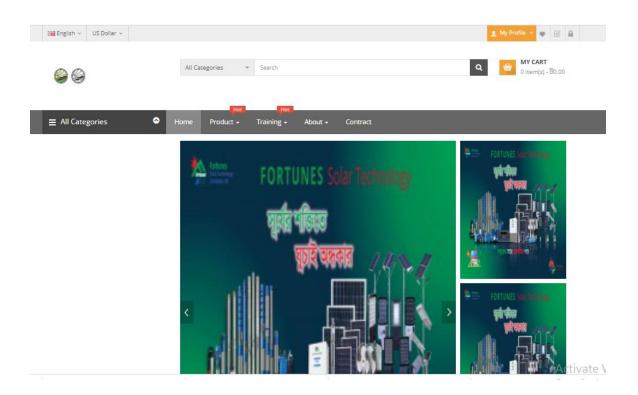


Figure 4.1.4: User Home page Design.

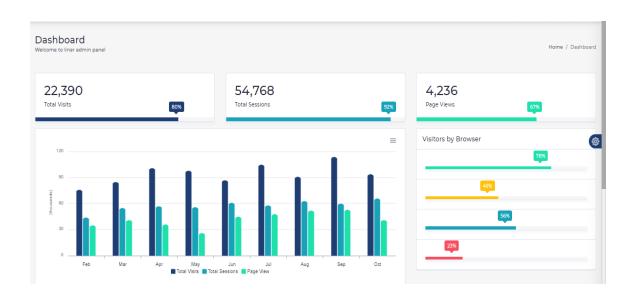


Figure 4.1.5: Admin Panel Dashboard Design.

Admin panel: Admin will control entire website from this dashboard. Only Admin can access this dashboard and admin will control all activities from this dashboard.



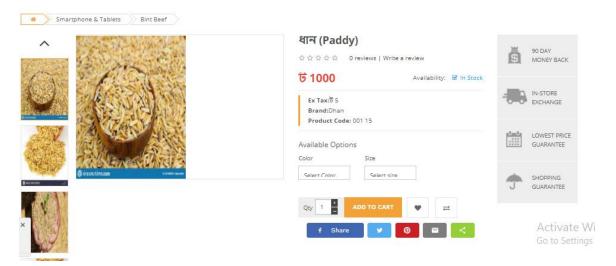


Figure 4.1.6: Home page of website

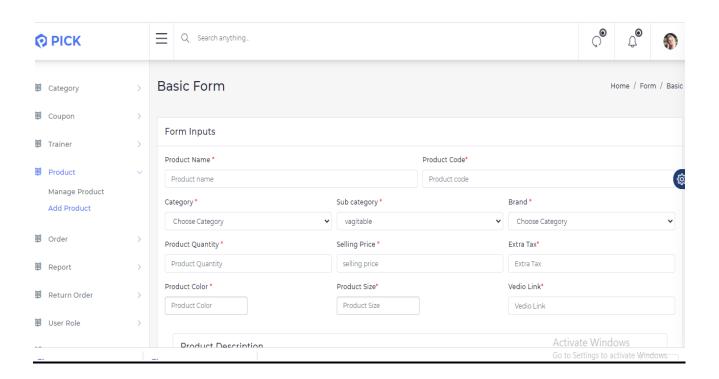


Figure 4.1.7: Admin Panel Dashboard Design.

Admin panel: Admin will control entire website from this dashboard. Only Admin can access this dashboard and admin will control all activities from this dashboard.

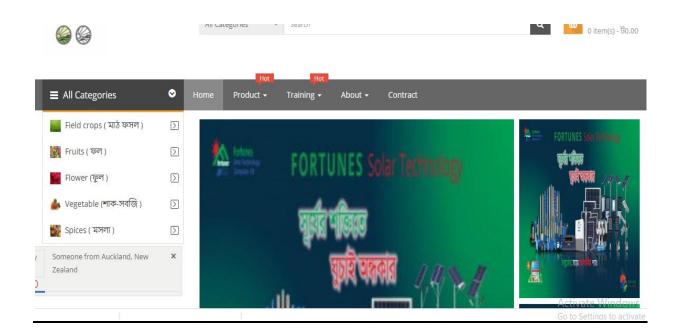
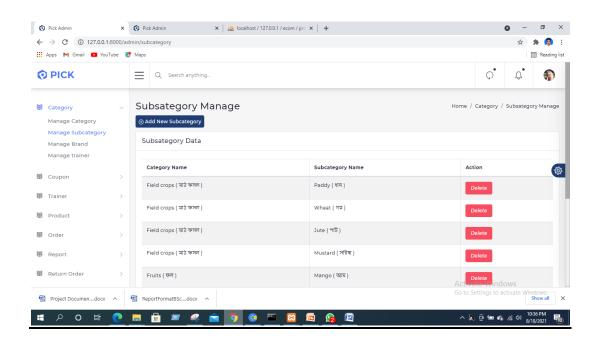


Figure 4.1.8: All Categories



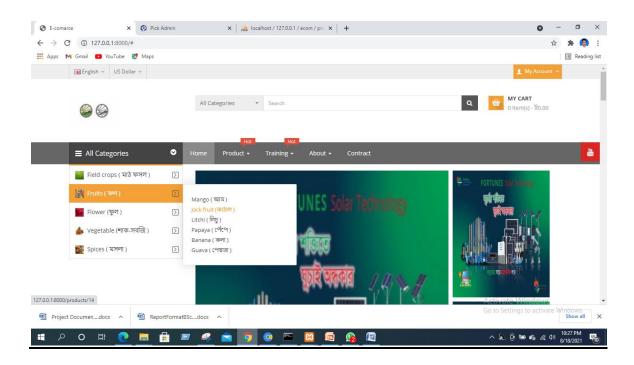


Figure 4.1.9: Add Subcategory

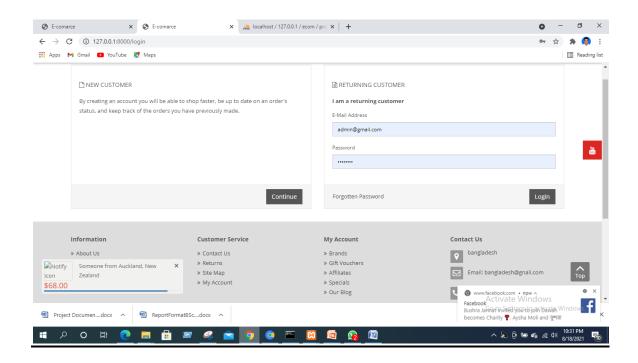


Figure 4.1.10: Create Admin



Figure 4.1.10: Cart Page

4.3 Implementation

Requirements Prerequisites examination was the principal cycle of the undertaking. Absolute first we investigation our necessities, we examine about the prerequisites and get thoughts when we examine with client and specialist organization. After examination our prerequisites we assemble model and afterward we test model. In the wake of testing client model we proceed onward plan of our site. We examination various types of site and get thoughts and afterward we make a remarkable plan of site.

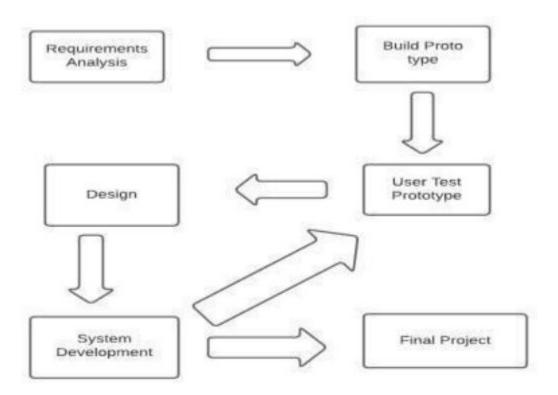


Figure 4.3: Requirements of Implementation

Completing our front-end plan part we start the advancement of our undertaking that is the back-end part of the site. Furthermore, we did whatever it takes not to do complex and plan MySQL information base. After advancement we again test our model and after commonly trying and testing that when acknowledge projects has no bug then we make it as complete. To actualize this site, we keep the venders significant reports like National ID card, Passport or Driving License for security reason.

CHAPTER 5

Implementation and Testing

5.1 Introduction

In order to implement our market platform, we test our requirements. Despite that Our site is for root level experts and we provide support, so we test with our clients and Workers about administration and job market websites. From their point of view in the long run. Eventually we spread our initiative and started building this site.

5.2 Implementation of Database

For execute our information base we use MySQL information base and Relational Database. Management System. We plan our information base extremely straightforward we don't make it more unpredictable. Likewise we plan this considering our definitive objective. We attempt to do our information base standardization. Principle certainty is we investigation our necessities of our definitive objective and accumulate information about that and we plan our data set base on this.

5.3 Implementation of Front-end Design

Execution of front-end plan, first we examine plan about our site and afterward we start actualize our front-end plan.

For complete front-end design we use HTML, CSS, Bootstrap, JavaScript and JQuery.

HTML: This is the main base of a website, that means it make structure of website.

CSS: CSS mainly works for design purpose like it gives design of website.

Bootstrap: Bootstrap mainly a frontend framework used for responsiveness.

JavaScript: JavaScript mainly make a static webpage to dynamic webpage.

JQuery: It's a platform JavaScript library and its design to simplify Html.

5.4 Implementation of Interaction

For usage of cooperation our task we talk about our client and specialist organization and cause it

to disentangle and make it best site for clients for their better insight.

- User friendly website.
- Simplify website user interface
- Secure their information

5.5 Test Results and Reports

Table 5.5.1: Login Report

Test No	Date	Module	Cases	Data	Pass/F ail	Numbe r of Bug	Comments
1	28/12/20	Login	Login as Admin	Admin's username and password	Pass	N/A	Only login access for Admin
2	28/12/20	Login	Login as User	User's Mobile No and Password	Pass	N/A	login access for registered Users
3	28/12/20	Login	Login as Seller	Mobile No and Password	pass	N/A	login access for registered service provider

Table 5.5.1: Registration and verification Report

Test No.	Date	Module	Cases	Data	Pass/F ail	Numbe r of Bug	Comments
1	28/12/20	Registratio n and verification	User Registration and verification	User's name, mobile number, email and password	Pass	N/A	Registratio n for the users completed
2	28/12/20	Registratio n and verification	Seller registration and verification	User's name,mobil e number,ema il,Identity card and password	pass	N/A	Registratio n for seller is pending for admin's approval.

CHAPTER 6

Conclusion and Future Scope

6.1. Discussion and Conclusion

We have attempted to fulfill the clarification to complete the project and increment our drive. We are cheerful with our creation. Where everybody is considering making a framework that will advantage them, we have thought about our employed jobless specialists who are at the cutting edge of our economy. Despite the fact that they're contributing for our nation, they're being dispossessed of their genuine qualities of their administration. We tend to request the reasonable estimation of their work and to remain by them to interface with their computerized approach. We realize that the assignment isn't exceptionally simple to frame them fit for abuse this technique anyway we are cheerful. When our uninformed chose laborers wasn't equipped for securing any position, anyway presently they're doing it by the computerized technique like us. It would be acceptable if a solitary laborers of us get profited utilizing our framework.

6.2 Scope for Further Development

- Our undertaking might be expanded with a great deal of alternatives and substance to help the clients. We've some planed with respect to certain choices to be authorized in future to shape the framework less complex and easy to use. A portion of these alternatives zone unit referenced underneath:
- Users will have the option to utilize Google Maps to track the delivery.
- Payment gateway integration.
- Voice guidance to make the system extra usable for the clients.
- Image detection to detect insect of crops that will be included with our support corner.
- Suggesting area wise special products & make way to distribute them countrywide.
- Dealing with almost all agricultural products.

REFERENCES

- [1] Krishi Batayon, http://krishi.gov.bd.
- [2] Business model diagram, https://www.lucidchart.com/documents/view/ef086821-85f9-4a9eac49-1b2cd45126bc/0>>
- [3] Software Requirements Introduction, << https://www.microtool.de/en/knowledge-base/what-isa-software-requirements-specification/ >>
- [4] Design specification, << https://en.wikipedia.org/wiki/Design_specification>>
- [5] krishi info service, http://www.ais.gov.bd
- [6] Learn about Wikipedia, available at << http://www.wikipedia.org/>>
- [7] https://www.tutorialspoint.com/reactnative/index.htm/
- [8] https://www.agricart.com/
- [9] https://plantix.net/
- [10] https://www.agricultureinformation.com/
- [11] chaldal.com, << https://chaldal.com/>
- [12] Laravel doc, << https://laravel.com/docs/8.x/">>>
- [13] Logical data model, https://en.wikipedia.org/wiki/Logical data model,
- [14] Kiosk suvida, https://gowithfloat.com
- [15] Agriland, http://www.agriland.ie/

Turnitin Originality Report

Processed on: 19-Aug-2021 16:49 +06 ID: 1588580719 Word Count: 3842 Submitted: 2

Bazaar By Md. Shobuj



