CHAPTER 1

INTRODUCTION

1.1 OVERVIEW OF THE PROJECT

This IWONTMISS is an online shopping website. In real time there is no communication between farmer and buyer. Try to solve those issue by updating the process done through online. The purpose of this site is to provide easy way of shopping facility to get healthy food products on online for consumers. For vendors it provides an easy way to sell the Food products using online. In order to give guaranteed products the system named “IWONTMISS” was introduced. It directly connects the buyer with the seller. The buyer is able to view and order the products from the nearby seller through logging in and if the buyer is new to the site they need to sign up. The seller first need to complete their signup process by contacting the Admin, after getting the login details the seller is able to update the product quantity for sales. In such way it helps the buyers to save time and money along with quality products. IWONTMISS is place the buyers can get all the details of nearby sellers who sell fresh and healthy products like fruits and vegetables. IWONTMISS is easiest way to find nearby seller’s wherever you may be. It allows the buyer to find seller using their current location, it also allows the buyers to search sellers within state, city or zip code.to achieve the above features ionic framework is used to develop the front end and firebase as server.

CHAPTER 2

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

In existing system sellers and buyers are used to go the market to sell and buy food products. There is middle person between the farmer and buyer. The farmer produce the food products and handover it to the middle person, the middle person who bring food products to the market, consumer able to get food product only from the market. There is no opportunity to get different kinds of food products from a single place.

2.2 PROPOSED SYSTEM

To solving the issues of the existing system I proposed a system that will allow the buyer and seller to buy and sell food product online. In that proposed system there is no intermediate process between farmer and buyer. Buyer can get a healthy and good product from the farmer itself. We also get different types of product from one place. It also reduce the cost for buyers and encourage the farmers.

2.3 FEASIBILITY STUDY

A feasibility study is used to determine the viability of an idea, such as ensuring a project is legally and technically feasible as well as economically justifiable. It tells us whether a project is worth the investment in some cases, a project may not be doable. There can be many reasons for this, including requiring too many resources, which not only prevents those resources from performing other tasks but also may cost more than an organization would earn back by taking on a project that isn’t profitable.

A well-designed study should offer a historical background of the business or project, such as a description of the product or service, accounting statements, details of operations and management, marketing research and policies, financial data, legal requirements, and tax obligations. Generally, such studies precede technical development and project implementation.

Areas of Project Feasibility

There are three types of feasibility study they are separate areas that a feasibility study examines, described below.

2.3.1 TECHNICAL FEASIBILITY

This assessment focuses on the technical resources available to the organization. It helps organizations determine whether the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems. Technical feasibility also involves evaluation of the hardware, software, and other technology requirements of the proposed system. This system will build using ionic framework as front-end and firebase as backend so it is technically feasible.

2.3.2 ECONOMIC FEASIBILITY

This assessment typically involves a cost benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before financial resources are allocated. It also serves as an independent project assessment and enhances project credibility. That helps for the decision makers to determine the positive economic benefits to the organization that the proposed project will provide. This system will develop using ionic framework and firebase which require less cost for development so it is economically feasible.

2.3.3 OPERATIONAL FEASIBILITY

This assessment involves undertaking a study to analyze and determine whether and how well the organization's needs can be met by completing the project. Operational feasibility studies also analyze how a project plan satisfies the requirements identified in the requirements analysis phase of system development. This system will develop using ionic framework and firebase. The process of installation, development and maintenance are easy. This system is user-friendly so it is operatively feasible.

2.4 SYSTEM SPECIFICATION

2.4.1 HARDWARE REQUIREMENTS

Processor	Quad Core and above
Ram	2GB
Memory Space	50GB

2.4.2 SOFTWARE REQUIREMENTS

Operating System	Windows, Android and IOS
Framework	Ionic
Editor	Visual Studio Code, devtools
Server	Firebase

2.5 SOFTWARE DESCRIPTION

Technology used

Ionic

Firebase

2.5.1 IONIC

Ionic is a complete open-source SDK for hybrid mobile app development.it is built on top of AngularJs and Apache Cordova. The more recent releases, known as Ionic 3 or simply "Ionic", are built on Angular. Ionic provides tools and services for developing hybrid mobile apps using Web technologies like CSS, HTML5, and Sass. Apps can be built with these Web technologies and then distributed through native app stores to be installed on devices by leveraging Cordova.

Features of Ionic

Ionic provides all the functionality which can be found in native mobile development SDKs. Users can build their apps, customize them for Android or iOS, and deploy through Cordova. Ionic includes mobile components, typography, interactive paradigms, and an extensible base theme.

Using Angular, Ionic provides custom components and methods for interacting with them. One such component, collection repeat, allows users to scroll through a list of thousands of items without any performance hits.

Besides the SDK, Ionic also provides services that developers can use to enable features, such as push notifications, A/B testing, analytics, code deploys, and automated builds.

Ionic also provides a powerful command-line interface (CLI), so developers can get started with creating a project with a simple command. The CLI also allows developers to add Cordova plugins and additional front-end packages, enable push notifications, generate app Icons and Splash screens, and build native binaries.

Supported Platforms

Ionic is focused on building for modern Web standards and for modern mobile devices. For Android, Ionic supports Android 4.1 and up. For iOS, Ionic supports iOS 7 and up. Ionic supports the Universal Windows Platform for building Windows 10 apps.Ionic Framework, powered by Angular.js also supports BlackBerry 10 apps.

Performance

Compared to hybrid applications, mixing Ionic code with native mobile app code in Apache Cordova allows for higher performance of the resulting product.

Utilizing AngularJS (rather than jQuery) allows Ionic to rely on native hardware acceleration (rather than extensive DOM manipulation). Ionic leverages CSS transitions and transforms for animation as a way to leverage the GPU and maximize available processor time.

Web technologies

The methods by which computers communicate with each other through the use of markup languages and multimedia packages is known as web technology. Ionic supports following web technologies:

HTML

CSS/SaSS

Angularjs

HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

Sass

Sass(Syntactically awesome style sheets) is a preprocessor scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). SassScript is a simple scripting language used in Sass files.

JavaScript

JavaScript is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.

Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vaSst majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles.

It has an API for working with text, arrays, dates, regular expressions, and basic manipulation of the DOM, but the language itself 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.

AngularJS

AngularJS is a JavaScript-based open-source front-end web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. The JavaScript components complement Apache Cordova, a framework used for developing cross-platform mobile apps. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model–view–controller (MVC) and model–view–viewmodel (MVVM) architectures, along with components commonly used in rich Internet applications.

The AngularJS framework works by first reading the HTML page, which has additional custom tag attributes embedded into it. Angular interprets those attributes as directives to bind input or output parts of the page to a model that is represented by standard JavaScript variables. The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic JSON resources.

JSON

Java Object Notation is an open-standard file format that uses readable text to transmit data objects consisting of attribute–value pairs and array data types (or any other serializable value). It is a very common data format used for asynchronous browser–server communication, including as a replacement for XML in some AJAX-style systems.

2.5.2 FIREBASE

Real-time Database

Firebase provides a real-time database and backend as a service. The service provides application developers an API that allows application data to be synchronized across clients and stored on Firebase's cloud. The company provides client libraries that enable integration with Android, iOS, JavaScript, Java, Objective-C, swift and Node.js applications. The database is also accessible through a REST API and bindings for several JavaScript frameworks such as AngularJS, React, Ember.js and Backbone.js. The REST API uses the Server-Sent Events protocol, which is an API for creating HTTP connections for receiving push notifications from a server. Developers using the real-time database can secure their data by using the company's server-side-enforced security rules.

Firebase Authentication

Firebase Authentication is a service that can authenticate users using only client-side code. It supports social login providers Facebook, GitHub, Twitter and Google (and Google Play Games). Additionally, it includes a user management system whereby developers can enable user authentication with email and password login stored with Firebase.

Firebase Storage

Firebase Storage provides secure file uploads and downloads for Firebase apps, regardless of network quality. The developer can use it to store images, audio, video, or other user-generated content. Firebase Storage is backed by Google Cloud Storage.

CHAPTER 3

SYSTEM DESIGN AND DEVELOPMENT

3.1 MODULE DESCRIPTION

This system is proposed based on 3 necessary modules that are follows:

Buyer Module

Seller Module

Admin Module

3.1.1 BUYER MODULE

Buyer Module is the place where users can Search and order their needed food items. And the buyers also able to pay the amount when they place the order after placed the order they get the details of the seller. For that they need to sign up using their credentials like name, mobile number, and email id. All the verification is done using their mail id.

3.1.2 SELLER MODULE

Seller Module allows the sellers to update the quantity of food items and track the order summary. Seller is also get notification about their orders and the buyer details. For that they need to get the login from the admin.

3.1.3 ADMIN MODULE

Admin Module allows the admin to create seller login and monitor the process of buyer and seller.

3.2 UML DIAGRAMS

3.2.1 DATA FLOW DIAGRAM

Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs. A **data-flow diagram (DFD)** is a **graphical representation** of the "flow" of data through an information system. DFDs can also be used for the visualization of data processing (**structured design**).On a **DFD**, data items flow from an external data source or an internal data store to an internal data store or an external data sink, via an internal process.

A DFD provides no information about the timing or ordering of processes, or about whether processes will operate in sequence or in parallel. It is therefore quite different from a flowchart, which shows the flow of control through an algorithm, allowing a reader to determine what operations will be performed, in what order, and under what circumstances, but not what kinds of data will be input to and output from the system, nor where the data will come from and go to, nor where the data will be stored (all of which are shown on Fig 3.2.1).

DFDs help system designers and others during initial analysis stages visualize a current system or one that may be necessary to meet new requirements. Systems analysts prefer working with DFDs, particularly when they require a clear understanding of the boundary between existing systems and postulated systems.

DFDs represent the following

1. External devices sending and receiving data

2. Processes that change that data

3. Data flows themselves

4. Data storage locations

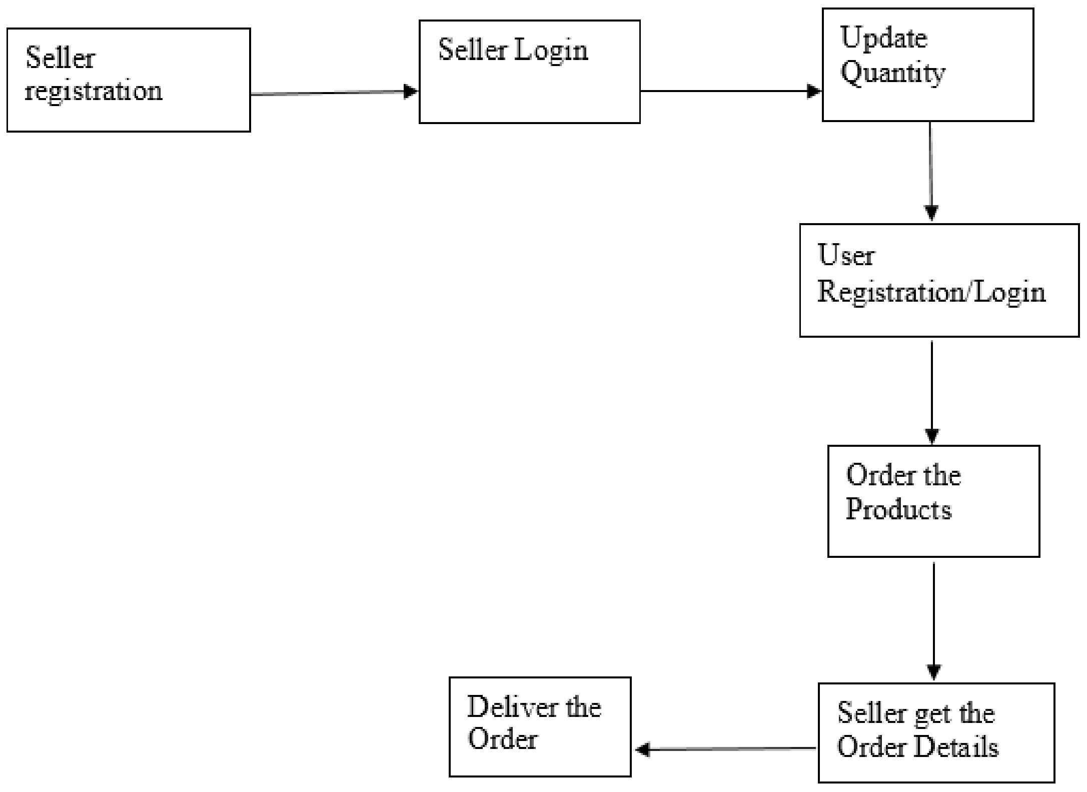


Fig 3.2.1 Data Flow Diagram

3.2.2 USE CASE DIAGRAM

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements (for example, classes and interfaces) that can be used together in a way that will have an effect larger than the sum of the separate elements combined. The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal, indeed, the use case and goal are sometimes considered to be synonymous.

A use case (or set of use cases) has these characteristics

- Organizes functional requirements
- Models the goals of system/actor (user) interactions
- Records paths (called *scenarios*) from trigger events to goals
- Describes one main flow of events (also called a basic course of action), and possibly other ones, called *exceptional* flows of events (also called alternate courses of action)
- Is multi-level, so that one use case can use the functionality of another one.

Use cases can be employed during several stages of software development, such as planning system requirements, validating design, testing software, and creating an outline for online help and user manuals Fig 3.2.2 illustrates the usecase diagram for the system.

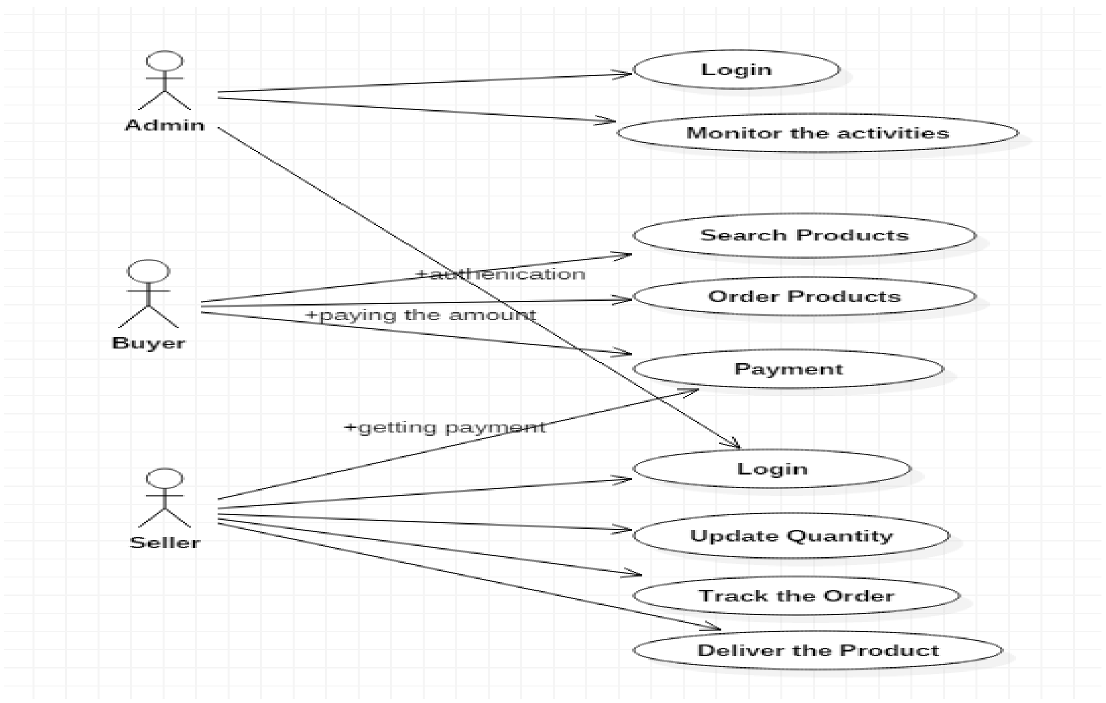


Fig 3.2.2 Usecase Diagram

3.2.3 CLASS DIAGRAM

A class diagram is an illustration of the relationships and source code dependencies among classes in the Unified Modeling Language (UML). In this context, a class defines the methods and variables in an object, which is a specific entity in a program or the unit of code representing that entity. Class diagrams are useful in all forms of object-oriented programming (OOP). The concept is several years old but has been refined as OOP Modeling paradigms have evolved.

In a class diagram, the classes are arranged in groups that share common characteristics. A class diagram resembles a flowchart in which classes are portrayed as boxes, each box having three rectangles inside. The top rectangle contains the name of the class; the middle rectangle contains the attributes of the class; the lower rectangle contains the methods, also called operations, of the class. Lines, which may have arrows at one or both ends, connect the boxes. These lines define the relationships, also called associations, between the classes.

Class Diagram provides an overview of the target system by describing the objects and classes inside the system and the relationships between them. It provides a wide variety of usages; from Modeling the domain-specific data structure to detailed design of the target system. With the share model facilities, you can reuse your class model in the interaction diagram for Modeling the detailed design of the dynamic behaviour. Fig 3.2.3 illustrates the classes of the IWONTMISS system with its attributes and methods.

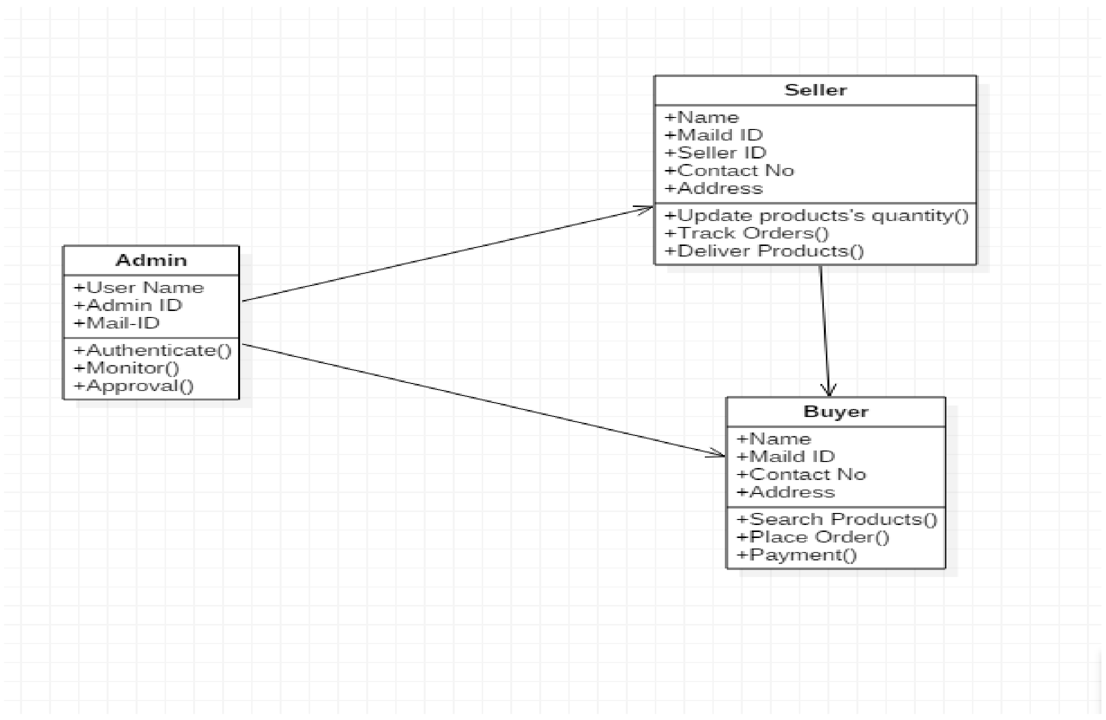


Fig 3.2.3 Class Diagram

3.2.4 SEQUENCE DIAGRAM

A sequence diagram, in the context of UML, represents object collaboration and is used to define event sequences between objects for a certain outcome. A sequence diagram is an essential component used in processes related to analysis, design and documentation. A sequence diagram is also known as a timing diagram, event diagram and event scenario.

Object interactions usually begin at the top of a diagram and end at the bottom. In a sequence diagram, object interaction occurs through messages on the vertical and horizontal dimensions and are designated by horizontal arrows and message names.

The initial sequence diagram message begins at the top and is located on the diagram's left side. Subsequent messages are added just below previous messages. Sequence diagram messages may be subdivided by type, based on functionality.

A lifeline, which indicates a role, is represented by a named rectangular box with a dashed line descending from the centre of the diagram's bottom edge. Lifeline boxes represent participating sequence object instances. Blank instance names represent anonymous instances. The Sequence Diagram models the collaboration of objects based on a time sequence. It shows how the objects interact with others in a particular scenario of a use case. Fig 3.2.4 sequence diagram is from the flow of events which you have defined in the use case description.

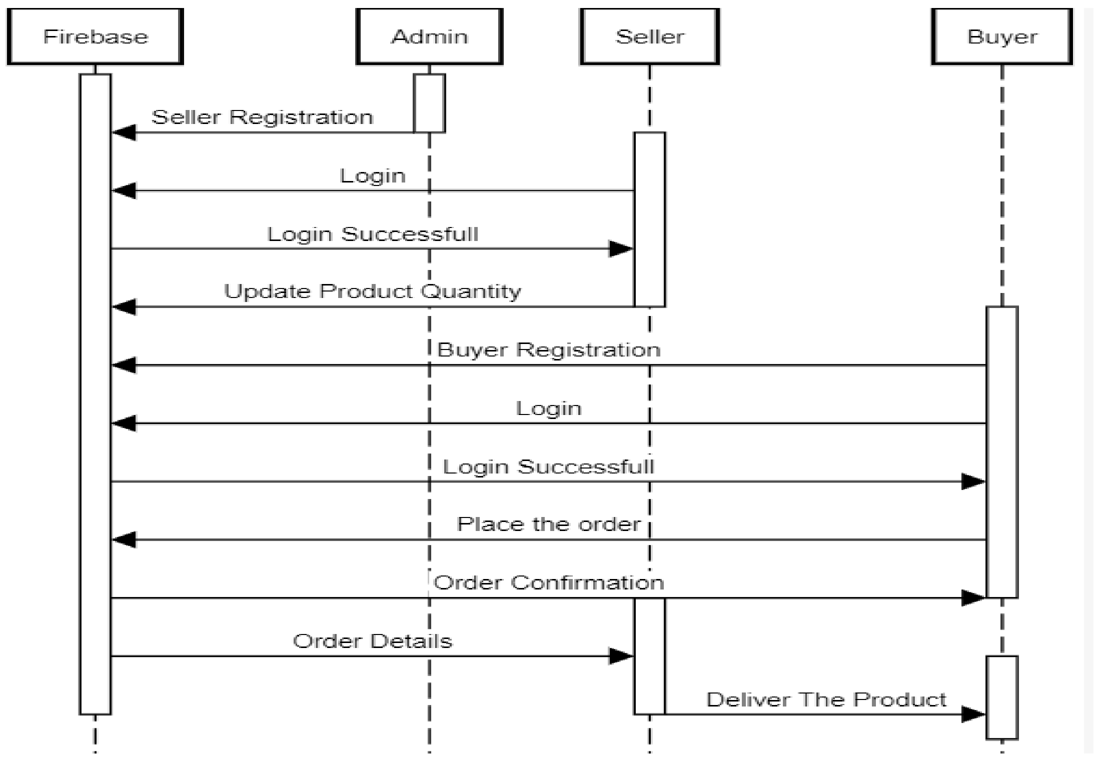


Fig 3.2.4 Sequence Diagram

3.2.5 ER DIAGRAM

An entity-relationship diagram (ERD) is a data modeling technique that graphically illustrates an information system’s entities and the relationships between those entities. An ERD is a conceptual and representational model of data used to represent the entity framework infrastructure.

The three main components of an ERD are:

- The *entity* is a person, object, place or event for which data is collected. For example, if you consider the information system for a business, entities would include not only customers, but the customer's address, and orders as well. The entity is represented by a rectangle and labelled with a singular noun.
- The *relationship* is the interaction between the entities. In the example above, the customer *places* an order, so the word "places" defines the relationship between that instance of a customer and the order or orders that they place. A relationship may be represented by a diamond shape, or more simply, by the line connecting the entities. In either case, verbs are used to label the relationships.
- The *cardinality* defines the relationship between the entities in terms of numbers. An entity may be *optional*: for example, a sales rep could have no customers or could have one or many customers; or *mandatory*: for example, there must be at least one product listed in an order. There are several different types of cardinality notation; *crow's foot notation*, used here, is a common one.

In crow's foot notation, a single bar indicates *one*, a double bar indicates *one and only one*, a *circle* indicates zero, and a *crow's foot* indicates many.

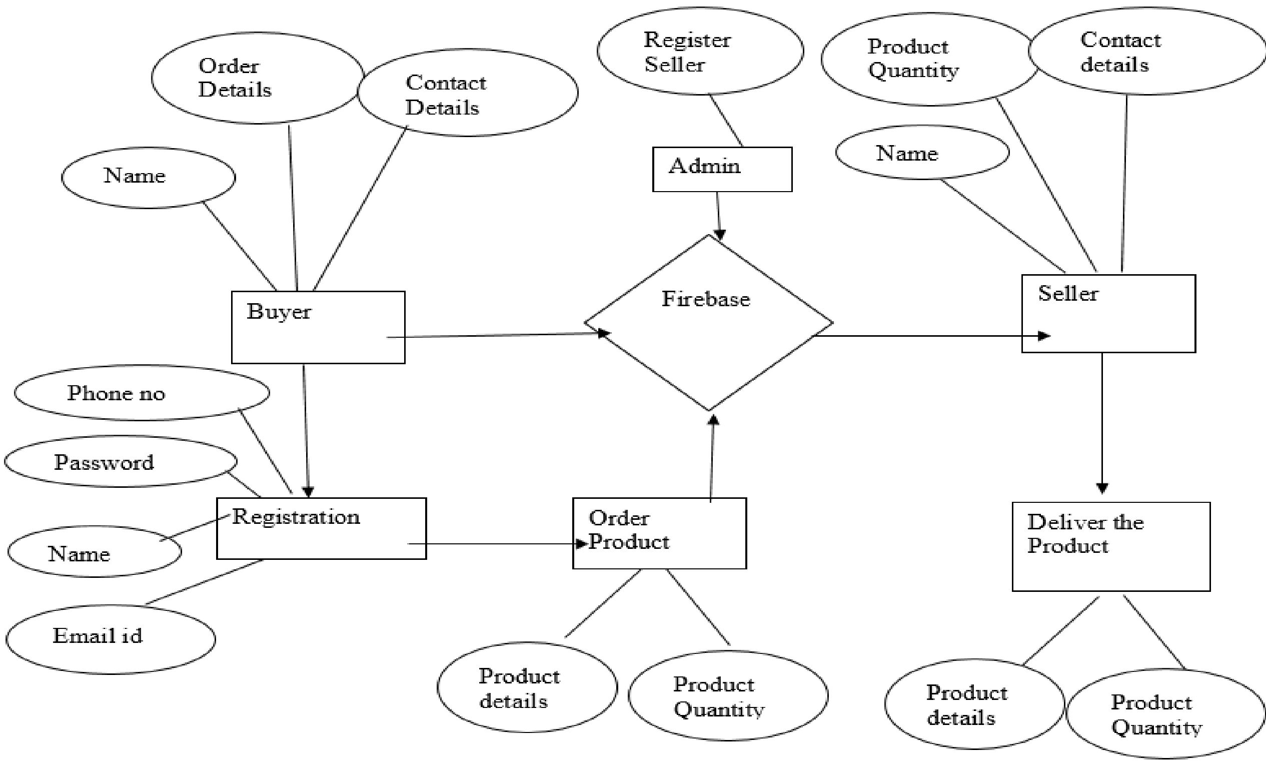


Fig 3.2.5 ER Diagram

3.3 DATABASE DESIGN

Database is an integrated collection of data and provides a centralized access to the data and makes possible to treat data as a separate resource. Usually centralized data managing software is called a Relational Database Management System (RDBMS). The most significant different between RDBMS and other type of Data Management is the separation of data as seen by the program and data as store of on the direct access storage device. This is the difference between logical and physical data.

Data Dictionary

The efficiency of an application developed using RDBMS mainly depend upon the database tables, the fields in each table and the way the tables are opened using the contents in them to retrieve the necessary information. Hence a careful selection of tables and their fields are imperative.

The database tables used in this system are created keeping the above points in mind. The tables used are given below.

Table 3.3.1 Buyer Table

SERIAL NO	**FIELD NAME**	**DATATYPE**	**DESCRIPTION**
1	Bname	Varchar(50)	Buyer Name
2	Baddress	varchar(50)	Buyer Adress
3	Bnumber	int(10)	Buyer Mobile Number
4	Bemail	varchar(50)	Buyer Email address

Table 3.3.2 Seller Table

SERIAL NO	**FIELD NAME**	**DATATYPE**	**DESCRIPTION**
1	Sname	Varchar(50)	Seller Name
2	Saddress	varchar(50)	Seller Adress
3	Snumber	int(10)	Seller Mobile Number
4	Semail	varchar(50)	Seller Email address
5	Sproduct	Varchar(30)	Product details which is the seller wants to sell

Table 3.3.3 Product Table

SERIAL NO	**FIELD NAME**	**DATATYPE**	**DESCRIPTION**
1	Pid	Int(50)	Product Id
2	Pname	Varchar(50)	Product Name
3	Pprice	int(20)	Price of the Product
4	Pqunt	int(10)	Product Quantity

3.4 OUTPUT DESIGN

The term output necessarily implies to information printed or displayed by an information system. Following are the activities that are carried out in the output design stage:

- Identification of the specific outputs required to meet the information requirements.
- Selection of methods required for presenting information.
- Designing of reports, formats or other documents that acts as carrier of information.

Output design objectives

The output design of an information system must meet the following objectives:

1.) The output design should provide information about the past, present or future events. The operational control level outputs provide information of the past and present events. On the other hand, required at the strategic planning level provide information of the future events.

2.) The output design should indicate the important events, opportunities and problems.

3.) The output design should be designed keeping in mind that an action must be triggered in response to some event. A set of rules is pre-defined for such trigger.

4.) The output design should produce some action to the transaction. For example, when the telephone bill is received, a receipt is printed.

Presentation of output

The next consideration in the output design is the presentation involved with an information system. The presentation of an output is regarded as an important feature of output design. The presentation of an output represented either in tabular or graphical form or in both forms. A tabular format is preferred in the following conditions:

- When the details dominate the content of the output
- When the contents of the output are classified in groups.
- When the output design are to be compared.

A tabular format is also preferred for the detailed reports. Graphical representation is used to improve the effectiveness of the output because some users prefer to view information in graphic form rather than in rows and columns of the tables. The tabular and graphical formats may be combined together to enhance the presentation of the output.

3.5 INPUT DESIGN

Similar to the output design, input design is equally important for a system designer. This is because output from a system is regarded as the foremost determinant for defining the performance of a system. The output of the system greatly affects the input design of the system.

Input Design Objectives

The input design of an information system must the following objectives:

- The input design of the system must attempt and try reducing the data requirements. It should also avoid capturing unnecessary data such as constant and system-computable data.
- The input design must avoid processing delays during data entry. Capturing automatic data can reduce this kind of delay.
- The input design must avoid data entry errors. This can be achieved by checking the errors in data entry program. This technique of checking data entry program programs for errors is known as input validation technique.
- The input design must keep the process simple and easy to use.

Input layout

The layout of the input design must contain the following items.

1. Headings and date of data entry.
2. Data heading and value
3. Data type and width of the column
4. Initials of data entry operator

CHAPTER 4

TESTING

Testing is the stage before system implementation where the system is made error free and all the needed modifications are made. The system was tested with test data and necessary corrections to the system were carried out. All the reports were checked by the user and approved. The system was very user friendly with online help to assist the user wherever necessary.

4.1 TEST PLAN

A test plan is a general document for the entire project, which defines the scope, approach to be taken, and schedule of testing, as well as identifying the test item for the entire testing process, and the personal responsible for the different activities of testing. This document describes the plan for testing, the knowledge management tool.

Major testing activities are

Test units

Features to be tested

Approach for testing

Test deliverables

Schedule

Personal allocation

4.2 TESTING STRATEGIES

Some of other testing strategies are follows:

Alpha Testing

Beta Testing

Unit Testing

System Testing

4.2.1 ALPHA TESTING

This was done at the developer's site by a customer. The software is used in a natural setting with the developer "looking over the shoulder" of the user and recording errors and usage problems. Alpha tests are conducted in a controlled environment.

4.2.2 BETA TESTING

This was conducted at one or more customer sites by the end-user of the software. Unlike alpha testing, the developer is generally not present. Therefore, the beta test is a "live" application of the software in an environment that cannot be controlled by the developer. The customer records all problems that are encountered during beta testing and reports these to the developer at regular intervals. As a result of problems reported during beta tests, software engineers make modifications and then prepare for release of the software product to the entire customer base.

4.2.3 UNIT TESTING

Unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use.

4.2.4 SYSTEM TESTING

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements.

Test Deliverables

The following documents are required besides the test plan

Unit test report for each unit

Test case specification for system testing

The report for system testing

Error report

The test case specification for system testing has to be submitted for review before the system testing commences.

4.3 TEST CASES

A test case is a set of conditions or variables and inputs that are developed for a particular goal or objective to be achieved on a certain application to judge its capabilities or features. It might take more than one test case to determine the true functionality of the application being tested. Every requirement or objective to be achieved needs at least one test case.

TEST CASE RESULTS

S.NO	TESTCASE	EXPECTED RESULT	ACTUAL RESULT
1.	Signup With Invalid Username or Password of Gmail in buyer Signup Page	Error message should be display.	Error message is display.
2.	Login with valid username and password in both Seller and Buyer Login Page	Error message should be display.	Error message is display.
3.	Login with valid username and password in both	Menu Page should be open.	Menu page is open.

	Seller and Buyer Login Page		
4.	Register with valid details in Buyer Page	Registration done	User dash board open.
5.	Address Field in order page of buyer is empty	Error message should be displayed	Error message is displayed
6.	After placing order	A success message should be displayed	Order Successfully placed message is displayed

Table 4.3.1 Test Cases Table

CHAPTER 5

IMPLEMENTATION

An implementation is a realization of a technical specification or algorithm as a program, software component, or other computer system through computer programming and deployment. Many implementations may exist for a given specification or standard. For an implementation process to be successful, many tasks between different departments need to be accomplished in sequence.

5.1 IMPLEMENTATION PROCEDURE

Implementation of a computer system to replace a manual system. The problems encountered are converting files, training users, and verifying printouts for integrity.

Implementation of a new computer system to replace an existing one. This is usually a difficult conversion. If not properly planned there can be many problems.

5.2 IMPLEMENTATION ISSUES

This phase is primarily concerned with user training, site preparation and file conversions. During the final testing, user acceptance is tested, followed by user training. Depending in the nature of the extensive user training may be required.

After development and testing has been completed, implementation of the information system can begin. During system implementation system can begin. During system implementation, the project team should be brought back to full strength. During software development stage, project teams end to play passive role as the technical steps of program development and testing evolve. However, organizational representation, accomplished through the project team, is required to complete the system development life cycle.

A key difference between system implementation and all other phases of the lifecycle is that all project activities up to this point have been performed in safe, protected and secure environments, where project issues that arise have little or no impact on day-to-day business operations. Once the system goes live, however, this is no longer the case. Any misuses at this point will almost certainly translate into direct operational and/or financial impacts on the performing organization. It is through the careful planning, execution and management of the system implementation activities that the project team can minimize the likelihood of these occurrences, and determine the contingency plans in the event of a problem.

The entire system was developed using the ionic as Front End and firebase as back end. Ionic is used to design the pages with Input Fields and Output Fields. It also used to Perform Validations. The firebase is the back end tool where the database resides.

Hence the design of the entire system is user-friendly and simple the implementation has been quite easy

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

The IWONTMISS system is developed using Ionic Framework as Front end and firebase as Server fully meets the objectives of the system which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the buyers and sellers associated with the system understands its advantage.

6.2 FUTURE ENHANCEMENT

As the technology emerges, it is possible to upgrade the system and can be adaptable to desired environment. Sub admin module can be added to control the traffic. Based on the customer needs the products and its seller will be expanded in this system.

APPENDIX

A1 SAMPLE CODE

```
angular.module('app.controllers', [])
.controller('loginCtrl',function($scope,$rootScope,$ionicHistory,sharedUtils,$state,$i
onicSideMenuDelegate) {
  $rootScope.extras = false;  // For hiding the side bar and nav icon
$scope.$on('$ionicView.enter', function(ev) {
    if(ev.targetScope !== $scope){
      $ionicHistory.clearHistory();
      $ionicHistory.clearCache();
    }
  });
  //Check if user already logged in
  firebase.auth().onAuthStateChanged(function(user) {
    if (user) {
      $ionicHistory.nextViewOptions({
        historyRoot: true
      });
      $ionicSideMenuDelegate.canDragContent(true);    // Sets up the sideMenu
dragable
      $rootScope.extras = true;
      sharedUtils.hideLoading();
      $state.go('menu2', {}, {location: "replace"});
    }
  });
  $scope.loginEmail = function(formName,cred) {


    if(formName.$valid) {  // Check if the form data is valid or not
```

```
        sharedUtils.showLoading();
firebase.auth().signInWithEmailAndPassword(cred.email,cred.password).then(functi
on(result) {
 $ionicHistory.nextViewOptions({
            historyRoot: true
           });
           $rootScope.extras = true;
           sharedUtils.hideLoading();
           $state.go('menu2', {}, {location: "replace"});
          },
          function(error) {
           sharedUtils.hideLoading();
           sharedUtils.showAlert("Please note","Authentication Error");
          }
      );
     }else{
      sharedUtils.showAlert("Please note","Entered data is not valid");
     }
   };
  $scope.loginGmail = function(){
     //Gmail Login
   };
})
.controller('signupCtrl',
function($scope,$rootScope,sharedUtils,$ionicSideMenuDelegate,
                          $state,fireBaseData,$ionicHistory) {
   $rootScope.extras = false; // For hiding the side bar and nav icon
   $scope.signupEmail = function (formName, cred) {
     if (formName.$valid) {  // Check if the form data is valid or not
      sharedUtils.showLoading();
      //Main Firebase Authentication part
```

```
        firebase.auth().createUserWithEmailAndPassword(cred.email,
cred.password).then(function (result) {

            //Add name and default dp to the Autherisation table

            result.updateProfile({

              displayName: cred.name,

              photoURL: "default_dp"

            }).then(function() {}, function(error) {});

            //Add phone number to the user table

            fireBaseData.refUser().child(result.uid).set({

              telephone: cred.phone

            });

            //Registered OK

            $ionicHistory.nextViewOptions({

              historyRoot: true

            });

            $ionicSideMenuDelegate.canDragContent(true);    // Sets up the sideMenu
dragable

            $rootScope.extras = true;

            sharedUtils.hideLoading();

            $state.go('menu2', {}, {location: "replace"});

        }, function (error) {

            sharedUtils.hideLoading();

            sharedUtils.showAlert("Please note","Sign up Error");

        });

      }else{

        sharedUtils.showAlert("Please note","Entered data is not valid");

      }

    }

  })

.controller('menu2Ctrl',
function($scope,$rootScope,$ionicSideMenuDelegate,fireBaseData,$state,
                  $ionicHistory,$firebaseArray,sharedCartService,sharedUtils) {
  //Check if user already logged in
  firebase.auth().onAuthStateChanged(function(user) {
    if (user) {
      $scope.user_info=user; //Saves data to user_info
    }else {
      $ionicSideMenuDelegate.toggleLeft(); //To close the side bar
      $ionicSideMenuDelegate.canDragContent(false);   // To remove the sidemenu
white space\
      $ionicHistory.nextViewOptions({
        historyRoot: true
      });
      $rootScope.extras = false;
      sharedUtils.hideLoading();
      $state.go('tabsController.login', {}, {location: "replace"});
    }
  });
  // On Loggin in to menu page, the sideMenu drag state is set to true
  $ionicSideMenuDelegate.canDragContent(true);
  $rootScope.extras=true;
  // When user visits A-> B -> C -> A and clicks back, he will close the app instead of
back linking
  $scope.$on('$ionicView.enter', function(ev) {
    if(ev.targetScope !== $scope){
      $ionicHistory.clearHistory();
      $ionicHistory.clearCache();
    }
  });
  $scope.loadMenu = function() {
    sharedUtils.showLoading();
    $scope.menu=$firebaseArray(fireBaseData.refMenu());
    sharedUtils.hideLoading();
  }
  $scope.showProductInfo=function (id) {
  };
  $scope.addToCart=function(item){
    sharedCartService.add(item);
  };
})
.controller('offersCtrl', function($scope,$rootScope) {
    //We initialise it on all the Main Controllers because, $rootScope.extra has default
value false
    // So if you happen to refresh the Offer page, you will get $rootScope.extra = false
    //We need $ionicSideMenuDelegate.canDragContent(true) only on the menu, ie
after login page
    $rootScope.extras=true;
})
.controller('indexCtrl',
function($scope,$rootScope,sharedUtils,$ionicHistory,$state,$ionicSideMenuDelega
te,sharedCartService) {
    //Check if user already logged in
    firebase.auth().onAuthStateChanged(function(user) {
      if (user) {
        $scope.user_info=user; //Saves data to user_info
        //Only when the user is logged in, the cart qty is shown
        //Else it will show unwanted console error till we get the user object
        $scope.get_total= function() {
          var total_qty=0;
          for (var i = 0; i < sharedCartService.cart_items.length; i++) {
            total_qty += sharedCartService.cart_items[i].item_qty;
          }
          return total_qty;
        };
      }else {
        $ionicSideMenuDelegate.toggleLeft(); //To close the side bar
        $ionicSideMenuDelegate.canDragContent(false);  // To remove the sidemenu
white space
        $ionicHistory.nextViewOptions({
          historyRoot: true
        });
        $rootScope.extras = false;
        sharedUtils.hideLoading();
        $state.go('tabsController.login', {}, {location: "replace"});
      }
    });
    $scope.logout=function(){
      sharedUtils.showLoading();
      // Main Firebase logout
      firebase.auth().signOut().then(function() {
        $ionicSideMenuDelegate.toggleLeft(); //To close the side bar
        $ionicSideMenuDelegate.canDragContent(false);  // To remove the sidemenu
white space
        $ionicHistory.nextViewOptions({
          historyRoot: true
        });
        $rootScope.extras = false;
        sharedUtils.hideLoading();
        $state.go('tabsController.login', {}, {location: "replace"});
      }, function(error) {
         sharedUtils.showAlert("Error","Logout Failed")
      });
    }
  })
.controller('myCartCtrl', function($scope,$rootScope,$state,sharedCartService) {
    $rootScope.extras=true;
    //Check if user already logged in
    firebase.auth().onAuthStateChanged(function(user) {
      if (user) {
        $scope.cart=sharedCartService.cart_items;  // Loads users cart
        $scope.get_qty = function() {
          $scope.total_qty=0;
          $scope.total_amount=0;
          for (var i = 0; i < sharedCartService.cart_items.length; i++) {
            $scope.total_qty += sharedCartService.cart_items[i].item_qty;
            $scope.total_amount += (sharedCartService.cart_items[i].item_qty * 
sharedCartService.cart_items[i].item_price);
          }
          return $scope.total_qty;
        };
      }
      //We dont need the else part because indexCtrl takes care of it
    });
    $scope.removeFromCart=function(c_id){
      sharedCartService.drop(c_id);
    };
    $scope.inc=function(c_id){
      sharedCartService.increment(c_id);
    };
    $scope.dec=function(c_id){
      sharedCartService.decrement(c_id);
    };
    $scope.checkout=function(){
      $state.go('checkout', {}, {location: "replace"});
    };
```

```
})
.controller('lastOrdersCtrl', function($scope,$rootScope,fireBaseData,sharedUtils) {
  $rootScope.extras = true;
  sharedUtils.showLoading();
  //Check if user already logged in
  firebase.auth().onAuthStateChanged(function (user) {
    if (user) {
      $scope.user_info = user;
      fireBaseData.refOrder()
        .orderByChild('user_id')
        .startAt($scope.user_info.uid).endAt($scope.user_info.uid)
        .once('value', function (snapshot) {
          $scope.orders = snapshot.val();
          $scope.$apply();
        });
        sharedUtils.hideLoading();
    }
  });
})
.controller('favouriteCtrl', function($scope,$rootScope) {
  $rootScope.extras=true;
})
.controller('settingsCtrl', function($scope,$rootScope,fireBaseData,$firebaseObject,
                                     $ionicPopup,$state,$window,$firebaseArray,
                                     sharedUtils) {
  //Bugs are most prevailing here
  $rootScope.extras=true;
  //Shows loading bar
  sharedUtils.showLoading();
  //Check if user already logged in
```

```
   firebase.auth().onAuthStateChanged(function(user) {
     if (user) {
       //Accessing an array of objects using firebaseObject, does not give you the $id , so use firebase array to get $id
       $scope.addresses= $firebaseArray(fireBaseData.refUser().child(user.uid).child("address"));
       // firebaseObject is good for accessing single objects for eg:- telephone. Don't use it for array of objects
       $scope.user_extras= $firebaseObject(fireBaseData.refUser().child(user.uid));
       $scope.user_info=user; //Saves data to user_info
       //NOTE: $scope.user_info is not writable ie you can't use it inside ng-model of <input>
       //You have to create a local variable for storing emails
       $scope.data_editable={};
       $scope.data_editable.email=$scope.user_info.email;   // For editing store it in local variable
       $scope.data_editable.password="";
       $scope.$apply();
       sharedUtils.hideLoading();
     }
   });
   $scope.addManipulation = function(edit_val) {   // Takes care of address add and edit ie Address Manipulator
     if(edit_val!=null) {
       $scope.data = edit_val; // For editing address
       var title="Edit Address";
       var sub_title="Edit your address";
     }
     else {
       $scope.data = {};    // For adding new address
       var title="Add Address";
       var sub_title="Add your new address";
     }
     // An elaborate, custom popup
     var addressPopup = $ionicPopup.show({
       template: '<input type="text"     placeholder="Nick  Name"    ng-model="data.nickname"> <br/> ' +
              '<input type="text"  placeholder="Address" ng-model="data.address"> <br/> ' +
              '<input type="number" placeholder="Pincode" ng-model="data.pin"> <br/> ' +
              '<input type="number" placeholder="Phone" ng-model="data.phone">',
       title: title,
       subTitle: sub_title,
       scope: $scope,
       buttons: [
        { text: 'Close' },
        {
         text: '<b>Save</b>',
         type: 'button-positive',
         onTap: function(e) {
          if (!$scope.data.nickname || !$scope.data.address || !$scope.data.pin || !$scope.data.phone ) {
           e.preventDefault(); //don't allow the user to close unless he enters full details
          } else {
           return $scope.data;
          }
         }
        }
       ]
     });
     addressPopup.then(function(res) {
       if(edit_val!=null) {
        //Update  address
```

```
        if(res!=null){          //          res          ==null                    =>          close
fireBaseData.refUser().child($scope.user_info.uid).child("address").child(edit_val.$i
d).update({    // set
          nickname: res.nickname,
          address: res.address,
          pin: res.pin,
          phone: res.phone
         });
        }
      }else{
        //Add new address
        fireBaseData.refUser().child($scope.user_info.uid).child("address").push({    //
set
          nickname: res.nickname,
          address: res.address,
          pin: res.pin,
          phone: res.phone
        });
      }
    });
  };
  // A confirm dialog for deleting address
  $scope.deleteAddress = function(del_id) {
    var confirmPopup = $ionicPopup.confirm({
      title: 'Delete Address',
      template: 'Are you sure you want to delete this address',
      buttons: [
        { text: 'No' , type: 'button-stable' },
        { text: 'Yes', type: 'button-assertive' , onTap: function(){return del_id;} }
      ]
    });
```

```
      confirmPopup.then(function(res) {
        if(res) {
fireBaseData.refUser().child($scope.user_info.uid).child("address").child(res).remov
e();
        }
      });
    };
    $scope.save= function (extras,editable) {
      //1. Edit Telephone doesnt show popup 2. Using extras and editable  // Bugs
      if(extras.telephone!="" && extras.telephone!=null ){
        //Update  Telephone
        fireBaseData.refUser().child($scope.user_info.uid).update({    // set
          telephone: extras.telephone
        });
      }
      //Edit Password
      if(editable.password!="" && editable.password!=null  ){
        //Update Password in UserAuthentication Table
firebase.auth().currentUser.updatePassword(editable.password).then(function(ok) {},
function(error) {});
        sharedUtils.showAlert("Account","Password Updated");
      }
      //Edit Email
      if(editable.email!=""           &&           editable.email!=null                    &&
editable.email!=$scope.user_info.email){
        //Update Email/Username in UserAuthentication Table
        firebase.auth().currentUser.updateEmail(editable.email).then(function(ok) {
          $window.location.reload(true);
          //sharedUtils.showAlert("Account","Email Updated");
        }, function(error) {
          sharedUtils.showAlert("ERROR",error);
        });
      }
    };
    $scope.cancel=function(){
      // Simple Reload
      $window.location.reload(true);
      console.log("CANCEL");
    }
})
.controller('supportCtrl', function($scope,$rootScope) {
    $rootScope.extras=true;
})
.controller('forgotPasswordCtrl', function($scope,$rootScope) {
    $rootScope.extras=false;
  })
.controller('checkoutCtrl',
function($scope,$rootScope,sharedUtils,$state,$firebaseArray,
                              $ionicHistory,fireBaseData,   $ionicPopup,sharedCartService)
{
    $rootScope.extras=true;
    //Check if user already logged in
    firebase.auth().onAuthStateChanged(function(user) {
      if (user) {
        $scope.addresses=                                        $firebaseArray(
fireBaseData.refUser().child(user.uid).child("address") );
        $scope.user_info=user;
      }
    });
scope.payments = [
      {id: 'CREDIT', name: 'Credit Card'},
      {id: 'NETBANK', name: 'Net Banking'},
      {id: 'COD', name: 'COD'}
    ];
    $scope.pay=function(address,payment){
      if(address==null || payment==null){
        //Check if the checkboxes are selected ?
        sharedUtils.showAlert("Error","Please choose from the Address and Payment Modes.")
      }
      else {
        // Loop throw all the cart item
        for (var i = 0; i < sharedCartService.cart_items.length; i++) {
          //Add cart item to order table
          fireBaseData.refOrder().push({

            //Product data is hardcoded for simplicity
            product_name: sharedCartService.cart_items[i].item_name,
            product_price: sharedCartService.cart_items[i].item_price,
            product_image: sharedCartService.cart_items[i].item_image,
            product_id: sharedCartService.cart_items[i].$id,
            //item data
            item_qty: sharedCartService.cart_items[i].item_qty,
            //Order data
            user_id: $scope.user_info.uid,
            user_name:$scope.user_info.displayName,
            address_id: address,
            payment_id: payment,
            status: "Queued"
          });
        }
        //Remove users cart
        fireBaseData.refCart().child($scope.user_info.uid).remove();
        sharedUtils.showAlert("Info", "Order Successfull");
        // Go to past order page
        $ionicHistory.nextViewOptions({
          historyRoot: true
        });
        $state.go('lastOrders', {}, {location: "replace", reload: true});
      }
    }

    $scope.addManipulation = function(edit_val) {   // Takes care of address add and
  edit ie Address Manipulator
      if(edit_val!=null) {
        $scope.data = edit_val; // For editing address
        var title="Edit Address";
        var sub_title="Edit your address";
      }
      else {
        $scope.data = {};    // For adding new address
        var title="Add Address";
        var sub_title="Add your new address";
      }
      // An elaborate, custom popup
      var addressPopup = $ionicPopup.show({
        template:   '<input   type="text"        placeholder="Nick   Name"       ng-
  model="data.nickname"> <br/> ' +
        '<input type="text"   placeholder="Address" ng-model="data.address"> <br/> ' +
        '<input type="number" placeholder="Pincode" ng-model="data.pin"> <br/> ' +
        '<input type="number" placeholder="Phone" ng-model="data.phone">',
        title: title,
        subTitle: sub_title,
        scope: $scope,
        buttons: [
          { text: 'Close' },
          {
            text: '<b>Save</b>',
            type: 'button-positive',
            onTap: function(e) {
              if (!$scope.data.nickname || !$scope.data.address || !$scope.data.pin ||
!$scope.data.phone ) {
                e.preventDefault(); //don't allow the user to close unless he enters full details
              } else {
                return $scope.data;
              }
            }
          }
        ]
      });
      addressPopup.then(function(res) {
        if(edit_val!=null) {
         //Update  address

fireBaseData.refUser().child($scope.user_info.uid).child("address").child(edit_val.$i
d).update({    // set
            nickname: res.nickname,
            address: res.address,
            pin: res.pin,
            phone: res.phone
          });
        }else{
          //Add new address
          fireBaseData.refUser().child($scope.user_info.uid).child("address").push({     //
set
            nickname: res.nickname,
            address: res.address,
            pin: res.pin,
            phone: res.phone
          });
        }
      });
    };
  })
```

A2 SCREEN SHOTS

ADMIN SCREENSHOT

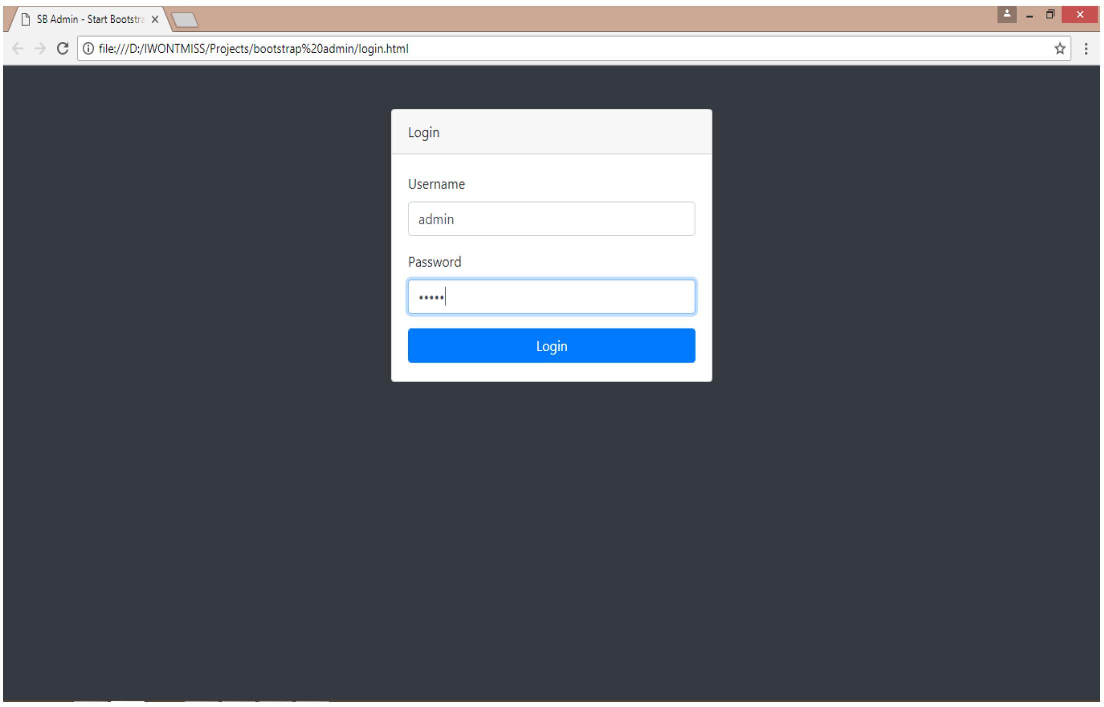
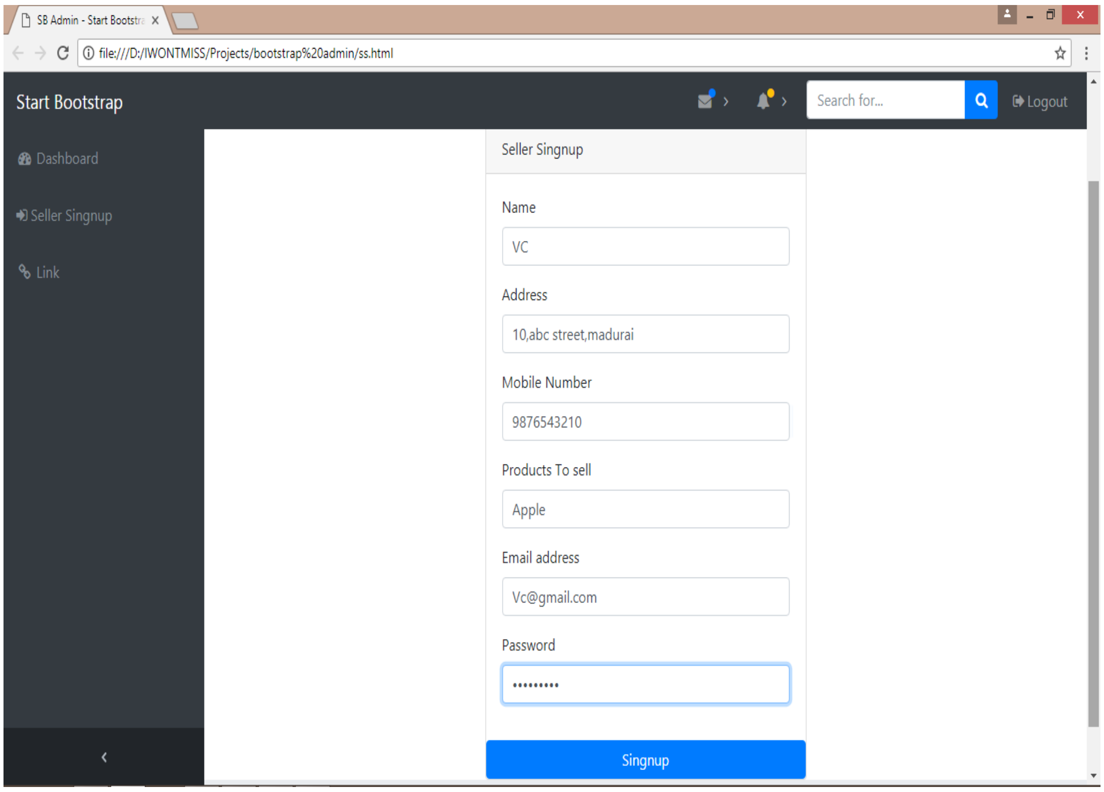

SB Admin - Start Bootstra
file:///D:/IWONTMISS/Projects/bootstrap%20admin/login.html
Login
Username
admin
Password
•••••
Login

Fig A2.1 Admin Login



SB Admin - Start Bootstra

file:///D:/IWONTMISS/Projects/bootstrap%20admin/ss.html

Start Bootstrap

Dashboard

Seller Singnup

Link

Search for...

Logout

Seller Singnup

Name

VC

Address

10,abc street,madurai

Mobile Number

9876543210

Products To sell

Apple

Email address

Vc@gmail.com

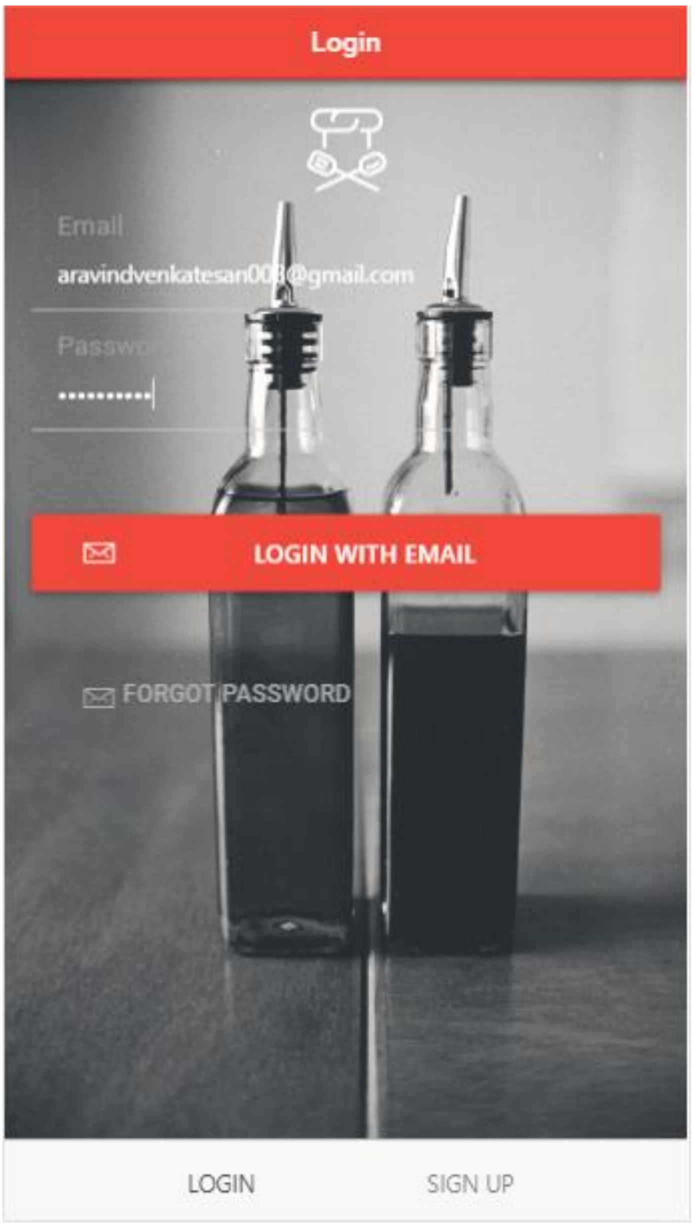
Password

•••••••••

Singnup

Fig A2.2 Seller Signup

SELLER SCREENSHOT


Login

Email

aravindvenkatesan003@gmail.com

Password

•••••••••••

Fig A2.3 Seller Login

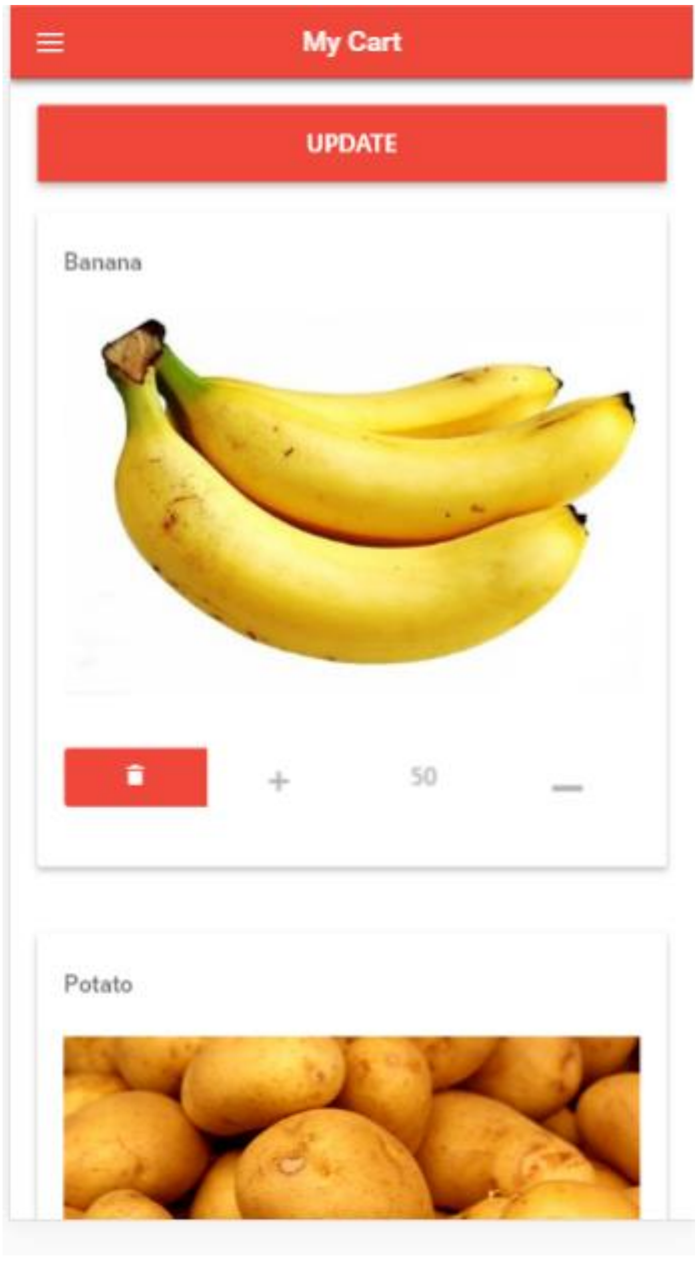
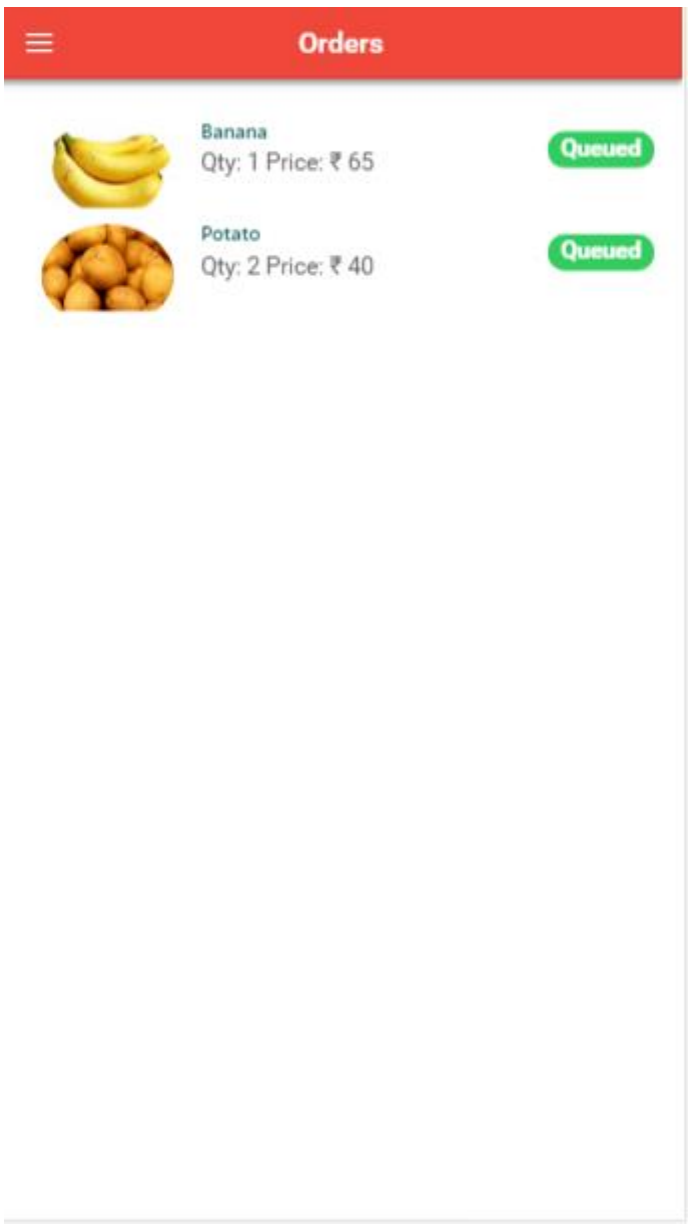


Fig A2.4 Seller Update Page



Banana

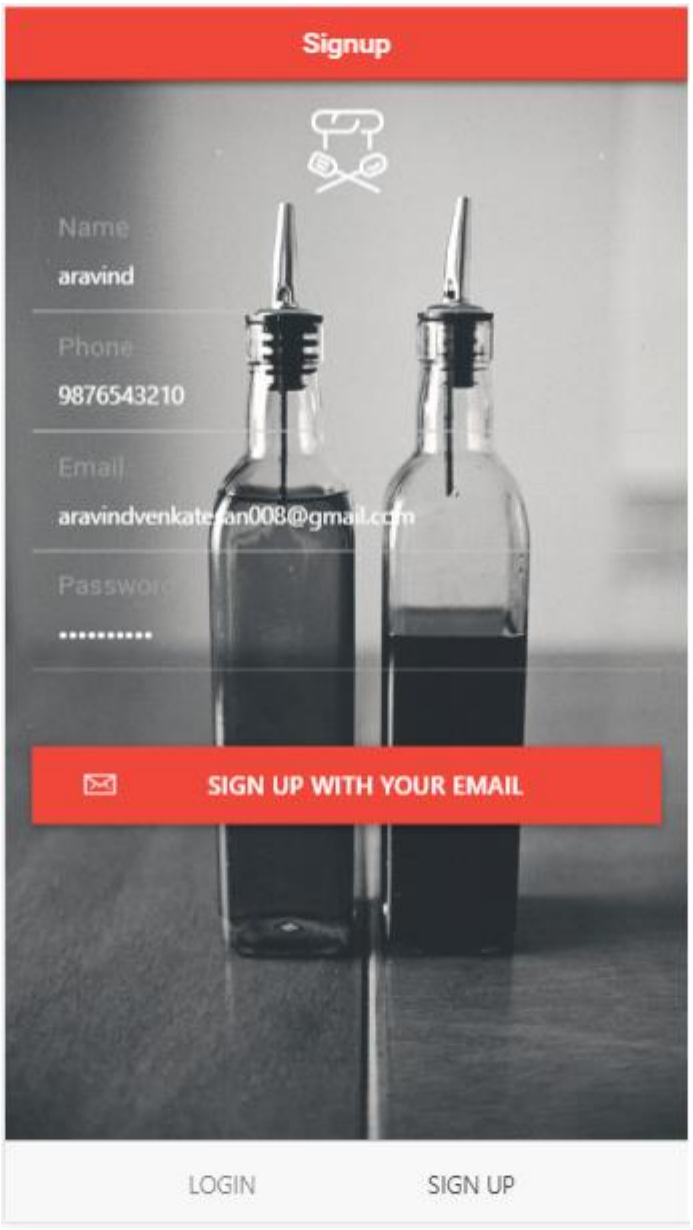
Qty: 1 Price: ₹ 65

Potato

Qty: 2 Price: ₹ 40

Fig A2.5 Order Details

BUYER SCREENSHOT



Name
aravind
Phone
9876543210
Email
aravindvenkatesan008@gmail.com
Password
••••••••••

Fig A2.6 Buyer Signup

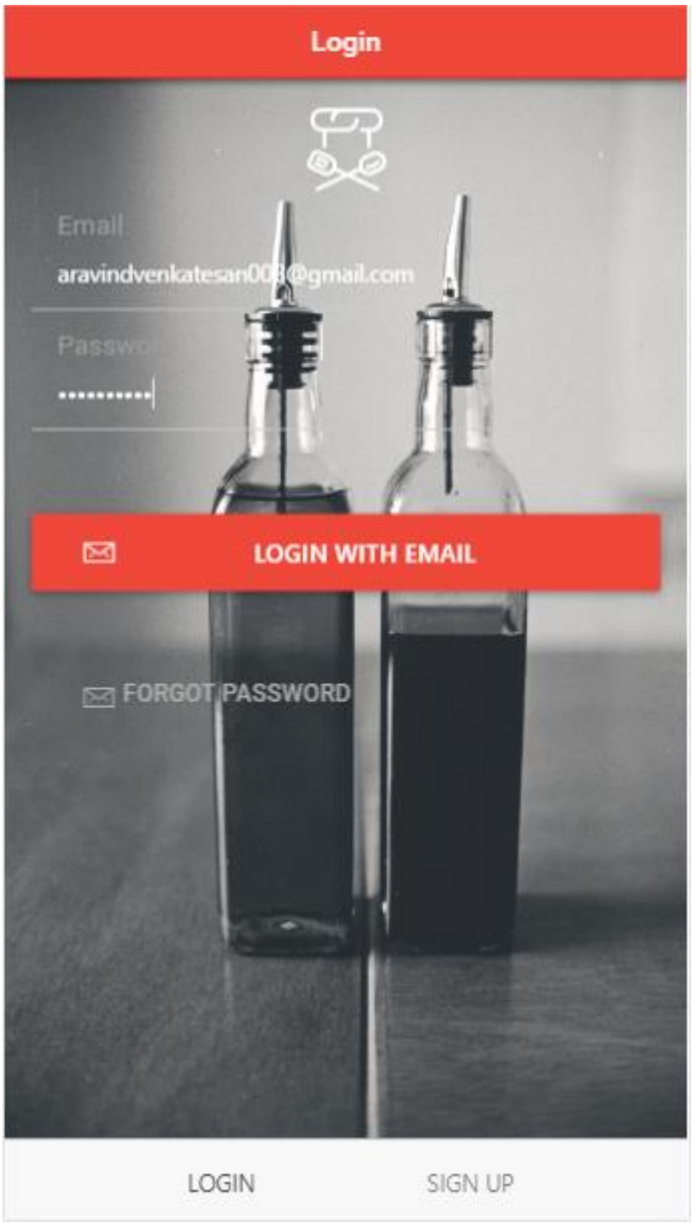


Fig A2.7 Buyer Login

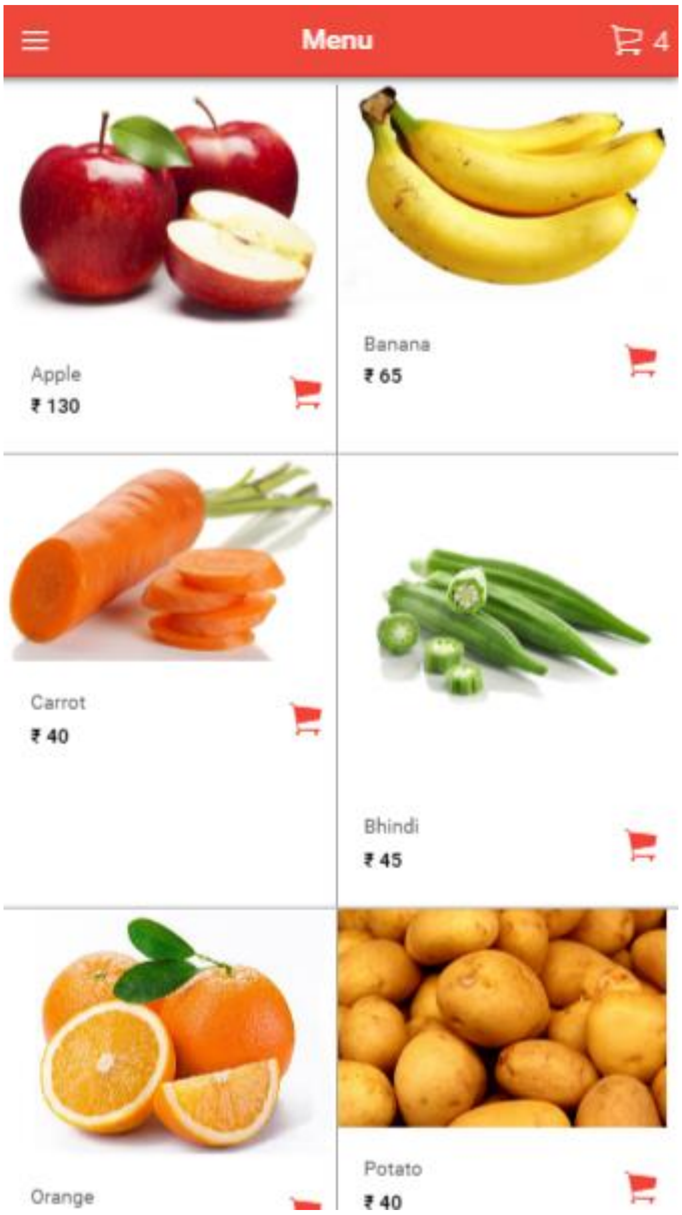


Fig A2.8 Menu Page

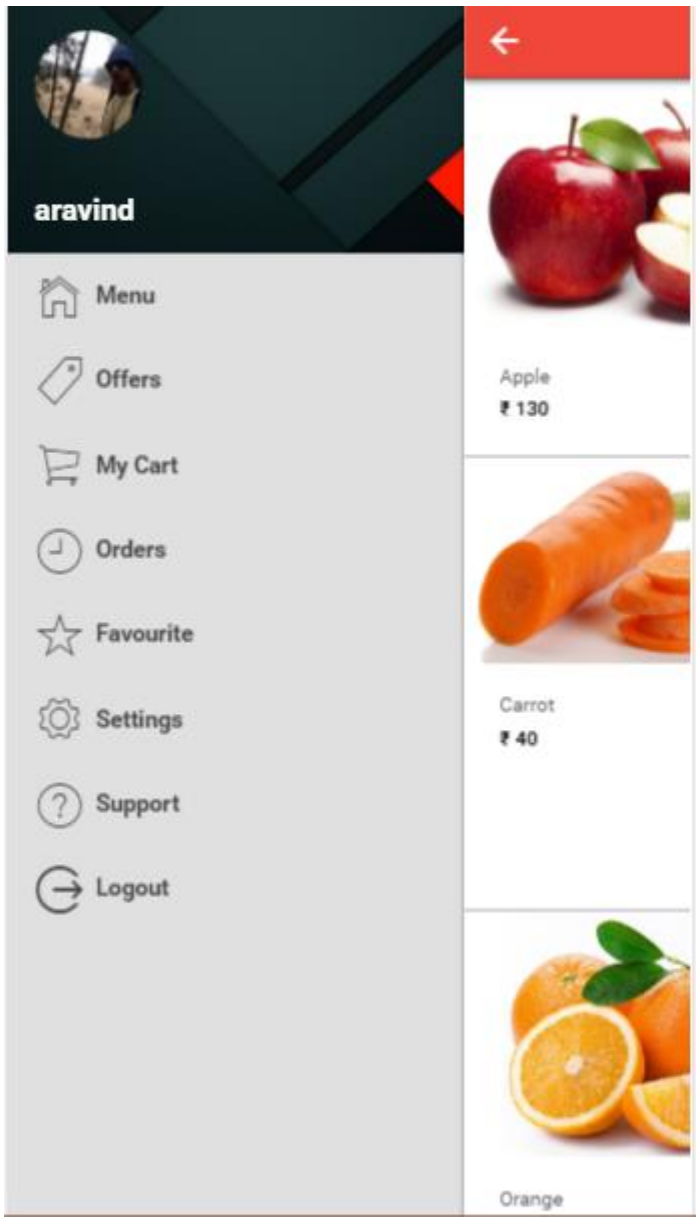
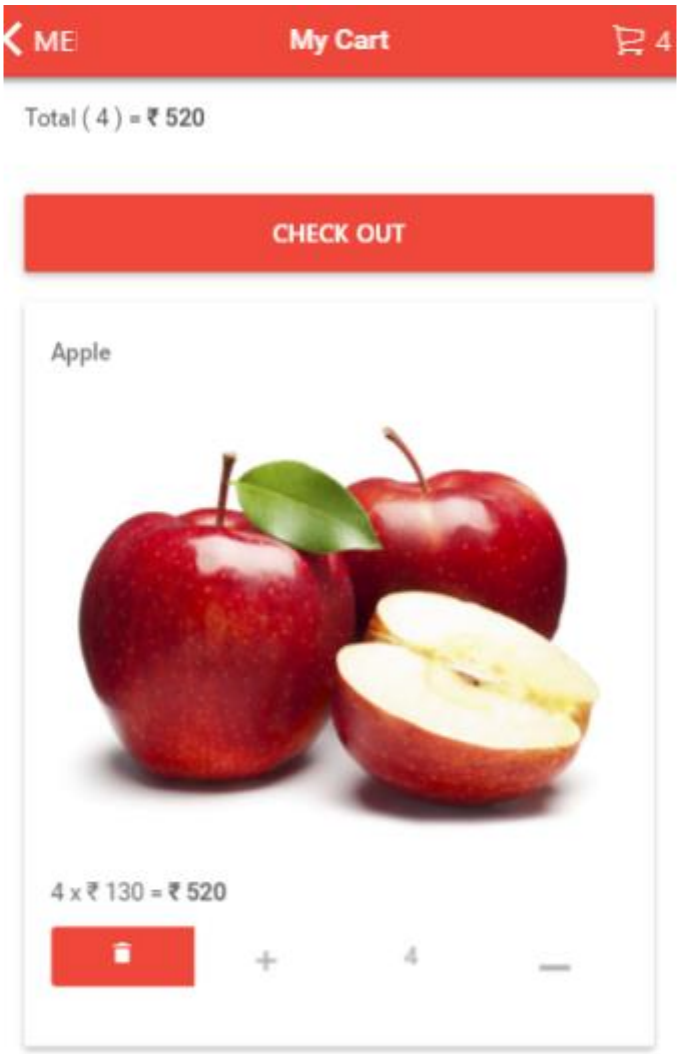


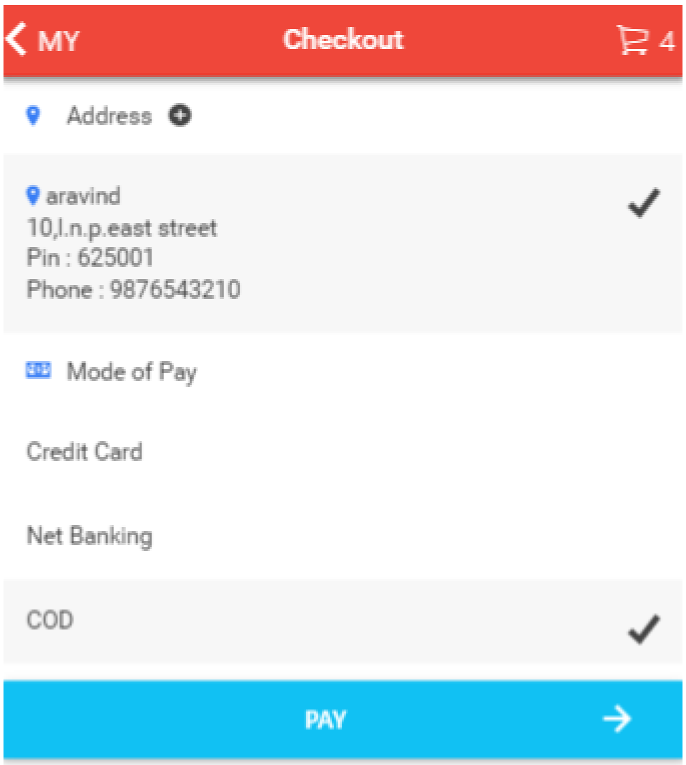
Fig A2.9 Slider



Total (4) = ₹ 520

4 x ₹ 130 = ₹ 520

Fig A2.10 Buyer Cart



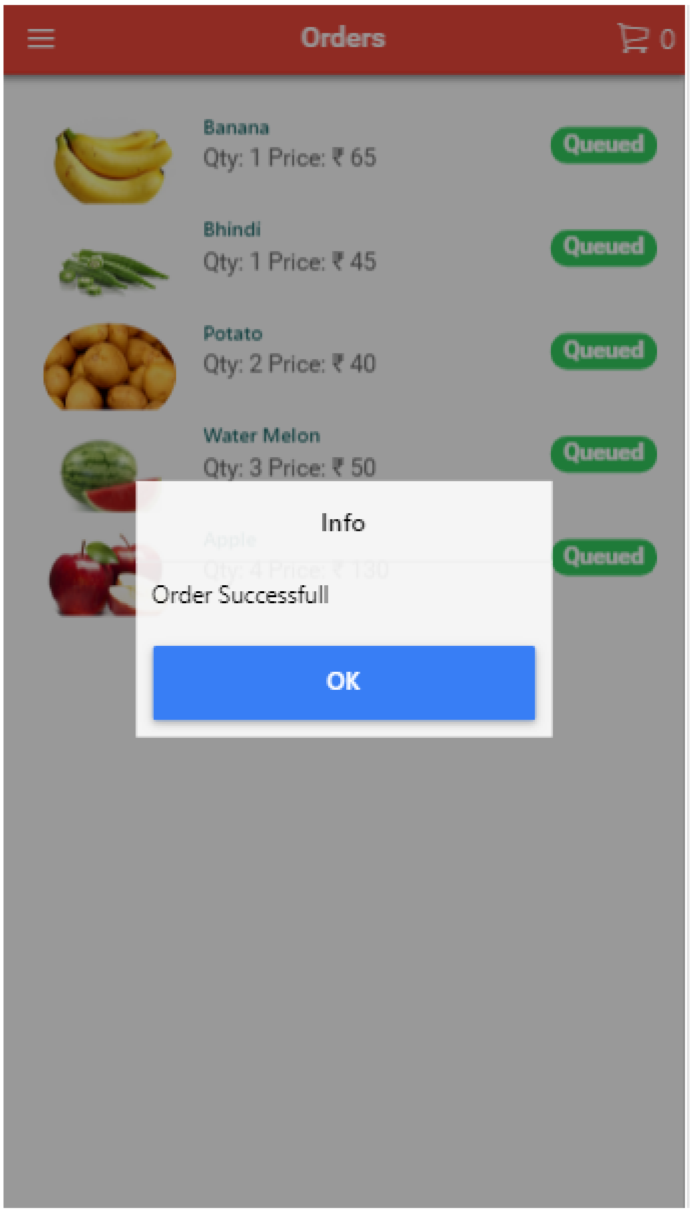
aravind
10,l.n.p.east street
Pin : 625001
Phone : 9876543210

Credit Card

Net Banking

COD ✓

Fig A2.11 Checkout


Orders

0

Banana

Qty: 1 Price: ₹ 65

Queued

Bhindi

Qty: 1 Price: ₹ 45

Queued

Potato

Qty: 2 Price: ₹ 40

Queued

Water Melon

Qty: 3 Price: ₹ 50

Queued

Apple

Qty: 4 Price: ₹ 130

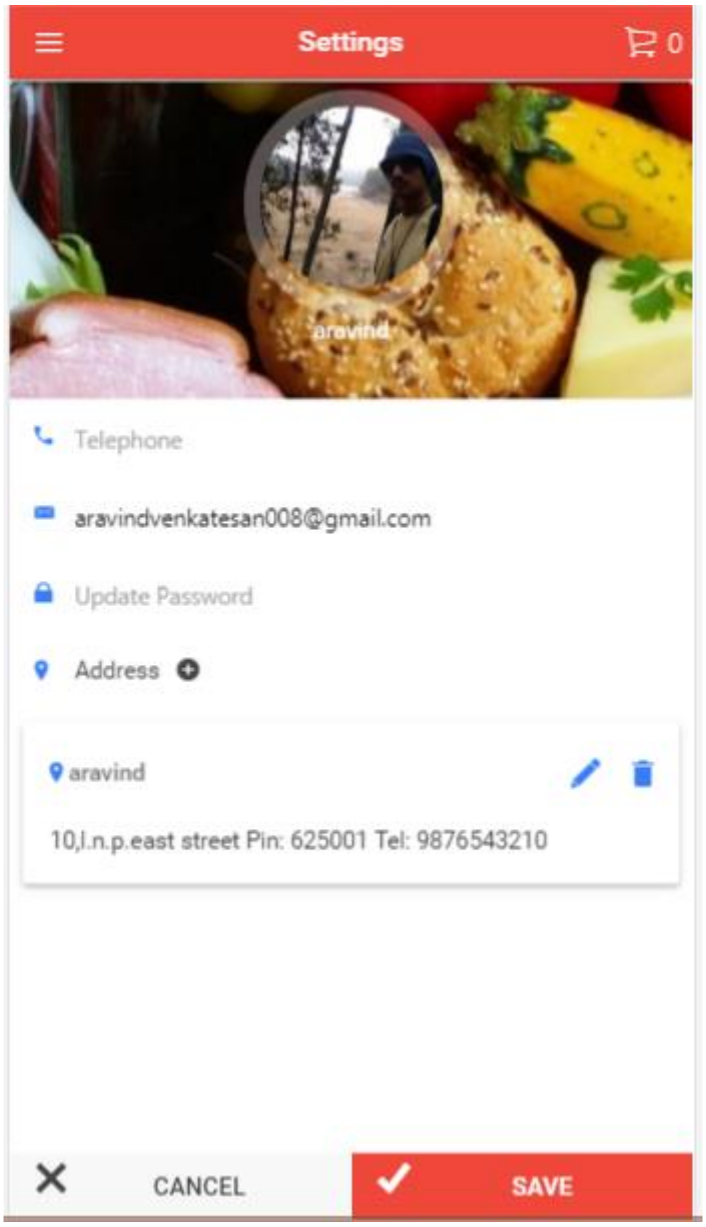
Queued

Info

Order Successfull

OK

Fig A2.12 Orders



aravindvenkatesan008@gmail.com

aravind

10,l.n.p.east street Pin: 625001 Tel: 9876543210

Fig A2.13 Buyer Settings

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