E-Farming: An E-Commerce Site for Agricultural Products

Alamin Mia

ID: 2012-2-60-032

A project submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering



Department of Computer Science and Engineering East West University Dhaka-1212, Bangladesh

August, 2017

Declaration

I, Alamin Mia, hereby, declare that the work presented in this project is the outcome of the investigation performed by me under the supervision of Sadia Nowrin, Lecturer, Department of Computer Science and Engineering, East West University. I also declare that no part of this project has been or is being submitted elsewhere for the award of any degree or diploma.

Countersigned	Signature of Student
(Sadia Nowrin)	(Alamin Mia)
Supervisor	(ID: 2012-2-60-032)

Letter of Acceptance

This Project entitled "E-Farming: An E-Commerce Site for Agricultural Products" submitted by Alamin Mia (ID:2012-2-60-032), to the Department of Computer Science and Engineering, East West University, Dhaka, Bangladesh is accepted by the department in partial fulfillment of requirements for the Award of the Degree of Bachelor of Science in Computer Science and Engineering on Summer, 2017.

Supervisor

Sadia Nowrin

Lecturer

Department of Computer Science and Engineering,

East West University, Dhaka, Bangladesh.

Chairperson

Dr. Md. Mozammel Huq Azad Khan

Professor and Chairperson,

Department of Computer Science and Engineering,

East West University, Dhaka, Bangladesh.

Abstract

E-commerce is clearly beginning to have a major impact in the agricultural sector. The way people go about purchasing agricultural products is of great concern. Most of the time customers have to travel far distances to get agricultural products and getting the right quality is not ensured. Besides, farming is the prime occupation in Bangladesh. Bangladeshi people involved in farming are mostly cheated by the agents in today's market which leads to poverty. Our project aims to help farmers as well as customers for buying and selling agricultural products across the country using a computerized approach. The website will guide the farmers to access new farming techniques, compare current market rate of different products, the total sale and the earned profit for the sold products. The website builds a platform for farmers and agents to ensure greater profitability through direct farmer to farmer, farmer to agent and farmer to customer communication. The website will act as a unique and secure way to perform agro-marketing. E-farming will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website. This project allows viewing various products available enables users to purchase desire products instantly by online payment. This website would be developed using web service as the communication infrastructure between the buyer and farmers and also products selling.

Acknowledgement

As it is true for everyone, I have also arrived at this point of achieving a goal in my life through various interactions with and help from other people. I would not like to make efforts to find best words to express my thankfulness other than simply listing those people who have contributed to this project itself in an essential way. This work has been carried out in the Department of Computer Science and Engineering at East West University, Bangladesh.

First of all, I would like to express my deepest gratitude to the almighty Allah for his blessings on me. Next, my special thanks go to my supervisor Sadia Nowrin, Lecturer, East West University who gave me this opportunity, initiated me into the field of "Design and Implementation of Agricultural E-Commerce Site for Farmers", and without whom this work would not have been possible and his encouragements, visionaries and thoughtful comments and suggestions and unforgettable support. I would like to thank all Friends who give excellent collaboration during performance evaluation studies for overall support and helpful suggestions in solving tricky technical problems. Last but not the least, I would like to thank my parents for their unending support, encouragement and prayers.

There are numerous other people too who have shown me their constant support and friendship in various ways, directly or indirectly related to my academic life. I will remember them in my heart and hope to find a more appropriate place to acknowledge them in the future.

Alamin Mia August, 2017

Table of Contents

11
iii
iv
v
vi
1
2
3
3
4
4
5
5
5
5
5
6
ϵ
7
7
8
9
Ģ

3.2.2 Use Case Diagram for Farmer Management	10
3.2.3 Use Case Diagram for Customer Management	11
3.2.4 Use Case Diagram for Dealer Management	12
3.3 ER Diagram	13
Chapter 4 Implementation	
4.1 Database Implementation	14
4.1.1 Database of User	14
4.1.2 Database of Products	15
4.1.3 Database of Contact	15
4.1.4 Database of Shipping	16
4.1.5 Database of Wish List	16
4.1.6 Database of Order	17
4.1.7 Database of Admin	17
4.1.8 Database of Category	18
4.1.9 Database of Manufacturer	18
4.1.10 Database of Payment	19
4.1.11 Database of Order Details	19
4.1.12 Database of Payments with Stripe	20
4.2 Interfaces	20
4.2.1 Home Page	21
4.2.2 About Us Page	21
4.2.3 Wish List Page	22
4.2.4 Account Login Page	23
4.2.5 Registration Page	23
4.2.6 Shipping Info Page	24
4.2.7 Shopping Cart Page	25
4.2.8 Payment Info Page	25
4.2.9 Successful Order Mail Page	26
4.2.10 Manage Category Page	27
4.2.11 Category Page	27

4.2.12 Manage Manufacturer Page	28
4.2.13 Product Page	29
4.2.14 Manage Product Page	29
4.2.15 Manage Order Page	30
4.2.16 Stripe Payment Page	31
4.2.17 Stripe Payment Successful Page	31
4.2.18 Stripe Payment details Page	32
Chapter 5 Conclusion and Future Work 5.1 Interface	33
5.1 Future Work	33
References	34
Appendix A List of Acronyms	35
Appendix B Source Code	36

List of Figures

Figure-3.1: Use Case Diagram for Admin	09
Figure-3.2: Use Case Diagram for Farmer	10
Figure-3.3: Use Case Diagram for Customer	
Figure-3.4: Use Case Diagram for Dealer	
Figure-3.5: ER Diagram of the system	
Figure-4.1: Databases for User	
Figure-4.2: Databases for Products	
Figure-4.3: Databases for Contact	15
Figure-4.4: Databases for Shipping	16
Figure-4.5: Databases for Wish List	16
Figure-4.6: Databases for Order	17
Figure-4.7: Databases for Admin	17
Figure-4.8: Databases for Category	
Figure-4.9: Databases for Manufacturer	
Figure-4.10: Databases for Payment	
Figure-4.11: Databases for Order Details	
Figure-4.12: Databases for Payment with Stripe	
Figure-4.13: Home Page	
Figure-4.14: About Us Page	22
Figure-4.15: Wish List Page	22
Figure-4.16: Account Login Page	23
Figure-4.17: Registration Page	24
Figure-4.18: Shipping Info Page	24
Figure-4.19: Shopping Cart Page	25
Figure-4.20: Payment Info Page	26
Figure-4.21: Successful Order Mail Page	26
Figure-4.22: Manage Category Page	27
Figure-4.23: Category Page	28
Figure-4.24: Manage Manufacturer Page	28
Figure-4.25: Product Page	29
Figure-4.26: Manage Product Page	30
Figure-4.27: Manage Order Page	30
Figure-4.28: Stripe Payment Page	31
Figure-4.29: Stripe Payment Successful Page	32
Figure-4.30: Stripe Payment Details Page	32

Chapter 1

Introduction

Ecommerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming common place. It is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably.

The main objective of this project is to help farmers ensure greater profitability through direct farmer to farmer, farmer to customer & farmer to dealer communication. Our project deals with respect to the farmers benefit of getting their products sale at a best price online. Here, the main users of this website are farmer, customer, dealer and admin. Farmers will get unique interface where they can perform marketing, get the correct rates of the market, get in touch with SMS or Email and gather knowledge of different schemes and get pay online. It will provide market wise, commodity wise report to the farmer in interactive way. The centralized market committee will control all business activities.

Agricultural E-commerce enables good trading possibilities by supporting different business models such as multi-suppliers, e-sales and several types of auctions. It can blur the physical existence of agro-allied stores, the integrity of products is ensured no paper money involved in the process, distance doesn't exist and so on. Today E-commerce lacks fully automated business processes and still requires a significant manual effort by users. So our project tries to solve all lacking of E-commerce business process.

1.1 Motivation

Bangladesh is agricultural country. Majority of Bangladesh people live on agricultural. So, Agricultural institutes, research bases agencies and other resources related to agriculture in Bangladesh is vitally important. Now a day, the farmers have to go to the nearest market to hand over his product to a particular agent where agent sells the product to another agent or a dealer. After a specific time the agent gives the collected cash out of the sold products to the respected farmer but every Agent tries to cuts his commission out of the earned amount. The whole process is not transparent as there is no way for farmer to know about the deal and the exact amount at which their product was sold. No facility is present for the farmers to know the product rates at different markets where they can sell their products for achieving high profits. Our project aims to help farmers to sell their products in a transparent way.

1.2 Objectives

The main objective of this project is to build a platform for farmers to sell their product and track the sale. This platform is flexible which can maneuver the customer-farmer relationship in an effective manner. Farmer will get unique interface where they can avail everything right from learning to the market information. This website will act as unique and secure way to perform agro-marketing.

1.3 Outline of the Report

In chapter 2, we survey existing agricultural e-commerce sites and review some technologies used to implement this project; Chapter 3 analyzes the whole architecture of the system; In chapter 4, the database implementation and interfaces are presented and in chapter 5, conclusion and future works are highlighted. Lastly, list of acronyms, proper references and source code of the project have been illustrated.

Chapter 2

Background Study

In this chapter, existing websites related to agriculture and technologies used to implement the project have been discussed in detail.

2.1 Existing Agricultural Websites

The contents of some agricultural websites in Bangladesh are discussed below:

BADC (Bangladesh Agricultural Development Corporation) [1] provides quality agricultural inputs supply, efficient irrigation management and production of high yielding seeds of different crops. It also provides the best use of surface water, irrigation efficiency by reducing logging and increasing irrigated areas and farmers to supply quality fertilizer.

BARC (The Bangladesh Agricultural Research Council) [2] is to develop an efficient, effective and sustainable system of agricultural research promoting to increase standard of living, which would be adequate for well-being of the people of Bangladesh. BARC also is to strengthen and mobilize research capabilities of the institutes of the NARS, universities, private sectors and other stakeholders in partnership in the generation of appropriate technologies and information for the development of agriculture sector.

BARI (Bangladesh Agricultural Research Institute) [3] is an autonomous organization under the Ministry of agriculture, that conducts research on all crops except rice, jute, sugarcane, and tea for which there are separate institutes. The central research station of the institute is at Joydebpur about 35 kilometers (22 mi) north of Dhaka. The research compound of the central station is spread over 176 hectares of land of which 126 hectares are experiment fields.

MOA (Ministry of Agriculture) [5] is one of best ministries of the Government of the People's Republic of Bangladesh. It comprises seven wings with responsibilities of policy formulation, planning, monitoring and administration. Sixteen agencies operate under this ministry which are responsible for implementation of different projects and plans of MOA. MOA develops agricultural policies, plans, regulations, acts and provide support in developing new agricultural technologies to boost up agricultural production and coordinate with local and international trade agencies for marketing.

2.2 Technological Background

To implement the project, some open source tools have been used such as Netbeans, XAMPP, CodeIgniter Framework, Apache as web server. The web programing language used to implement this project are HTML (Hyper Text Markup Language), CSS (Cascading Style Sheets), JavaScript, JQuery and PHP. MySQL is used as database server.

2.2.1 HTML

HTML [6] is a markup language that are used to create electronic documents, especially pages on the World Wide Web that contain connections called hyperlinks to other pages. Every web page you see on the Internet, including this one contains HTML code that helps format and show text and images in an easy to read format. Without HTML a browser would not know how to format a page and would only display

2.2.2 CSS

CSS [11] is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

2.2.3 JavaScript

JavaScript HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content production. It is used to make webpages interactive and provide online programs, including video games. The majority of websites employ it, and all modern web browsers support it without the need for plug-ins by means of a built-in JavaScript engine. Each of the many JavaScript engines represent a different implementation of JavaScript, all based on the ECMA Script specification, with some engines not supporting the spec fully, and with many engines supporting additional features beyond ECMA. It has an API for working with text, arrays, dates, regular expressions, and basic manipulation of the DOM, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

2.2.4 PHP

PHP [7] is probably the most popular scripting language on the web. It is used to enhance web pages. With PHP, you can do things like create username and password login pages, check details from a form, create forums, picture galleries, surveys, checkout, cart product and a whole lot more. If you've come across a web page that ends in PHP, then the author has written some programming code to liven up the plain, old HTML. PHP is known as a server-sided language. That's because the PHP doesn't get executed on your computer. But on the computer you requested the page from. The results are then handed over to you, and displayed in your browser.

2.2.5 PHP CodeIgniter Framework

CodeIgniter [8] is an Application Development Framework a toolkit for people who build web sites using PHP with a very small footprint. Its goal is to enable to develop projects much faster

than you could if you were writing code from scratch, by providing a rich set of libraries for commonly needed tasks, as well as a simple interface and logical structure to access these libraries. CodeIgniter lets you creatively focus on your project by minimizing the amount of code needed for a given task.

2.2.6 Apache Server (XAMPP):

The Apache HTTP Server [9], commonly referred to as Apache is a web server application notable for playing a key role in the initial growth of the World Wide Web and creates a localhost server. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. Most commonly used on a Unix-like system, Microsoft Windows, OS/2, TPF, OpenVMS and eComStation. Released under the Apache License, Apache is open-source software.

2.2.7 Editor (NetBeans IDE 8.0.1):

NetBeans IDE [10] is the web development tool that lets you efficiently design, quickly & easily develop and maintain standards-based websites and applications. NetBeans IDE provides a powerful combination of visual layout tools, application development features, and code editing support.

Chapter 3

System Analysis and Design

In this chapter, the architecture of the whole project is analyzed. System analysis is the process of defining the architecture, components, and data of a system to satisfy specified requirements. Design is a method of studying a system by examining its component parts and their interactions. Before implementation began the system was analyzed and designed. In this section, use cases, requirement analysis, and other part are described in details.

3.1 Requirement Analysis

Web service of farmer product required the following requirements. This has mainly four actors. Those are Admin, Customer, Farmer and Dealer. This website give service of farmer product to sell holder is known as customer and dealer.

3.1.1 Data Requirement

During requirement analysis the following data have been identified for a web service of farmer product system:

- ✓ At first each person need to register (without admin) himself/herself as a customer or a farmer or a dealer for accessing the user's necessary information. Each user requires an unique username or email Id and password to register in the website.
- ✓ Admin/Farmer need to login to the system to operate the system. Admin/Farmer has an individual or unique login user id and password. Through this user id and password admin/farmer can login to the system.
- ✓ A customer can select a product for buying and add to cart. Customer also can pay online or cash on delivery.
- ✓ Admin can update all the information of the registered users. Any registered member can be deleted by the admin. And also view all order and can download.

- ✓ Admin can update the category list of the product. An admin can edit or delete a category from the product category list. Admin can also insert a new category menu in the category list. Admin can also insert product with price and quantity.
- ✓ Farmer can add product with price. After add product farmer can edit, delete and publish of product. When farmer add product and publish then customer can buy the product from the web page.
- ✓ After get buying product Customer can get discount offer. Because of discount customer can buy low price from selected category which are available in the site.
- ✓ Dealer get the product from website with low price. Dealer should be register for this service.

3.1.2 Process Requirement

The following process requirements are identified for system:

- ✓ A valid login is required for all process to be performed. A valid login is required for every registered users and admin. All of them have a valid user id and password. System will authenticate their valid login.
- ✓ After valid login Customer and Dealer can check his/her information, can see personal information and can check product history and buy product.
- ✓ Admin can login to the system. Admin can view, delete, publish and update all members' information and product info too. Admin can also enter new category in the list and insert new product.
- ✓ Farmer can login to the system. Farmer can view, delete, publish and update product info.

 Farmer can also enter new product in the list and insert new info.

3.2 Use Case Diagrams

A use case diagram is a graphical depiction of the interactions among the elements of a system that shows the relationship between the user and the different use cases in which the user is involved. It is a methodology used in system analysis to identify, clarify, and organize system requirements. A use case diagram can identify different types of users of a system in this chapter use cased.

3.2.1 Use case Diagram for Administrative Management:

The use case Diagram for Administrative Management is shown below in figure 3.1

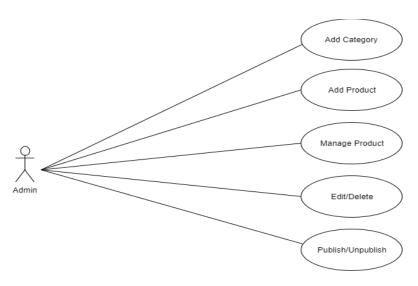


Figure 3.1: Use case Diagram for Admin

According to figure, Admin can perform following function:

- **Login:** Admin needs login to perform all administrative works from admin panel.
- ➤ **Add category:** Admin can add category of products in the system. To perform this action admin need to login to the system.
- Add Product: Admin can add product and a detail description of the product. Admin can also approve a product that has been added by a farmer.
- ➤ Manage Product: The description price and manufacturer of the product can be changed by admin at anytime. He/she has the capability to publish or unpublished of product.

3.2.2 Use case Diagram for Farmer Management:

The Use case Diagram for Farmer Management is shown below in figure 3.2

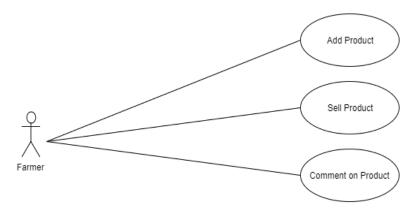


Figure 3.2: Use case Diagram for Farmer

According to figure, Farmer can perform following function:

- > Register: The farmer can perform the general registration to access as registered farmer.
- ➤ **Login:** After completing registration farmer needs to login part to perform the necessary actions.
- ➤ Add Product and Farming Comments: Farmer can add product add manufacturer of the product. Farmer can also comment about each product.
- ➤ Edit Farmer's Profile: The farmer can edit his profile. The farmer can update their name, and contact details.
- **Sell Product:** The farmer can sell all the products online which he added.

3.2.3 Use case Diagram for Customer Management:

The Use case Diagram for Customer Management is shown below in figure 3.3:

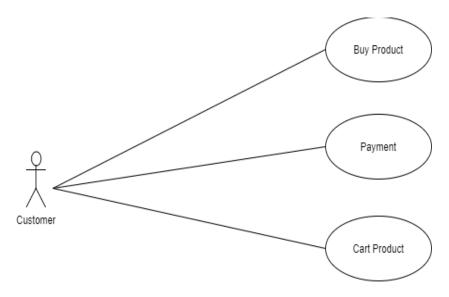


Figure 3.3: Use case Diagram for Customer

According to figure, Customer can perform following function:

- ➤ **Register:** The Customer can perform the general registration to have an access as registered customer.
- **Login:** After completing registration customer login to perform necessary job.
- ➤ Add to Cart: Customer can product to cart even they are not registered but they cannot pay the bill. Only a registered customer can avail the payment option.
- **Payment:** The customer can buy the product from website and pay online or cash.

3.2.4 Use case Diagram for Dealer Management:

The Use case Diagram for Dealer Management is shown below in figure 3.4:

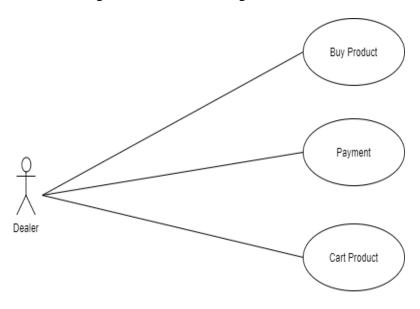


Figure 3.4: Use case Diagram for Dealer

According to figure, Dealer can perform following function:

- ➤ **Register:** The Dealer can perform the general registration to have an access as registered customer.
- **Login:** After completing registration customer login to perform necessary job.
- ➤ Cart Product: Dealer can product to cart even they are not registered but they cannot pay the bill. If they want pay bill than must be registered.
- **Payment:** The Dealer can buy the product from website and pay online or cash.

3.3 Entity Relationship Diagrams

An entity-relationship diagram (ERD) is a graphical representation of an information system that shows the relationship between people, objects, places, concepts or events within that system. In software engineering an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure that can be implemented in a database, typically a relational database.

User (id, name, email, password, mobile_no) Admin (id, name, email, password)

Product (id, name, price, status)

Wish list (id, product_id, user_id)

Shipping (id, name, email, address, mobile_no) Order (id, total, status, date, comments)

Payment (id, type, status, date)

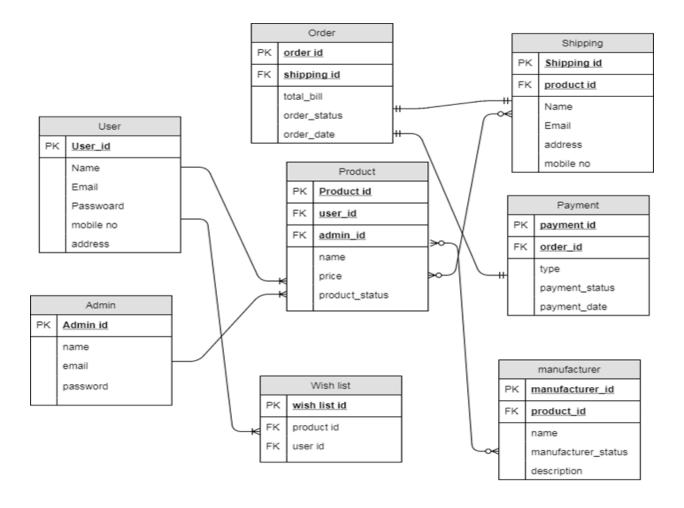


Figure 3.5: ER Diagram of the System

Chapter 4

Implementation

The system will be having only one User-name and Password section on the front page, as per the user-name and password the system will know whether user is Farmer/Customer/Dealer. We follow the MVC design pattern for developing our system. Model—view—controller (MVC) is a software design pattern for implementing user interfaces on computers. It divides a given software application into three interconnected parts, so as to separate internal representations of information from the ways that information is presented to or accepted from the user.

4.1 Database Implementation

After getting the requirement of a logical design and structural design of our database, we can move to the implementation stage. In general, implementing our structural design involves defining the various objects and enforcing the constraints on the data relationships. The implementation phase is where you install the DBMS on the required hardware, optimize the database to run best on that hardware and software platform, and create the database and load the data.

4.1.1 Database of Users:

In database, user database gather into user table. When user create an account then all information of user store into user table. In user table store user password, email, name, mobile number, user type, date of birth, city, address, gender and profile image. If user wants to login website then need that information. Figure 4.1 shows the database of user.

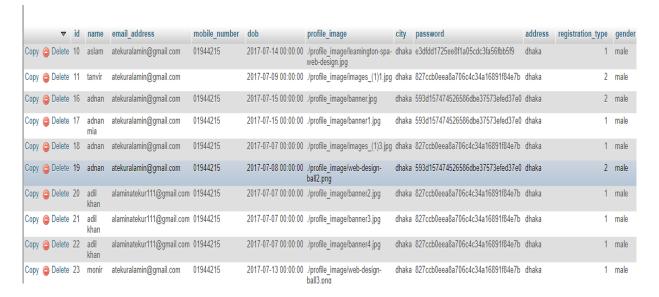


Figure 4.1: Databases of User

4.1.2 Database of Products:

Database of products store all information into product table of database. Here store product id, category, manufacturer id, product name, product comment, product price, stock and product image. Product table also store product status and publish or unpublished indicate. Figure 4.2 shows the database of products.

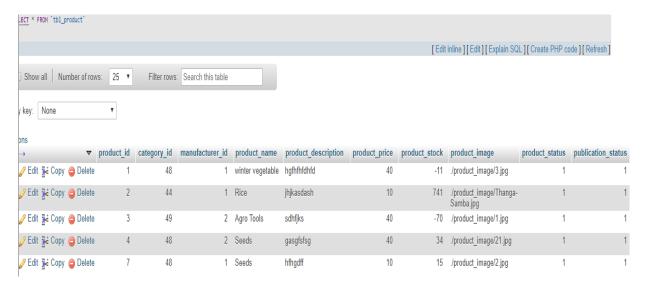


Figure 4.2: Databases of Products

4.1.3 Database of Contacts:

Contact database store into contact table. Here store user feedback about product or other service. Contact table also store contact id, name, email address and enquiry from user who give feedback about our website. This table also store complains about our product or website. Figure 4.3 shows the database of contacts.

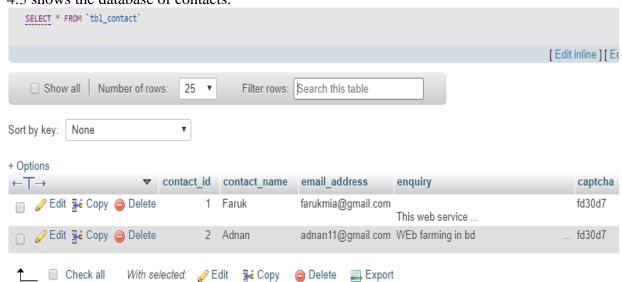


Figure 4.3: Databases of Contact

4.1.4 Database of Shippings:

Database of shipping store all information into shipping table. Here store shipping id, name, email address, mobile number, city, country and zip code. Shipping table also store product shipping address and product delivery place or city. Figure 4.4 shows the database of shippings.

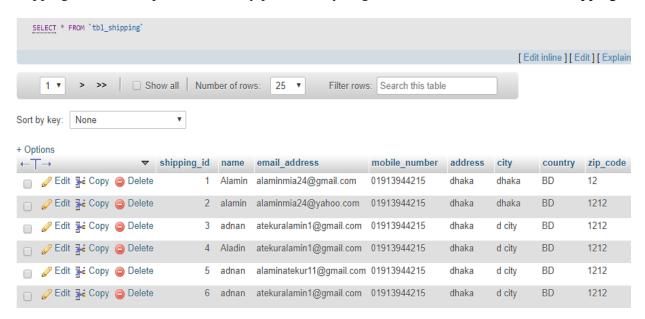


Figure 4.4: Databases of Shipping

4.1.5 Database of Wish List:

Wish list database store into wish list table. This table store user wish list product. Wish list table also store wish list id, product id and user id who add product into wish list. Figure 4.5 shows the database of wish list.

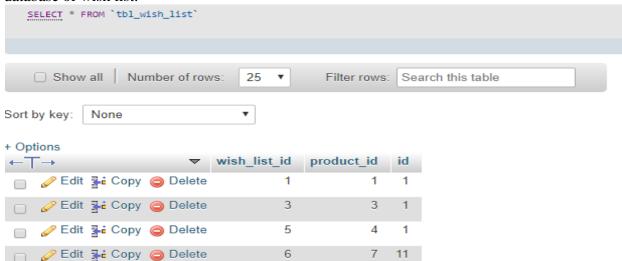


Figure 4.5: Databases of Wish List

4.1.6 Database of Orders:

In order database store order status and order total price which user order in website. User can order many products in same time that time order id will be different. There have user id, shipping id and payment id for ensure all formality. Order database also have order date which date user order product and order comment too. In Figure 4.6 shows the database of orders.

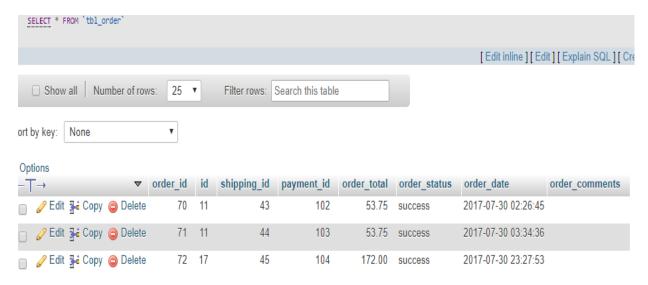


Figure 4.6: Databases of Order

4.1.7 Database of Admin:

Admin database store admin login info into admin table. This table store admin name, id, email address, and password. This table also store access label which type of admin login into admin panel. Our website has two type admin so we use two access label. Figure 4.7 shows the database of admin.



Figure 4.7: Databases of Admin

4.1.8 Database of Category:

Category database store category info into category table. This table store product category which category product add into website. Category table also store category id, name and category comment. Add category have to select which category publish or unpublished in website. Figure 4.8 shows the database of category.

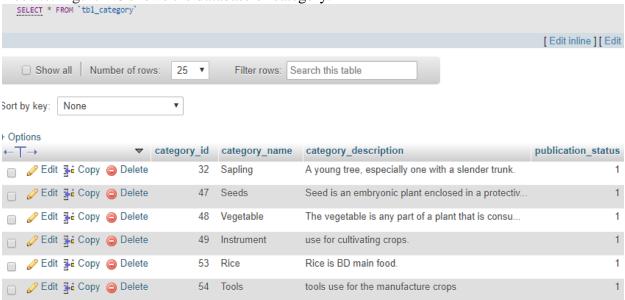


Figure 4.8: Databases of Category

4.1.9 Database of Manufacturer:

This database store manufacturer info into manufacturer table. This table store manufacturer name, id and comments. This table also store manufacturer status which type of manufacturer are publish or unpublished. Figure 4.9 shows the database of manufacturer.



Figure 4.9: Databases of Manufacturer

4.1.10 Database of Payment:

This database store payment info into payment table. This table store payment id and date. This table also store payment status which type of payment are completed by user. User can pay cash or card if pay cash then cash on delivery and if pay bay card then pay bay card status store into database. Figure 4.10 shows the database of payment.

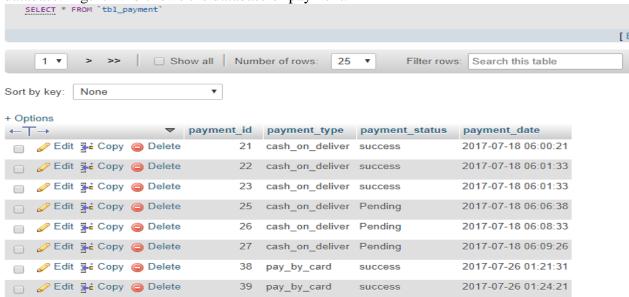


Figure 4.10: Databases of Payment

4.1.11 Database of Order Details:

In order details database store order id, order detail id, product id and order each product price which user order in website. User can order many products in same time that time order id will be different. Order details database also have order quantity which amount product order by user. Figure 4.11 shows the database of order details.

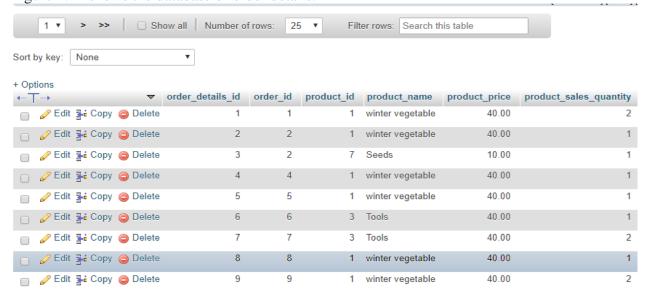


Figure 4.11: Databases of Order Details

4.1.12 Database of Payments with Stripe:

Stripe [13] is the best way to accept payments online and in mobile apps or PC. Stripe handles billions of dollars every year for forward-thinking businesses around the world. Stripe give developer friendly APIs let users focus on building great products. Using Stripe, web developers can integrate payment processing into their websites with having to register and maintain a merchant account. Here database of payments store stripe payment info. This database store strip id and total price which pay by card. Here also store payment status, description, date time and payment zip code. Figure 4.12 shows the database of payment with stripe.

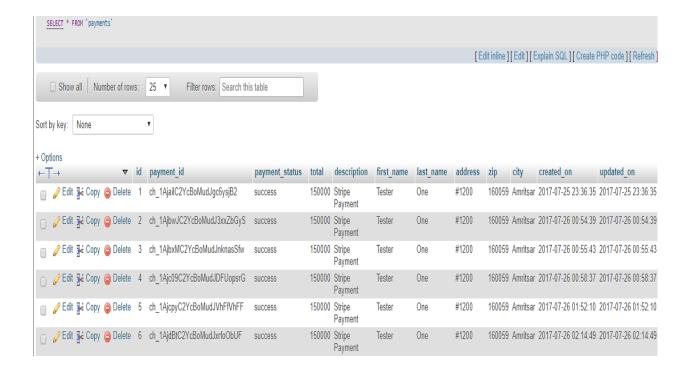


Figure 4.12: Databases of Payment with Stripe

4.2 Interface

A critical aspect of systems design is to create the user interface to the new system. Input and output design focuses on the content of that interface – the specific fields that should be included in screens and reports that are viewed by the users. Once the content is determined, the format for human-computer interaction (HCI) is determined. The user interface (UI) is the way the system talks to the users, using screens/forms, reports, and error messages. During interface design developers identify procedures for each system activity and the required

inputs for those activities. These required inputs become screens or forms. User involvement is critical during these design activities.

4.2.1 Home page:

This is the home page for Farming Assistant website and Online Product buy, sell and add product. In the top menu there is my account login, about us, shopping cart, compare and checkout in part and in middle there is featured product part. Between top menu and middle part there are category name of product and login or register part too. In the bottom part there are latest products of the website given. In the footer part there are the website information given. Figure 4.13 shows the Home page of the system.

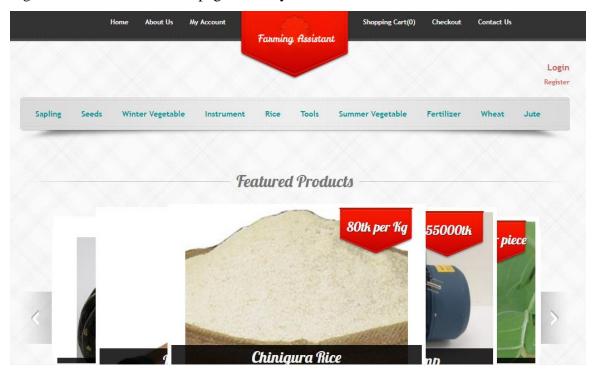


Figure 4.13: Home page

4.2.2 About Us Page:

This is the about us page for Farming Assistant website. Here describe about Farming Assistant service and aim. Just little bit brief of farming assistant which help to know service of farming assistant. Figure 4.14 shows the About Us page of the system.



Figure 4.14: About Us page

4.2.3 Wish List page:

This is the wish list page for Farming Assistant website. Here user can add product to wish list and also can remove from wish list. From wish list user can add product to shopping cart. For all access user must be registered. If user register then can get all access and next time not needed to register for access, only need login. Figure 4.15 shows the Wish List page of the system.

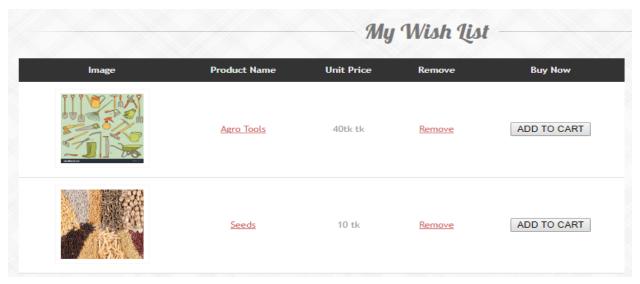


Figure 4.15: Wish List page

4.2.4 Account Login page:

This is the account login page for Farming Assistant website. Here user can login to access his account. User must need to register for login. User fills up the form with registered email address and valid password which is used at registration. Figure 4.16 shows the login page of the system.

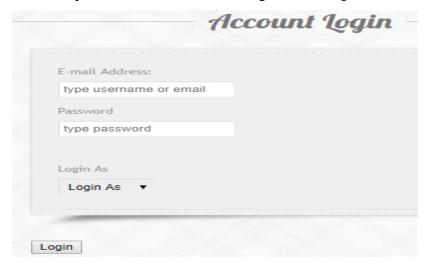


Figure 4.16: Account Login page

4.2.5 Registration page:

This is the account registration page for Farming Assistant website. Here user can register an account to access website all service. User must need to give requirement information for registration. User fill up the form with require all info which is complete the registration. If a person fills the form and submits, then he or she becomes a user of the site. Figure 4.17 shows the Registration page of the system.

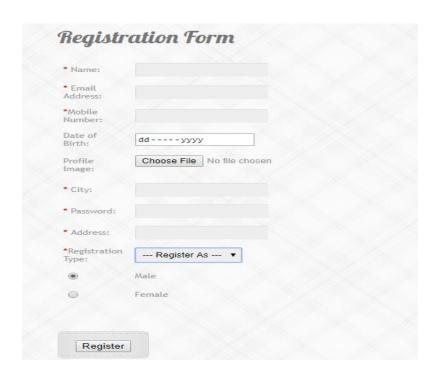


Figure 4.17: Registration page

4.2.6 Shipping Info page:

This is the shipping info page for Farming Assistant website. Here user should register an account to access shipping info in website. If user add product to shopping cart then user try to checkout product, at this moment user should fill up shipping info for completing shopping in this website. Figure 4.18 shows the Shipping Info page of the system.



Figure 4.18: Shipping info page

4.2.7 Shopping Cart page:

This is the shopping cart page for Farming Assistant website. Here user should register an account to access shopping cart in website. If user adds product to shopping cart then user try to checkout product, at this moment user should register for completing shopping in this website. User can update his product quantity and can remove product from shopping cart. Figure 4.19 shows the Shopping Cart page of the system.

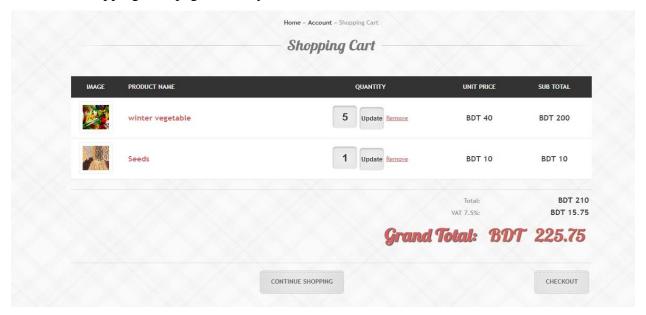


Figure 4.19: Shopping Cart page

4.2.8 Payment info page:

This is the payment info page for Farming Assistant website. Here user should register an account to access payment info in website. If user add product to shopping cart then user try to checkout product and give shipping info, at this moment user should pay for completing shopping in this website. There are two type payments such as cash and card. Figure 4.20 shows the Payment Info page of the system.

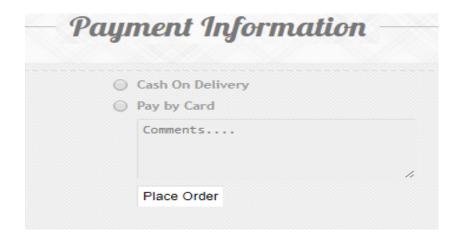


Figure 4.20: payment info page

4.2.9 Successful Order Mail Page:

This is the successful order mail page for Farming Assistant website. When he/she pay for his product then get a successful email for completing shopping in this website. User gets all info by email, about shopping get shipping info, order info & billing info too. This email sends from admin for user. Figure 4.21 shows the Successful Order Mail page of the system.

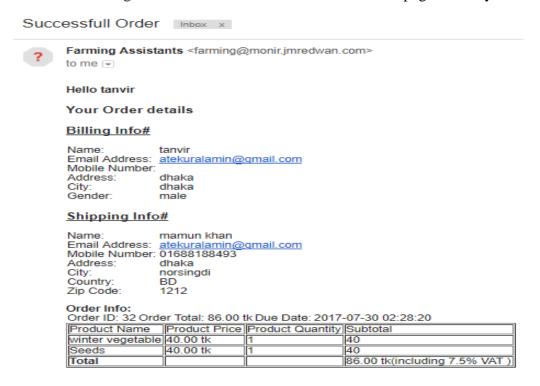


Figure 4.21: Successful order mail page

4.2.10 Manage Category page:

This is the manage category page for Farming Assistant website's admin panel. When admin add category of product and publish it then user see those category of product. Admin can edit category and delete category in this website. Figure 4.22 shows the Manage Category page of the system.

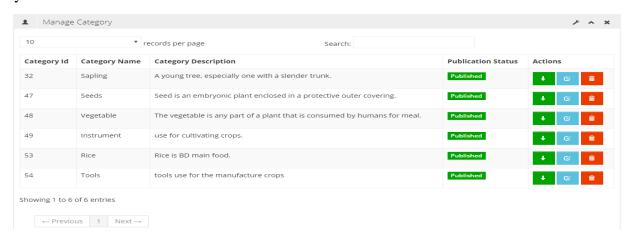


Figure 4.22: Manage Category page

4.2.11 Category page:

This is the category page for Farming Assistant website. When admin add category of product and publish it then user see those category of product in this page. User can add product into shopping cart in this website. Figure 4.23 shows the Category page of the system.

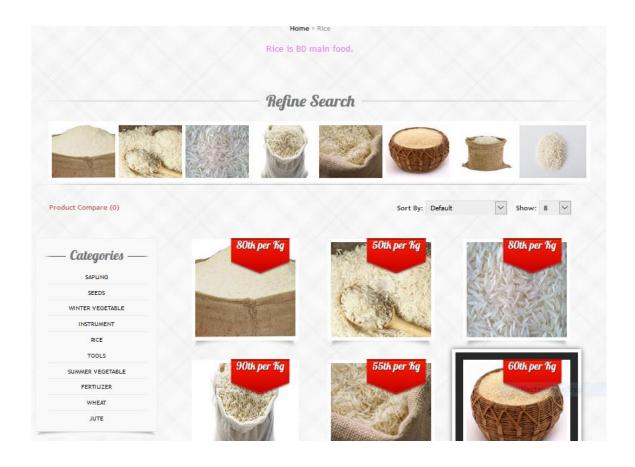


Figure 4.23: Category page

4.2.12 Manage Manufacturer page:

This is the manage manufacturer page for Farming Assistant website's admin panel. When admin add manufacturer of product and publish it then user see those manufacturer of product. Admin can edit manufacturer name and delete manufacturer in this website. Figure 4.24 shows the Manage manufacturer page of the system.

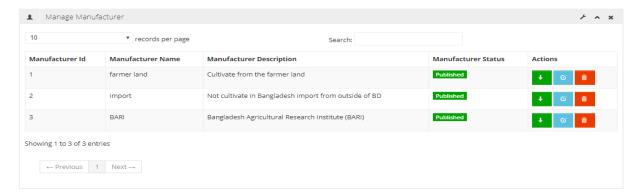


Figure 4.24: Manage Manufacturer page

4.2.13 Products page:

This is the product page for Farming Assistant website. When admin add product and publish it then user see those product in this page. This page show details of product information. User can add product into shopping cart from this page and also add to wish list if he/her registered. In the bottom part there are related product and product reviews of the product given. Figure 4.25 shows the Products page of the system.

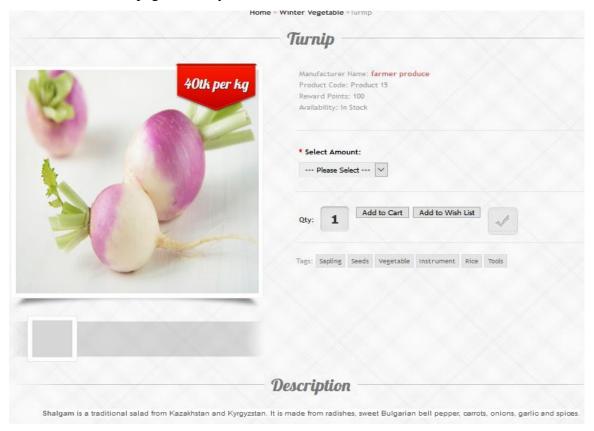


Figure 4.25: Product page

4.2.14 Manage Product page:

This is the manage product page for Farming Assistant website's admin panel. When admin add product and publish it then user see those product. Admin can edit product and delete product in this website. Admin can edit product type which product featured and which product are normal publish in this website. Figure 4.26 shows the Manage Product page of the system.

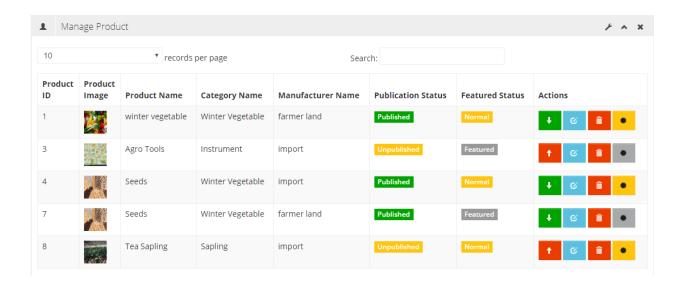


Figure 4.26: Manage Product page

4.2.15 Manage Order page:

This is the manage order page for Farming Assistant website' admin panel. When user pay for his product then get a order info for completing shopping in this website. Admin get all info by user place order, about shopping get shipping info, order info & billing info too. Admin see details from admin panel and download order pdf from this panel. Figure 4.27 shows the Manage Order page of the system.

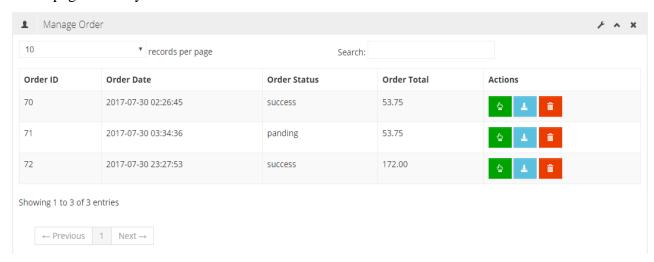


Figure 4.27: Manage Order page

4.2.16 Stripe Payment page:

This is the Stripe payment page for Farming Assistant website. Here user should register an account to access payment info in website. After shopping cart then user try to checkout product and give shipping info, at this moment user should pay for completing shopping. There is pay by card payments option use stripe test payment gateway. Here we use test card and zip number. Figure 4.28 shows the Stripe Payment page of the system.

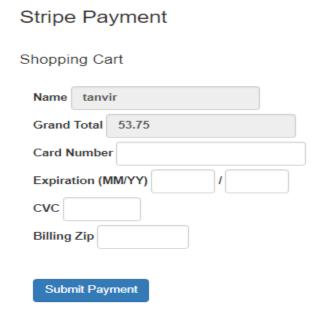


Figure 4.28: Stripe Payment page

4.2.17 Stripe Payment Successful page:

This is the Stripe payment successful page for Farming Assistant website. There are pay by card payments option use stripe test payment gateway. Here we use test card and test zip number. This page is successful page after payment by strip test card. Figure 4.29 shows the Stripe Payment Successful page of the system.



Successfull Payment!!

Back

Figure 4.29: Stripe Payment Successful page

4.2.18 Stripe Payments Details page:

This is the Stripe payment details page for Farming Assistant website. There are pay by card payments option use stripe test payment gateway. Here we use test card and test zip number. This page is payment details page in stripe official page [12] after payment by strip test card. Figure 4.30 shows the Stripe Payment Details page of the system.

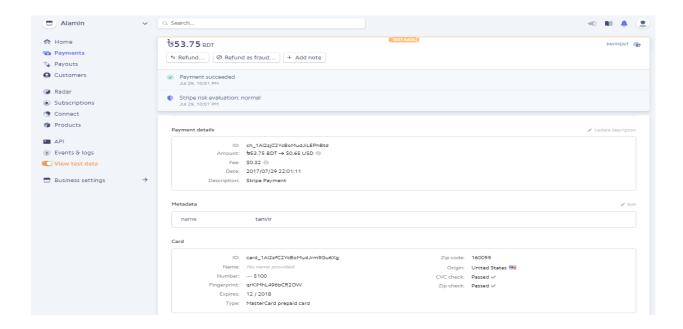


Figure 4.30: Stripe Payment Details page

Chapter 5

Conclusion and Future Work

5.1 Conclusion

The "E-Farming: An E-Commerce Site for Agricultural Product" is successfully designed and developed to fulfill the necessary requirements, as identified in the requirements analysis phase, such as the system is very much user friendly, form level validation and field level validation are performing very good. The old manual system was suffering from a series of drawbacks. The present project has been developed to meet the aspirations indicated in the modern age. Through the developed project, anyone can visualize the effectiveness and efficiency in the real life. It is very helpful for computerization or doing automation of a personal information management system. This program helps reduce the manual method and stress which is done by a person and that is time consuming and lengthy process. With this application user's information are stored very efficiently in a secured database. Trend of information improvement in the generation has improved the quality and services of human operation just as the case of this application for job services has reduce the mobility rate of human and improve their standard of database storage.

5.2 Future Work

The future plan of this project is to improved design; implementation and documentation in such a way that anyone can use this project for better perform. I will develop the site more dynamically. In future I will add the few modules for better improvement of the project such as, real-time chat bot option for user and farmer, so that user can directly enquiry theirs problem on any time through the chat bot. Video conversation option for user and farmer and admin and barcode generation for membership card and using online buy and sell product. Online account verification and notification for user for specific job category they searching for jobs. In future I will also add mobile version app of this website.

References

- 1. http://www.badc.gov.bd/
- 2. http://www.barc.gov.bd/
- 3. http://www.bari.gov.bd/
- 4. http://www.bdfish.org/
- 5. http://www.moa.gov.bd/
- 6. http://www.w3schools.com
- 7. http://www.php.net
- 8. http://www.codeigniter.com
- 9. https://www.apachefriends.org/index.html
- 10. https://netbeans.org/
- 11. https://www.w3schools.com/css/css_intro.asp
- 12. https://stripe.com/

Appendix A

List of Acronyms

BADC: Bangladesh Agricultural Development Corporation
BARC: The Bangladesh Agricultural Research Council
BARI: Bangladesh Agricultural Research Institute

MOA: Ministry of Agriculture

HTML: Hyper Text Markup Language

CSS: Cascading Style Sheets PHP: Hypertext Preprocessor

Appendix B

Source Code

Source Code for Admin panel:

```
//START
<?php
//admin controller
defined('BASEPATH') OR exit('No direct script access allowed');
/* class Welcome extends CI Controller { */
class Admin extends CI_Controller {
  public function __construct() {
    parent::__construct();
    $admin_id=$this->session->userdata('admin_id');
    if($admin_id!=NULL){
       redirect("super admin/dashboard");
    }
  }
  public function index() {
    $this->load->view('admin/admin_login');
  }
  public function admin_login() {
    $email_address = $this->input->post('email_address', true);
    $admin_password = md5($this->input->post('admin_password', true));
    $access label=$this->input->post('access label',true);
    //$this->load->model('admin_model');
    $admin_info = $this->admin_model->check_admin_login_info($email_address,
$admin_password,$access_label);
      echo $email address.'-----'.$admin password;
//
      exit();
    $sdata = array();
    if ($admin_info) {
       $sdata['admin_id'] = $admin_info->admin_id;
       $sdata['admin_name'] = $admin_info->admin_name;
```

```
$sdata['access_label']=$admin_info->access_label;
       $this->session->set_userdata($sdata);
redirect('super admin/dashboard');
    } else {
       $sdata['exception'] = "Your User Id Or Password Invalid !";
       $this->session->set userdata($sdata);
       redirect('admin/index');
    }
// super admin controller
<?php
defined('BASEPATH') OR exit('No direct script access allowed');
/* class Welcome extends CI_Controller { */
//session_start();
class Super_Admin extends CI_Controller {
  public function __construct() {
    parent::__construct();
    $admin_id=$this->session->userdata('admin_id');
    if($admin_id==NULL){
       redirect("admin/index");
    $this->load->model('Super Admin Model');
  public function dashboard() {
    $data=array();
    $data['home_content']=$this->load->view('admin/home_content',",true);
    $this->load->view('admin/admin_master',$data);}
  public function add_category(){
    $data=array();
    $data['home_content']=$this->load->view('admin/category_form',",true);
    $this->load->view('admin/admin_master',$data);
  }
  public function store_category(){
```

```
$this->Super_Admin_Model->save_category_info();
     $sdata=array();
     $sdata['message']="Category info save successfully";
     $this->session->set_userdata($sdata);
    return redirect('super_admin/add_category');
  }
  public function manage_category(){
     $data=array();
     $data['categories']=$this->Super_Admin_Model->get_allcategory();
     $\data[\text{home content'}]=\text{$\text{this}-\text{}oad-\text{}view(\text{'admin/manage category',}\text{$\text{}data,true);}
     $this->load->view('admin/admin_master',$data);}
  public function unpublished_category($category_id){
     $this->Super_Admin_Model->unpublished_category_byid($category_id);
     $data=array();
     $data['message']="Category info unpublished successfully";
     $this->session->set_userdata($data);
    return redirect('super admin/manage category');
  }
  public function published_category($category_id){
     $this->Super_Admin_Model->published_category_byid($category_id);
     $data=array();
     $data['message']="Category info published successfully";
     $this->session->set userdata($data);
     return redirect('super_admin/manage_category');
  }
  public function edit_category($category_id){
     $data=array();
     $data['category_byid']=$this->Super_Admin_Model->getcategory_byid($category_id);
     $data['home_content']=$this->load->view('admin/edit_category', $data,true);
     $this->load->view('admin/admin master',$data); }
  public function update_category(){
$this->Super_Admin_Model->update_category_info();
     $sdata=array();
     $sdata['message']="Category info update successfully";
```

```
$this->session->set_userdata($sdata);
    return redirect('super_admin/manage_category');
  }
  public function delete_category($category_id){
    $this->Super_Admin_Model->delete_category_byid($category_id);
    $sdata=array();
    $sdata['message']="Category info Delete succesfully";
    $this->session->set_userdata($sdata);
    return redirect('super_admin/manage_category');
  }
  public function add_manufacturer(){
    $data=array();
    $\data['home_content']=\$\this->load->\trigonian('admin/pages/add_manufacturer',",\true);
    $this->load->view('admin/admin_master',$data);
  }
  public function store_manufacturer(){
    $this->Super Admin Model->save manufacturer info();
    $sdata=array();
    $sdata['message']="Manufacturer info save successfully";
    $this->session->set_userdata($sdata);
    return redirect('super_admin/add_manufacturer');
  }
  public function manage manufacturer(){
    $data=array();
    $\data[\'manufactureis']=\$\this->Super_Admin_Model->get_allmanufacturer();
    $data['home_content']=$this->load->view('admin/pages/manage_manufacturer',$data,true);
    $this->load->view('admin/admin_master',$data);
  }
  public function unpublished_manufacturer($manufacturer_id){
$this->Super_Admin_Model->unpublished_manufacturer_byid($manufacturer_id);
    $data=array();
    $data['message']="Manufacturer info unpublished successfully";
    $this->session->set_userdata($data);
```

```
return redirect('super_admin/manage_manufacturer');
  }
  public function published_manufacturer($manufacturer_id){
    $this->Super_Admin_Model->published_manufacturer_byid($manufacturer_id);
    $data=array();
    $data['message']="Manufacturer info published successfully";
    $this->session->set_userdata($data);
    return redirect('super_admin/manage_manufacturer');
  }
  public function edit_manufacturer($manufacturer_id){
    $data=array();
    $data['manufacturer_byid']=$this->Super_Admin_Model-
>getmanufacturer_byid($manufacturer_id);
    $data['home_content']=$this->load->view('admin/pages/edit_manufacture',$data,true);
    $this->load->view('admin/admin_master',$data);
  }
  public function update_manufacturer(){
    $this->Super_Admin_Model->update_manufacturer_info();
    $sdata=array();
    $sdata['message']="Manufacturer info update successfully";
    $this->session->set_userdata($sdata);
    return redirect('super admin/manage manufacturer');
  public function delete_manufacturer($manufacturer_id){
    $this->Super_Admin_Model->delete_manufacturer_byid($manufacturer_id);
    $sdata=array();
$sdata['message']="Manufacturer info Delete succesfully";
    $this->session->set_userdata($sdata);
    return redirect('super admin/manage manufacturer');
  }
  public function add_product(){
    $data=array();
    $\data['all_published_category'] = \$\this->\Super_Admin_Model->\select_all_published_category();
```

```
$data['all_published_manufacturer'] = $this->Super_Admin_Model-
>select_all_published_manufacturer();
    $\data['home content']=\$\text{this->load->view('admin/pages/add product',\$\data,\true);}
    $this->load->view('admin/admin_master',$data);
  }
  public function store_product(){
    $this->Super_Admin_Model->save_product_info();
    $sdata=array();
    $sdata['message']="Product info save successfully";
    $this->session->set_userdata($sdata);
    return redirect('super_admin/add_product');
  }
  public function manage_product(){
    $data=array();
    $data['products']=$this->Super_Admin_Model->get_allproduct();
//
      echo '';
//
     print_r($data['products']);
      exit();
    $data['home_content']=$this->load->view('admin/pages/manage_product',$data,true);
    $this->load->view('admin/admin_master',$data);
  }
  public function unpublished_product($product_id){
$this->Super Admin Model->unpublished product byid($product id);
    $data=array();
    $data['message']="Product info unpublished successfully";
    $this->session->set_userdata($data);
    return redirect('super_admin/manage_product');
}
  public function published_product($product_id){
    $this->Super_Admin_Model->published_product_byid($product_id);
    $data=array();
    $data['message']="Product info published successfully";
    $this->session->set_userdata($data);
    return redirect('super_admin/manage_product');
```

```
}
  public function edit_product($product_id){
    $data=array();
    $data['all_published_category']=$this->Super_Admin_Model->select_all_published_category();
    $data['all_published_manufacturer']=$this->Super_Admin_Model-
>select all published manufacturer();
    $\data['product_byid']=\$\this->\Super_Admin_Model->\getproduct_byid(\$\product_id);
    $\data['home_content']=\$\this->\load->\text{view('admin/pages/edit_product', $\data,\true);}
    $this->load->view('admin/admin_master',$data);
  }
  public function update_product($product_id){
    $this->Super_Admin_Model->update_product_info($product_id);
    $sdata=array();
    $sdata['message']="Product info update successfully";
    $this->session->set_userdata($sdata);
    return redirect('super_admin/manage_product');
  }
  public function delete_product($product_id){
    $this->Super_Admin_Model->delete_product_byid($product_id);
$sdata=array();
    $sdata['message']="Product info Delete succesfully";
    $this->session->set_userdata($sdata);
    return redirect('super admin/manage product');
  }
public function featured_product($product_id){
    $this->Super_Admin_Model->featured_product_byid($product_id);
    $data=array();
    $data['message']="Product featured successfully";
    $this->session->set_userdata($data);
    return redirect('super admin/manage product');
  }
  public function normal_product($product_id){
    $this->Super_Admin_Model->normal_product_byid($product_id);
    $data=array();
```

```
$data['message']="Product info normal successfully";
     $this->session->set_userdata($data);
     return redirect('super admin/manage product');
  }
  public function logout() {
     $this->session->unset userdata('admin id');
     $this->session->unset_userdata('admin_name');
     $this->session->unset_userdata('access_label');
     $sdata = array();
     $sdata['message'] = "You are successfully Logout!";
     $this->session->set_userdata($sdata);
    redirect("admin/index");
  }
  public function manage_order() {
     data = array();
     $data['all_order'] = $this->Super_Admin_Model->select_all_order();
     $\data['home_content'] = $\this->load->view('admin/pages/manage_order', $\data, \true);
$this->load->view('admin/admin_master', $data);
  }
  public function delete_order($order_id) {
     $this->Super_Admin_Model->delete_order_by_id($order_id);
    redirect('Super_admin/manage_order');
}
  public function view_invoice($order_id) {
     $data = array();
     $\data['billing_info'] = $\this->Super_Admin_Model->select_billing_info($\sorder_id);
     $data['shipping_info'] = $this->Super_Admin_Model->select_shipping_info($order_id);
     $data['order_details']= $this->Super_Admin_Model->select_order_details($order_id);
     $\data['home_content'] = $\this->load->view('admin/pages/view_invoice',$\data,true);
     $this->load->view('admin/admin master', $data);
  public function download_invoice($order_id){
     data = array();
     $\data['billing_info'] = $\this-> Super_Admin_Model-> select_billing_info($\forder_id);
```

```
$\data['shipping_info'] = $\this->Super_Admin_Model->select_shipping_info(\$order_id);
     $\data['order_details']= $\this->Super_Admin_Model->select_order_details(\$order_id);
    //$this->load->view('admin/pages/download invoice', $data);
     $this->load->helper('dompdf');
     $view_file=$this->load->view('admin/pages/download_invoice', $data,true);
     $file name=pdf create($view file, 'inv-00'.$order id);
    echo $file_name;
  }
}
//admin model
<?php
class Admin_Model extends CI_Model {
  public function check_admin_login_info($email_address,$admin_password,$access_label){
     $this->db->select('*');
     $this->db->from('tbl_admin');
     $this->db->where('email_address',$email_address);
$this->db->where('admin_password',$admin_password);
     $this->db->where('access_label',$access_label);
     $query_result=$this->db->get();
     $result=$query_result->row();
    return $result;
  }
}
// super admin model
<?php
class Super_Admin_Model extends CI_Model {
  public function save_category_info() {
     data = array();
     $\data['category_name'] = $\this->input->post('category_name', true);
     $\data['category_description'] = $\text{this->input->post('category_description', true);}
     $\data['publication_status'] = $\text{this->input->post('publication_status', true);}
     $this->db->insert('tbl_category', $data);}
  public function get_allcategory() {
     $this->db->select('*');
```

```
$this->db->from('tbl_category');
     //$this->db->order_by("category_id","desc");
     $query_result = $this->db->get();
     $result = $query_result->result();
     return $result;
public function unpublished_category_byid($category_id) {
     $this->db->set('publication_status', 0);
     $this->db->where('category_id', $category_id);
     $this->db->update('tbl category');
  }
  public function published_category_byid($category_id) {
     $this->db->set('publication_status', 1);
     $this->db->where('category_id', $category_id);
$this->db->update('tbl_category');
  }
  public function getcategory_byid($category_id) {
     //$this->db->order_by("category_id","desc");
     $this->db->select('*');
     $this->db->from('tbl_category');
     $this->db->where('category_id', $category_id);
     $query_result = $this->db->get();
     $result = $query result->row();
     return $result;
  public function update_category_info() {
     data = array();
     $category_id = $this->input->post('category_id', true);
     $data['category_name'] = $this->input->post('category_name', true);
     $\data['category_description'] = $\text{this->input->post('category_description', true);}
     $\data['publication_status'] = $\text{this->input->post('publication_status', true);}
     $this->db->where('category_id', $category_id);
     $this->db->update('tbl_category', $data);}
  public function delete_category_byid($category_id) {
```

```
$this->db->where('category_id', $category_id);
     $this->db->delete('tbl_category');
  }
  public function save_manufacturer_info() {
data = array();
     $data['manufacturer_name'] = $this->input->post('manufacturer_name', true);
     $data['manufacturer_description'] = $this->input->post('manufacturer_description', true);
     $\data['manufacturer_status'] = $\text{this->input->post('manufacturer_status', true);}
     $this->db->insert('tbl_manufacturer', $data);
  }
  public function get_allmanufacturer() {
$this->db->select('*');
     $this->db->from('tbl manufacturer');
    //$this->db->order_by("category_id","desc");
     $query_result = $this->db->get();
     $result = $query_result->result();
    return $result;
  }
  public function unpublished_manufacturer_byid($manufacturer_id) {
     $this->db->set('manufacturer_status', 0);
     $this->db->where('manufacturer_id', $manufacturer_id);
     $this->db->update('tbl_manufacturer');
  }
  public function published_manufacturer_byid($manufacturer_id) {
     $this->db->set('manufacturer_status', 1);
     $this->db->where('manufacturer_id', $manufacturer_id);
     $this->db->update('tbl_manufacturer');
  }
  public function getmanufacturer_byid($manufacturer_id) {
    //$this->db->order_by("manufacturer_id","desc");
     $this->db->select('*');
     $this->db->from('tbl_manufacturer');
     $this->db->where('manufacturer id', $manufacturer id);
     $query_result = $this->db->get();
```

```
$result = $query_result->row();
return $result;
  }
  public function update_manufacturer_info() {
 $data = array();
 $manufacturer id = $this->input->post('manufacturer id', true);
 $\data['manufacturer_name'] = \$\this->\text{input->post('manufacturer_name', true);}
$\data[\'manufacturer_description'] = \$\this->\input->\post(\'manufacturer_description', \true);
$data['manufacturer_status'] = $this->input->post('manufacturer_status', true);
     $this->db->where('manufacturer_id', $manufacturer_id);
     $this->db->update('tbl_manufacturer', $data);
  }
  public function delete_manufacturer_byid($manufacturer_id) {
     $this->db->where('manufacturer_id', $manufacturer_id);
     $this->db->delete('tbl_manufacturer');
  }
  public function select_all_published_category() {
     $this->db->select("*");
     $this->db->from('tbl_category');
     $this->db->where('publication_status', 1);
     $query_result = $this->db->get();
     $result = $query_result->result();
     return $result;
  public function select_all_published_manufacturer() {
     $this->db->select("*");
     $this->db->from('tbl_manufacturer');
     $this->db->where('manufacturer_status', 1);
     $query_result = $this->db->get();
     $result = $query_result->result();
     return $result;
  }
public function save_product_info() {
     data = array();
```

```
$\data['product name'] = \$\this->\text{input->post('product name')};
     $\data['category_id'] = $\this->input->post('category_id');
     $\data[\'manufacturer id'] = \$\this-\>input-\>post(\'manufacturer id');
     $data['product_description'] = $this->input->post('product_description');
     $data['product_price'] = $this->input->post('product_price');
     $\data['product stock'] = $\text{this->input->post('product stock');}
     $data['product_status'] = $this->input->post('product_status');
     $\data['publication_status'] = $\text{this->input->post('publication_status');}
     /* Start Image Upload */
     $config['upload path'] = './product image/';
     $config['allowed_types'] = 'gif[jpg|png|jpeg';
     config['max\_size'] = 4000;
     $this->load->library('upload', $config);
     if (!$this->upload->do_upload('product_image')) {
       $sdata['error'] = $this->upload->display_errors();
       $this->session->set_userdata($sdata);
     } else {
       $fdata = $this->upload->data();
       $data['product_image'] = $config['upload_path'] . $fdata['file_name'];
     }
     /* End Image Upload */
     $this->db->insert('tbl_product', $data);
  }
  public function get_allproduct() {
     $this->db->select('p.*,c.category_name,c.publication_status as
category_status,m.manufacturer_name');
     $this->db->from('tbl_product p');
$this->db->join('tbl_category c', 'p.category_id = c.category_id');
     $this->db->join('tbl_manufacturer m', 'm.manufacturer_id = p.manufacturer_id');
     $query result = $this->db->get();
$result = $query_result->result();
//
      echo 'Product';
//
      print_r($result);
//
      exit();
```

```
return $result;}
  public function unpublished_product_byid($product_id) {
     $this->db->set('publication_status', 0);
$this->db->where('product_id', $product_id);
     $this->db->update('tbl_product');
  }
  public function published_product_byid($product_id) {
     $this->db->set('publication_status', 1);
     $this->db->where('product_id', $product_id);
     $this->db->update('tbl_product');
  public function select_featured_product() {
     $this->db->select("*");
     $this->db->from('tbl_product');
     $this->db->where('publication_status', 1);
     $this->db->where('product_status', 1);
     $this->db->limit(3);
     $query_result = $this->db->get();
     $result = $query_result->result();
    return $result;
  public function getproduct_byid($product_id) {
    //$this->db->order_by("product_id","desc");
     $this->db->select('*');
     $this->db->from('tbl_product');
     $this->db->where('product_id', $product_id);
     $query_result = $this->db->get();
$result = $query_result->row();
    return $result;
  public function update_product_info($product_id) {
     data = array();
     $data['product_name'] = $this->input->post('product_name');
     $data['category_id'] = $this->input->post('category_id');
```

```
$data['manufacturer_id'] = $this->input->post('manufacturer_id');
$\data['product_description'] = $\text{this->input->post('product_description');}
     $\data['product price'] = $\this->input->post('product price');
     $data['product_stock'] = $this->input->post('product_stock');
     $data['product_status'] = $this->input->post('product_status');
     $\data['publication status'] = $\text{this->input->post('publication status');}
//
      echo '';
//
      print_r($data);
//
      exit();
     /* Start Image Upload */
     $config['upload_path'] = './product_image/';
     $config['allowed_types'] = 'gif|jpg|png|jpeg';
     config['max\_size'] = 4000;
     $this->load->library('upload', $config);
     if (!$this->upload->do_upload('product_image')) {
       $sdata['error'] = $this->upload->display_errors();
       $this->session->set userdata($sdata);
     } else {
       $fdata = $this->upload->data();
       $data['product_image'] = $config['upload_path'] . $fdata['file_name'];
     }
     /* End Image Upload */
     $this->db->where('product id', $product id);
     $this->db->update('tbl_product', $data);
  }
  public function delete_product_byid($product_id) {
$this->db->where('product_id', $product_id);
     $this->db->delete('tbl_product');
  }
  public function featured_product_byid($product_id) {
     $this->db->set('product_status', 1);
     $this->db->where('product_id', $product_id);
     $this->db->update('tbl_product');
  }
```

```
public function normal_product_byid($product_id){
     $this->db->set('product_status', 0);
     $this->db->where('product_id',$product_id);
     $this->db->update('tbl_product');
  }
     public function select_products_by_category_id($category_id) {
     $this->db->select("*");
     $this->db->from('tbl_product');
     $this->db->where('publication_status', 1);
     $this->db->where('category_id', $category_id);
     $query_result = $this->db->get();
     $result = $query_result->result();
     return $result;
  }
  public function select_product_info_by_id($product_id) {
     $sql = "SELECT a.category_name,b.*,c.manufacturer_name FROM tbl_category as a,tbl_product as
b,tbl_manufacturer as c WHERE a.category_id=b.category_id and b.manufacturer_id=c.manufacturer_id
and product_id='$product_id'";
     $this->db->where('publication_status',1);
     $this->db->where('product_id',$product_id);
     $query_result = $this->db->query($sql);
     $result = $query_result->row();
    return $result;
public function select_latest_products() {
     $this->db->select("*");
     $this->db->from('tbl_product');
     $this->db->where('publication_status', 1);
     $this->db->order_by('product_id', 'desc');
     $this->db->limit(8);
     $query_result = $this->db->get();
     $result = $query_result->result();
return $result;
```

```
public function select_featured_products() {
             $this->db->select("*");
             $this->db->from('tbl_product');
             $this->db->where('publication_status', 1);
             $this->db->where('product_status', 1);
             $query_result = $this->db->get();
             $result = $query_result->result();
             return $result;
      public function select_related_products($product_id) {
             $this->db->select("category_id");
             $this->db->from('tbl_product');
             $this->db->where('publication_status', 1);
             $this->db->where('product_id', $product_id);
             $query_result = $this->db->get();
             $result = $query_result->row();
             $category_id = $result->category_id;
             $this->db->select("*");
             $this->db->from('tbl_product');
             $this->db->where('publication_status', 1);
             $this->db->where('category_id', $category_id);
             tion 3 
             $query_result = $this->db->get();
$result = $query_result->result();
             return $result;
       }
      public function check_login_info($email_address,$password,$registration_type){
             $this->db->select('*');
             $this->db->from('tbl_user');
             $this->db->where('email_address',$email_address);
             $this->db->where('password',$password);
$this->db->where('registration_type',$registration_type);
             $query_result=$this->db->get();
             $result=$query_result->row();
```

```
return $result;
  }
  public function save user info() {
     data = array();
     $data['name'] = $this->input->post('name');
     $\data['email address'] = $\text{this->input->post('email address');}
     $data['mobile_number'] = $this->input->post('mobile_number');
     $data['dob'] = $this->input->post('dob');
     $data['city'] = $this->input->post('city');
     $\data['password'] = md5(\$\this->\input->\post('password'));
     $data['address'] = $this->input->post('address');
     $\data['registration_type'] = $\text{this->input->post('registration_type');}
     $data['gender'] = $this->input->post('gender');
     /* Start Image Upload */
     $config['upload_path'] = './profile_image/';
     $config['allowed_types'] = 'gif|jpg|png|jpeg';
     config['max\_size'] = 4000;
     $this->load->library('upload', $config);
     if (!$this->upload->do_upload('profile_image')) {
       $sdata['error'] = $this->upload->display_errors();
       $this->session->set_userdata($sdata);
     } else {
$fdata = $this->upload->data();
       $data['profile_image'] = $config['upload_path'] . $fdata['file_name'];
     }
    /* End Image Upload */
     $this->db->insert('tbl_user', $data);
     $id = $this->db->insert_id();
     $info = array();
          $info['id']=$id;
$info['name']=$data['name'];
          $info['registration_type']=$data['registration_type'];
          return $info;
  }
```

```
public function select_all_order() {
     $this->db->select("*");
     $this->db->from('tbl_order');
     $query_result = $this->db->get();
     $result = $query_result->result();
    return $result;}
   public function delete_order_by_id($order_id){
     $this->db->where('order_id',$order_id);
     $this->db->delete('tbl_order');
  }
  public function select_billing_info($order_id){
    $sql="SELECT * FROM tbl_user as c,tbl_order as o WHERE order_id='$order_id' and c.id=o.id";
    $query_result= $this->db->query($sql);
    $result=$query_result->row();
    return $result;
   public function select_shipping_info($order_id){
    $sql="SELECT * FROM tbl_shipping as s,tbl_order as o WHERE order_id='$order_id' and
s.shipping_id=o.shipping_id";
$query_result= $this->db->query($sql);
    $result=$query_result->row();
    return $result;
  public function select_order_details($order_id){
     $this->db->select('*');
     $this->db->from('tbl_order_details');
     $this->db->where('order_id',$order_id);
$query_result= $this->db->get();
     $result=$query_result->result();
    return $result:
  public function save_contact_info(){
     data = array();
     $data['contact_name'] = $this->input->post('contact_name');
```

```
$data['email_address'] = $this->input->post('email_address');
     $data['enquiry'] = $this->input->post('enquiry');
     $\data['captcha'] = $\this->\text{input->post('captcha');}
     $this->db->insert('tbl_contact', $data);
  }
}//END
Source Code for Front End:
//START
<?php
defined('BASEPATH') OR exit('No direct script access allowed');
/* class Welcome extends CI_Controller { */
class Welcome extends CI Controller {
  public function index() {
     data = array();
     $data['title'] = "Home";
     $\data['featured_product'] = $\text{this->Super_Admin_Model->select_featured_products();}
     $\data['latest_product'] = \$\this->Super_Admin_Model->\select_latest_products();
     $\data['publish_categories'] = \$\text{this->Super_Admin_Model->select_all_published_category();}
     $\data['publish_manufacturer'] = \$\text{this-}\Super_Admin_Model-}\select_all_published_manufacturer();
//
      echo '';
//
      print_r($data['publish_categories']);
//
      exit();
     $wish count = $this->Wish List Model->select wish list by customer id();
     $data['wish_count'] = $wish_count;
     $\data['maincontent'] = $\this->load->view('pages/home', $\data, true);
     $this->load->view('master', $data);
  }
  public function category($category_id) {
     $data = array();
    $data['title'] = "Category";
      $data['all_published_category'] = $this->Super_Admin_Model->select_all_published_category();
     $\data['publish_categories'] = \$\text{this->Super_Admin_Model->select_all_published_category();}
     $data['category_products'] = $this->Super_Admin_Model-
>select_products_by_category_id($category_id);
```

```
$\data['publish manufacturer'] = $\text{this-}\Super Admin Model-
>select_all_published_manufacturer();
     $data['category byid']=$this->Super Admin Model->getcategory byid($category id);
     $data['maincontent'] = $this->load->view('pages/category', $data, true);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish count'] = $wish count;
     $this->load->view('master', $data);
  }
  public function about() {
     data = array();
     $data['title'] = "About";
     $\data['publish categories'] = $\text{this->Super Admin Model->select all published category();}
     $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
     $data['maincontent'] = $this->load->view('pages/about', $data, true);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     $this->load->view('master', $data);
  }
  public function my_account() {
     data = array();
     $data['title'] = "My account";
     $data['publish_categories'] = $this->Super_Admin_Model->select_all_published_category();
     $\data['publish manufacturer'] = $\text{this-}\Super Admin Model-}\select all published manufacturer();
     $\data['maincontent'] = $\this->load->view('pages/my_account', ", true);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish count'] = $wish count;
     $this->load->view('master', $data);
  }
public function compare() {
     data = array();
$data['title'] = "Compare";
     $\data['publish_categories'] = \$\text{this->Super_Admin_Model->select_all_published_category();}
     $\data['publish manufacturer'] = $\text{this-}\Super Admin Model-}\select all published manufacturer();
     $data['published_product']= $this->Super_Admin_Model->select_featured_product();
```

```
$\data['maincontent'] = $\text{this->load->view('pages/compare',$\data, true);}
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish count'] = $wish count;
     $this->load->view('master', $data);
  }
  public function shopping cart() {
     data = array();
     $data['title'] = "Shopping Cart";
     $data['cart_js'] = true;
     $data['cart iquery'] = true;
     $data['publish_categories'] = $this->Super_Admin_Model->select_all_published_category();
     $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
     $\data['maincontent'] = $\text{this->load->view('pages/shopping_cart', ", true);}
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     $this->load->view('master', $data);
  }
  public function checkout() {
     data = array();
     $data['title'] = "Checkout";
     $\data['publish_categories'] = \$\text{this->Super_Admin_Model->select_all_published_category();}
     $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
$\data['maincontent'] = \$\this->\load->\tiew('pages/\text{checkout', ", true);}
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     $this->load->view('master', $data);
  }
  public function contact() {
     data = array();
     $data['title'] = "Contact us";
     $data['publish_categories'] = $this->Super_Admin_Model->select_all_published_category();
     $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
     $\data['maincontent'] = \$\this->\load->\text{view('pages/contact', ", true);}
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
```

```
$data['wish count'] = $wish count;
  $this->load->view('master', $data);
}
public function store_contact() {
  $this->Super_Admin_Model->save_contact_info();
  sdata = array();
  $sdata['message'] = "Contact info save successfully";
  $this->session->set_userdata($sdata);
  $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
  $data['wish count'] = $wish count;
  return redirect('Welcome/contact');
}
public function product($product_id) {
  data = array();
  $data['title'] = "Product";
  $data['product_js'] = true;
  $data['publish categories'] = $this->Super Admin Model->select all published category();
  $data['product_byid'] = $this->Super_Admin_Model->select_product_info_by_id($product_id);
  $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
  $data['related_products'] = $this->Super_Admin_Model->select_related_products($product_id);
  $\data['maincontent'] = \$\this->\load->\trigoniam('pages/product', \$\data, \true);
  $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
  $data['wish count'] = $wish count;
  $this->load->view('master', $data);
}
public function sitemap() {
  data = array();
  $data['title'] = "Sitemap";
  $\data['publish_categories'] = \$\text{this->Super_Admin_Model->select_all_published_category();}
  $\data['publish manufacturer'] = $\text{this-}\Super Admin Model-}\select all published manufacturer();
  $\data['maincontent'] = $\text{this->load->view('pages/sitemap', $\data, true);}
  $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
  $data['wish count'] = $wish count;
  $this->load->view('master', $data);
```

```
}
  public function login_form() {
     data = array();
     $data['title'] = "login";
     $data['publish_categories'] = $this->Super_Admin_Model->select_all_published_category();
     $\data['publish manufacturer'] = $\text{this-}\Super Admin Model-}\select all published manufacturer();
$data['maincontent'] = $this->load->view('pages/login_p', ", true);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
$data['wish_count'] = $wish_count;
     $this->load->view('master', $data);
  }
  public function login() {
     $email_address = $this->input->post('email_address', true);
     $password = md5($this->input->post('password', true));
    //$password = $this->input->post('password', true);
     $registration_type = $this->input->post('registration_type', true);
     $user_info = $this->Super_Admin_Model->check_login_info($email_address, $password,
$registration_type);
    //echo '';
    //print_r($user_info);
    //exit();
     sdata = array();
    if ($user info) {
       $sdata['id'] = $user_info->id;
       $sdata['name'] = $user_info->name;
       $sdata['registration_type'] = $user_info->registration_type;
       $this->session->set_userdata($sdata);
       redirect('welcome/index');
     } else {
       $sdata['exception'] = "Your User Id Or Password Invalid!";
       $this->session->set_userdata($sdata);
       redirect('welcome/login_form');
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
```

```
$data['wish_count'] = $wish_count;
  }
  public function logout() {
     $this->session->unset_userdata('id');
$this->session->unset_userdata('name');
     $this->session->unset_userdata('registration_type');
$this->session->unset_userdata('shipping_id');
     sdata = array();
     $sdata['message'] = "You are successfully Logout !";
     $this->session->set_userdata($sdata);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     redirect("welcome/index");
  }
  public function register() {
     data = array();
     $data['title'] = "Register";
     $\data['publish_categories'] = $\this->Super_Admin_Model->select_all_published_category();
     $data['publish_manufacturer'] = $this->Super_Admin_Model->select_all_published_manufacturer();
     $data['maincontent'] = $this->load->view('pages/register', ", true);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     $this->load->view('master', $data);
  public function store_user() {
     $reg_info = $this->Super_Admin_Model->save_user_info();
     $this->session->set_userdata($reg_info);
     sdata = array();
     $sdata['message'] = "User info save successfully";
     $this->session->set_userdata($sdata);
     $wish_count = $this->Wish_List_Model->select_wish_list_by_customer_id();
     $data['wish_count'] = $wish_count;
     return redirect('Welcome/index');
```