

## **ACKNOWLEDGMENT**

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The Online Shopping is a web based application intended for online retailers. The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for user's to search for products specific to their needs. The search engine provides an easy and convenient way to search for products where a user can Search for a product interactively and the search engine would refine the products available based on the user's input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. The main emphasis lies in providing a user friendly search engine for effectively showing the desired results and its drag and drop behavior.

#### **1.1 Need Of New System**

Services from a store that serves both walk-in customers and online customers. The online shopping system presents an online display of an order cutoff time and an associated delivery window for items selected by the customer. The system accepts the customer's submission of a purchase order for the item in response to a time of submission being before the order cutoff time. The online shopping system does not settle with a credit supplier of the customer until the item selected by the customer is picked from inventory but before it is delivered. Therefore, the customer can go online and make changes to the order. In addition, available service windows are presented to the customer as a function of customer selected order and service types; and further, the order picking is assigned in accordance with a picker's preference.

## **1.2 Detailed Problem Definition**

To develop a web-based application to improve the service to the customers and merchant which intern increases the sales and profit in "**ONLINESHOPPING**". The system is capable of maintaining details of various customers, vendors, Products and storing all the day to day transactions such as generation of shipment address bills, handling customers and product receipts, updating of stores.

## **1.3 Visibility Of The System**

Quality problems. It may become clear during the project life cycle that the original quality expectations cannot be met. This can have an impact on the acceptability and hence the usability of the project's outputs by the end user. Changes to quality must be assessed against the benefits. Changes to specifications and scope. As projects progress changes to the plan or even the scope will inevitably be requested. These need to be carefully assessed against the continued ability to deliver the benefits. Time overruns. Some projects have to be delivered within a certain time frame to deliver benefits. Extending time may completely eliminate the benefits. Cost overruns. If the project is based on a rate of return on capital invested, then an increase in project costs can eliminate this.

## **1.4 Future Prospects**

The process of online shopping will flourish in the coming years as well due to its capability of providing a larger platform for approaching our potential customers. These sites can help the online shopping and businesses to grow with greater speed and thereby earn more money. The content that company owners utilizes for online



shopping will be search engine friendly. These site will help the customers to buy goods directly by their credit cards. These site will use Bill Desk for the customers who can buy it directly by their cards.

A few points which speak in favor of e-commerce are:

1. Marketing is very important and it is generally believed that online people are easier to target. The savings in marketing costs can be passed on and prices can be reduced.
2. Now it is actually possible to get a product at less than what the manufacturer is selling it for.
3. FDI will help improving the efficiency in supply chain.
4. FDI will also help in boosting the confidence levels of the customers in which foreign players will play an important role.
5. The industry is still in the growth phase so profit margins are still likely to be high. The B2C e commerce is likely to be the main engine driving growth in the immediate future.
6. Spontaneous activity has reduced considerably and consumers now try to make better use of the time spent online.

### 2.1 Requirement Analysis

#### ➤ Information Gathering

As the goal of the application is ease of use and to provide an interactive interface, extensive research has been done to gain an insight into the needs and behaviors of various users. The working of the application is made convenient and easy to use for the end user.

Users can be classified into two types based on their knowledge of the products that suit their needs. They can be classified as users who know about the product that would satisfy their needs and users who have to figure out the product that would satisfy their needs. Users who know about the product should be able to find the product easy with the click of a button. Such users can search for the product by using the product name as the search term. Users who have to figure out the product that would satisfy their needs could use a search term to find a list of products and then should be able to filter the results based on various parameters like product type, manufacturer, price range, platform supported etc.

The users should be able to view the complete specification of the product and various images at different Zoom levels. The user should be able to read the customer reviews for the product and the ratings provided. They should be able to write their own reviews. They should be able to print out the specifications for a product or email the product page to a friend's etc.

To increase the ease of use the user should be able to add a product to the shopping cart by dragging a product and dropping it in the shopping cart. A user should be able to edit the contents of a shopping cart. They should be able to update the quantities of the products added to the cart and remove the products from the cart. The user should be able to remove the product from the shopping cart by dragging the product and dropping it outside the cart.

The application can be made interactive by pop up messages when a product has been dropped in to the shopping cart or out of the shopping cart. The user can be notified if the cursor enters a drop area and the object that could be dropped. Also users are impatient making it important to load pages soon.

## **2.2 Project Model**

Incremental model in software engineering is a one which combines the elements of waterfall model which are then applied in an iterative manner. It basically delivers a series of releases called increments which provide progressively more functionality for the client as each increment is delivered.

In incremental model of software engineering waterfall model is repeatedly applied in each increment. The incremental model applies linear sequences in a required pattern as calendar time passes. Each linear sequence produces an increment in the work.

As from the diagram you can see that there are 5 phases(tasks) which are carried out in each increment. If you want to see what activity is carried out in each phase then check out this post: [Phases of waterfall model](#) as the phases are same.

The first increment is often a core product where the basic requirements are addressed and the supplementary features are added in the next increments. The core product is used and evaluated by the client. Once the core product is evaluated by the client there is plan development for the next increment. Thus in every increment the needs of the client are kept in mind and more features and functions are added and the core product is updated. This process continues till the complete product is produced.

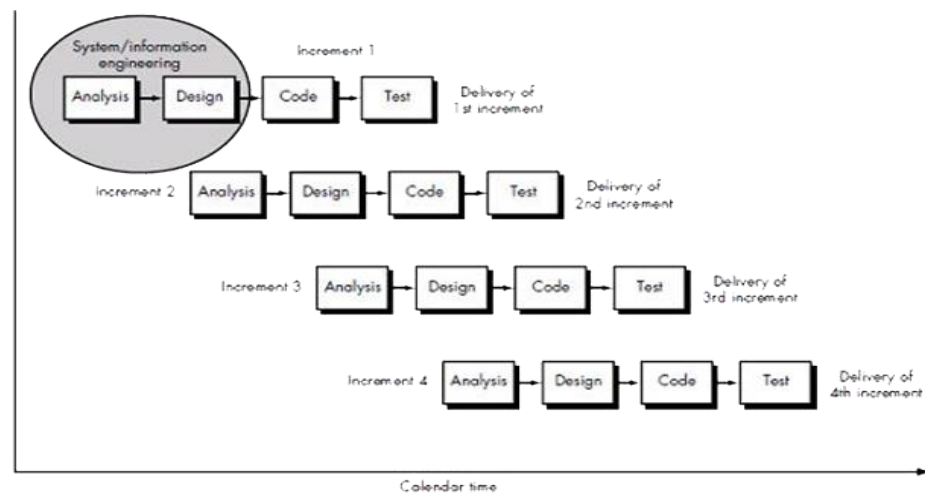


Figure 2.1 Incremental Model

The increments earlier to the main increment are called as “stripped down” versions of the final product. These increments form a base for customer evaluation. On this basis client can suggest new requirements if required.

If there are less number of employees to work on the project Incremental development model is very useful to complete the project before the deadline. In a project early increments can be done with less number of people. In case if the core product is well-defined and understood more employees can be added if needed in the future increments.

One of the benefits of Incremental process model is that it can be planned to manage technical risks.

### **2.3 Schedule Representation**

<b>ACTIVITY</b>	<b>START DATE</b>	<b>FINISH DATE</b>
Requirement Analysis	20/08/2014	3/09/2014
System Analysis	04/09/2014	14/09/2014
System Design	15/09/2014	15/12/2014
System Coding	21/12/2014	10/03/2015
Testing and Integration	11/03/2015	04/04/2015

## **2.4 Feasibility Study**

### **2.4.1 - System Feasibility**

The system feasibility can be divided into the following sections:

### **2.4.2 - Economic Feasibility**

The project is economically feasible as the only cost involved is having a computer with the minimum requirements mentioned earlier. For the users to access the application, the only cost involved will be in getting access to the Internet.

### **2.4.3 - Technical Feasibility**

To deploy the application, the only technical aspects needed are mentioned below:

Operating Environment Win XP/7/8/8.1/10

Platform JAVA

Database JDBC

➤ **For Users:** Internet Browser, Internet Connection

### **2.4.4 - Behavioral Feasibility**

The application requires no special technical guidance and all the views available in the application are self-explanatory. The users are well guided with warning and failure messages for all the actions taken.

## **2.5 - Java Technology**

Java technology is both a programming language and a platform.

- **Java Programming Language**

The Java programming language is a high-level language that can be characterized by all of the following:

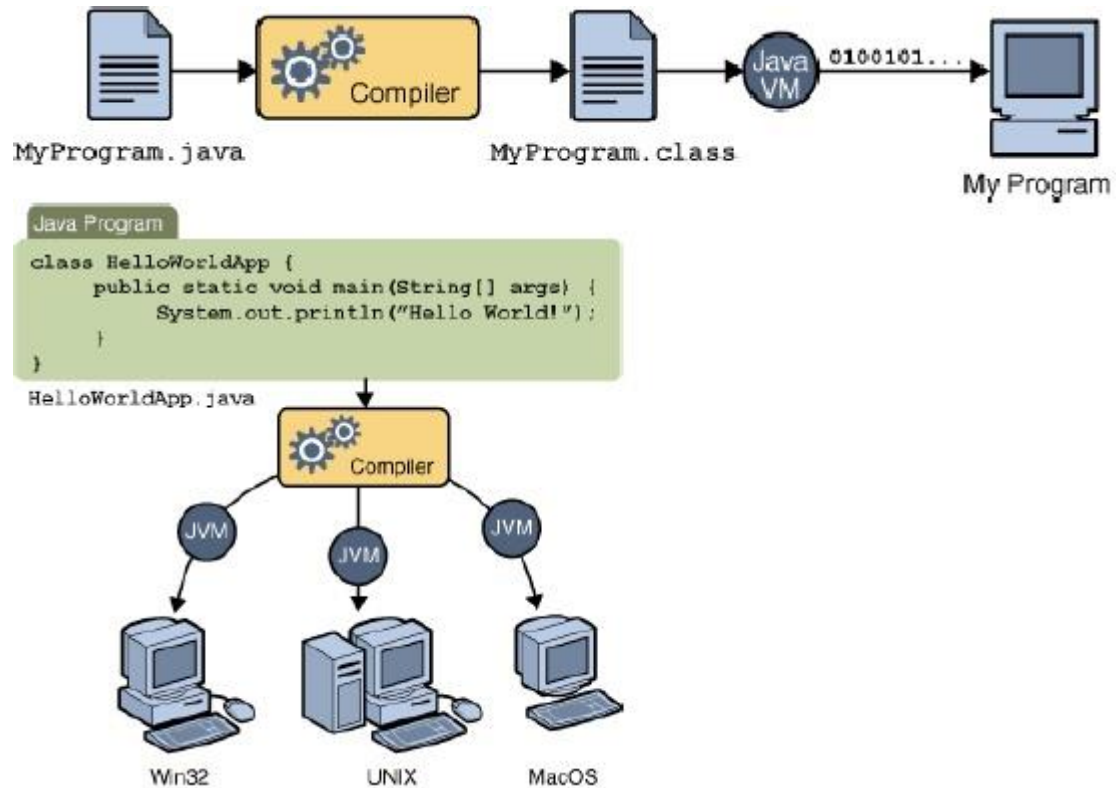


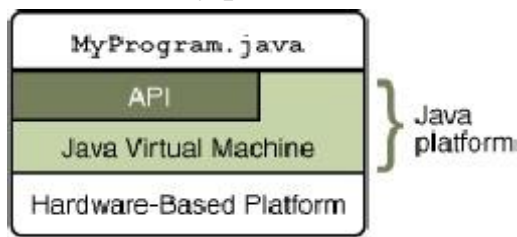
Figure 2.2 JVM

- Simple
- Object oriented
- Distributed
- Multithreaded
- Architecture neutral
- Portable
- High performance

In the Java programming language, all source code is first written in plain text files ending with the .java extension. Those source files are then compiled into .class files by the java c compiler. A .class file does not contain code that is native to your processor; it instead contains byte codes he machine language of the Java Virtual Machine1 (Java VM). The java launcher tool then runs your application with an instance of the Java Virtual Machine.

### 2.5.1 - The Java Platform

A platform is the hardware or software environment in which a program runs. Most platforms can be described as a combination of the operating system and underlying hardware. The Java platform differs from most other platforms in that it's a software-only platform that runs on top of other hardware-based platforms.



The Java platform has two components:

- The Java Virtual Machine
- The Java Application Programming Interface

Figure 2.3 Java Platform (API)

The API is a large collection of ready-made software components that provide many useful capabilities. It is grouped into libraries of related classes and interfaces; these libraries are known as packages.

Every full implementation of the Java platform gives you the following features:

Development Tools: The development tools provide means for compiling, running, debugging, and documenting your applications. The main tools are the java c compiler, the java launcher, and the java doc documentation tool.



- **Application Programming Interface (API):** The API provides the core functionality of the Java programming language. It offers a wide array of useful classes ready for use in your own applications. It spans everything from basic objects, to networking and security, to XML generation and database access, etc.
- **Deployment Technologies:** The JDK software provides standard mechanisms such as the Java Web Start software and Java Plug-In software for deploying your applications to end users.
- **User Interface Toolkits:** The Swing and Java 2D toolkits make it possible to create sophisticated Graphical User Interfaces (GUIs).
- **Integration Libraries:** Integration libraries such as the Java IDL, JDBC, JNDI, Java RMI, and Java Remote Method Invocation over Internet Inter-ORB Protocol Technology (Java RMI-IIOP Technology) enable database access and manipulation of remote objects.

### 2.5.2 Java - Exception Handling

An exception is an event, which occurs during the execution of a program, that disrupts the normal flow of the program's instructions. When an error occurs within a method, the method creates an object and hands it off to the runtime system. The object, called an exception object, contains information about the error, including its type and the state of the program when the error occurred. Creating an exception object and handing it to the runtime system is called throwing an exception. After a method throws an exception, the runtime system attempts to find something to handle it. The set of possible "something's" to handle the exception is the ordered list of methods that had been called to get to the method where the error occurred. The list of methods is known as the call stack.

### **2.5.3 Java Multithreading**

Threads are called lightweight processes. Threads exist within a process every process has at least one. Threads share the process's resources, including memory and open files. This makes for efficient, but potentially problematic, communication.

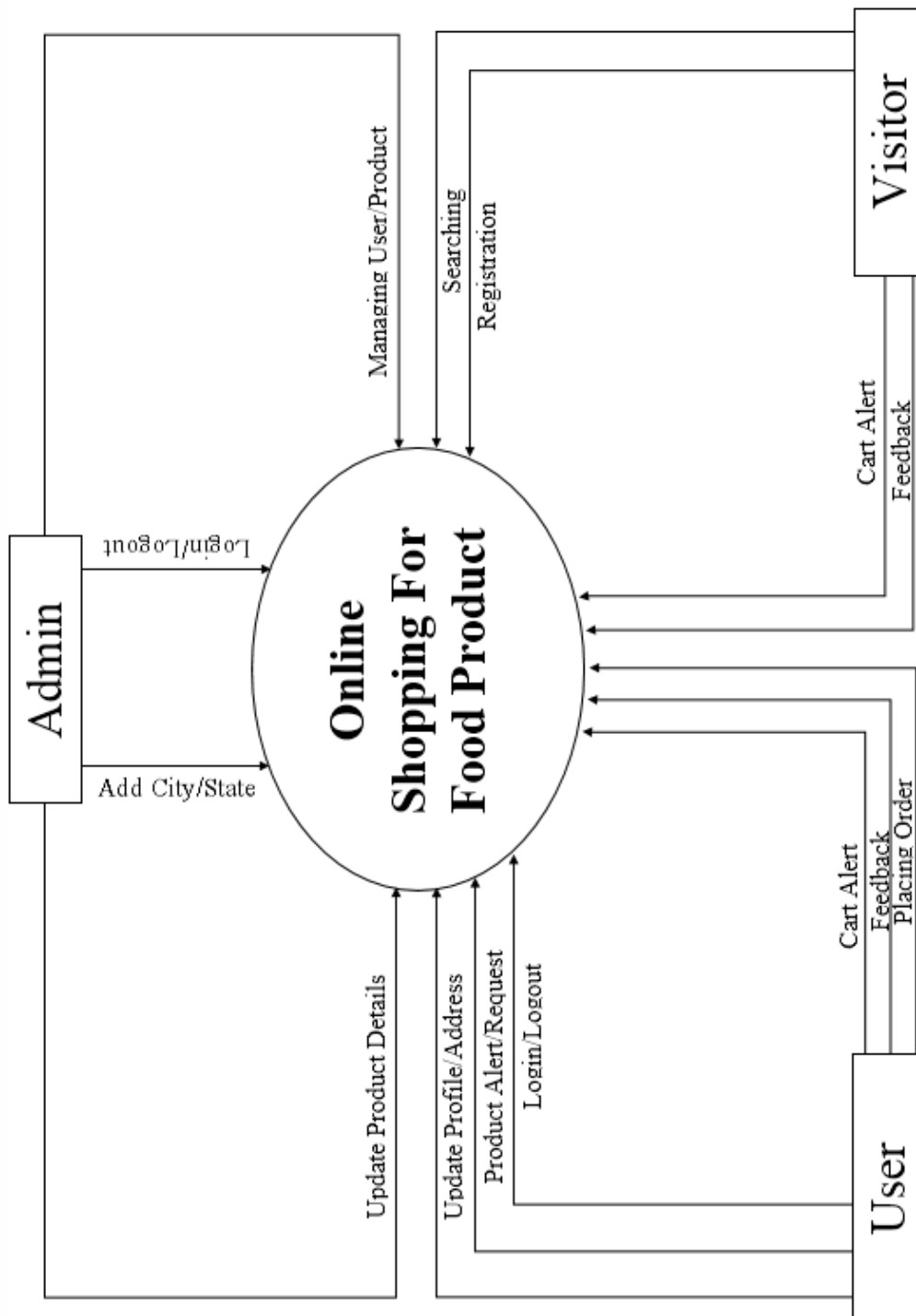
### **2.5.4 Java - JDBC**

JDBC stands for "Java Database Connectivity". It is an API (Application Programming Interface) which consists of a set of Java classes, interfaces and exceptions and a specification to which both JDBC driver vendors and JDBC developers adhere when developing applications. JDBC is a very popular data access standard. RDBMS (Relational Database Management Systems) or third-party vendors develop drivers which adhere to the JDBC specification. Other developers use these drivers to develop applications which access those databases. The JDBC API is a Java API that can access any kind of tabular data, especially data stored in a Relational Database.

Other Feature needs consists study of:-

- 1) Java server pages
- 2) Java servlet Technology
- 3) Web components

### 3.1 Context Diagram



## 3.2 Data Flow Diagram

### Data Flow Diagram For Admin(Level 1)

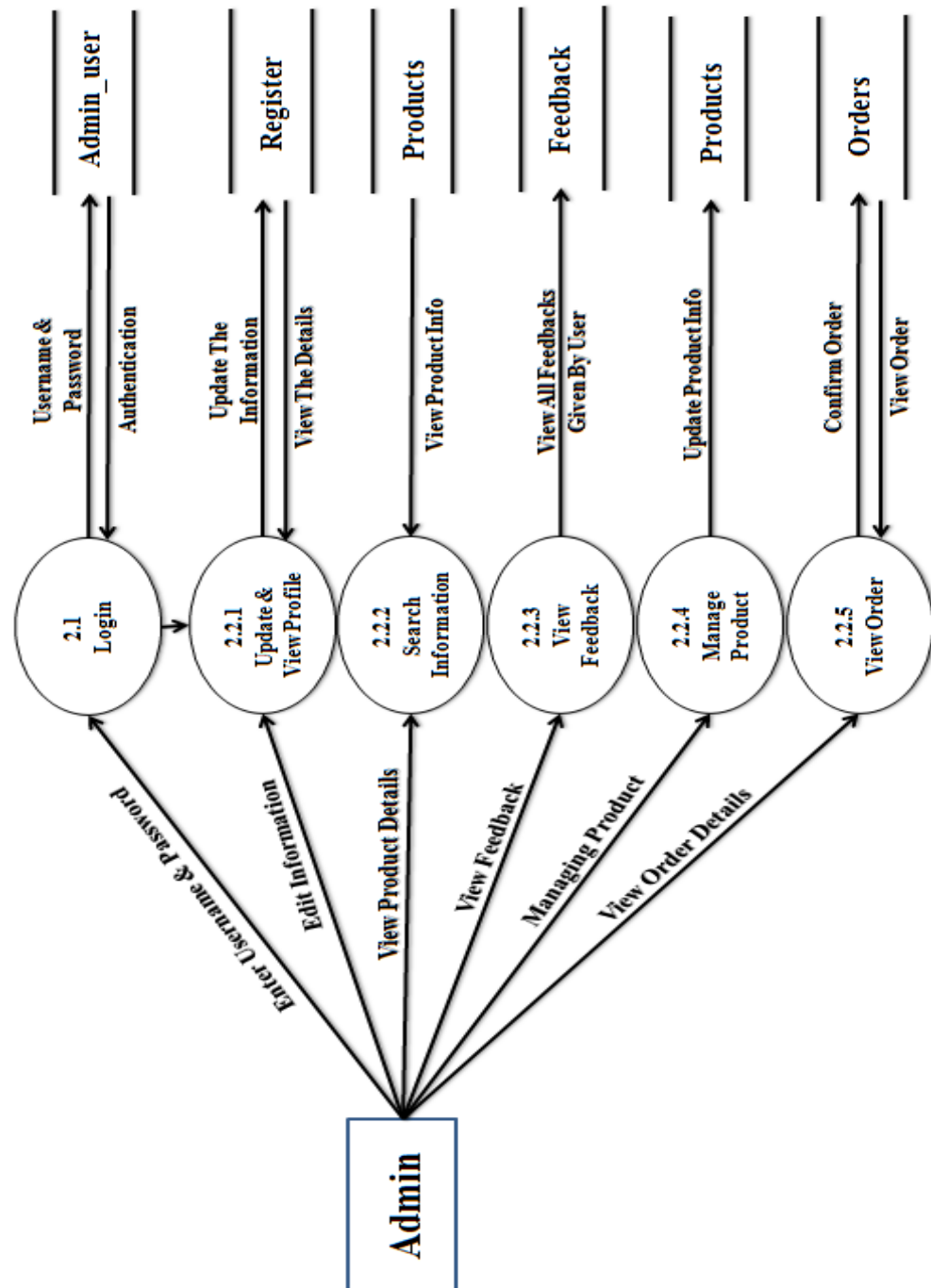


Figure 3.2 DFD Admin (level 1)

### Data Flow Diagram For User (Level 1)

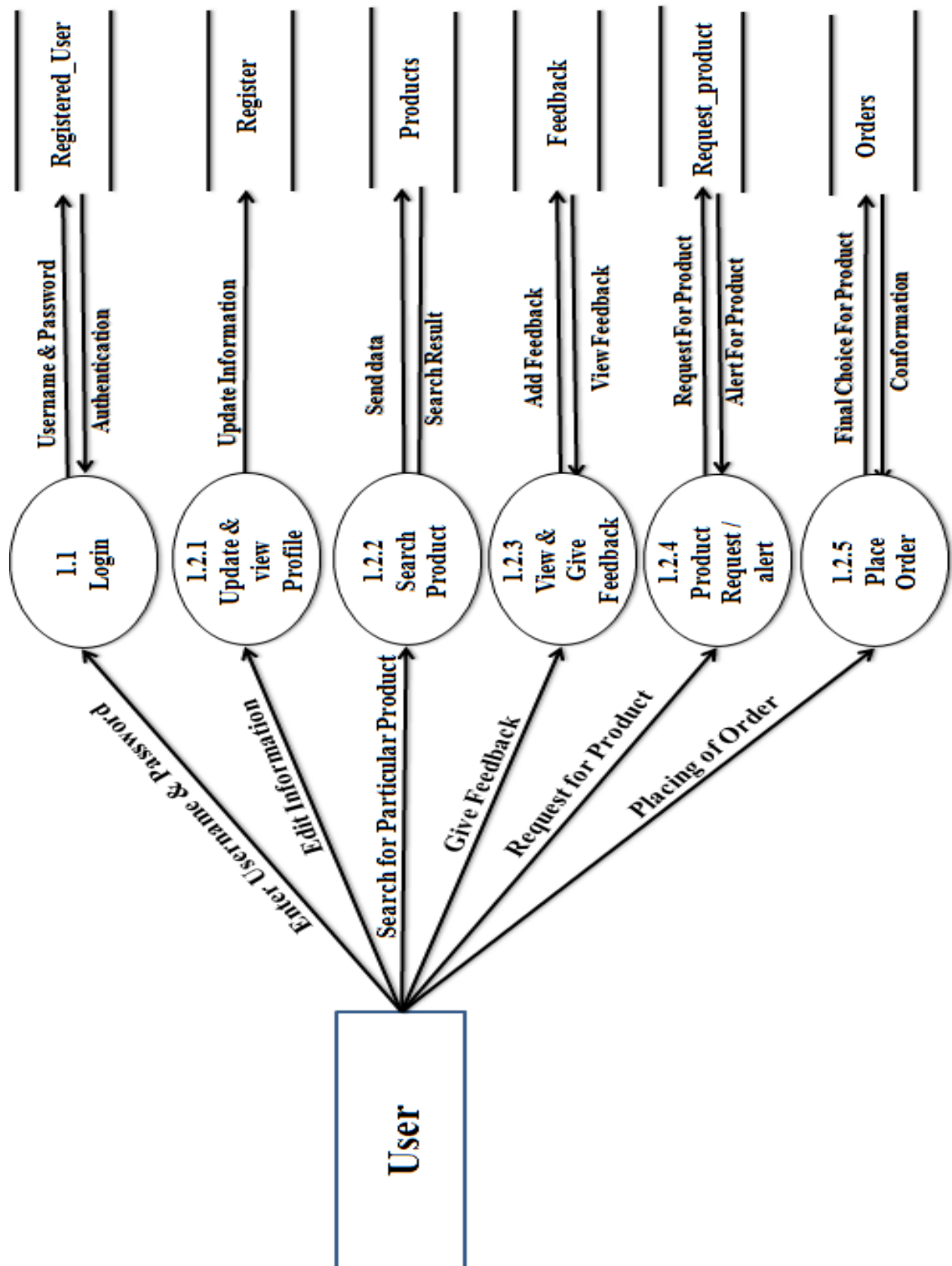


Figure 3.3 DFD User (level 1)

### Data Flow Diagram For Visitor

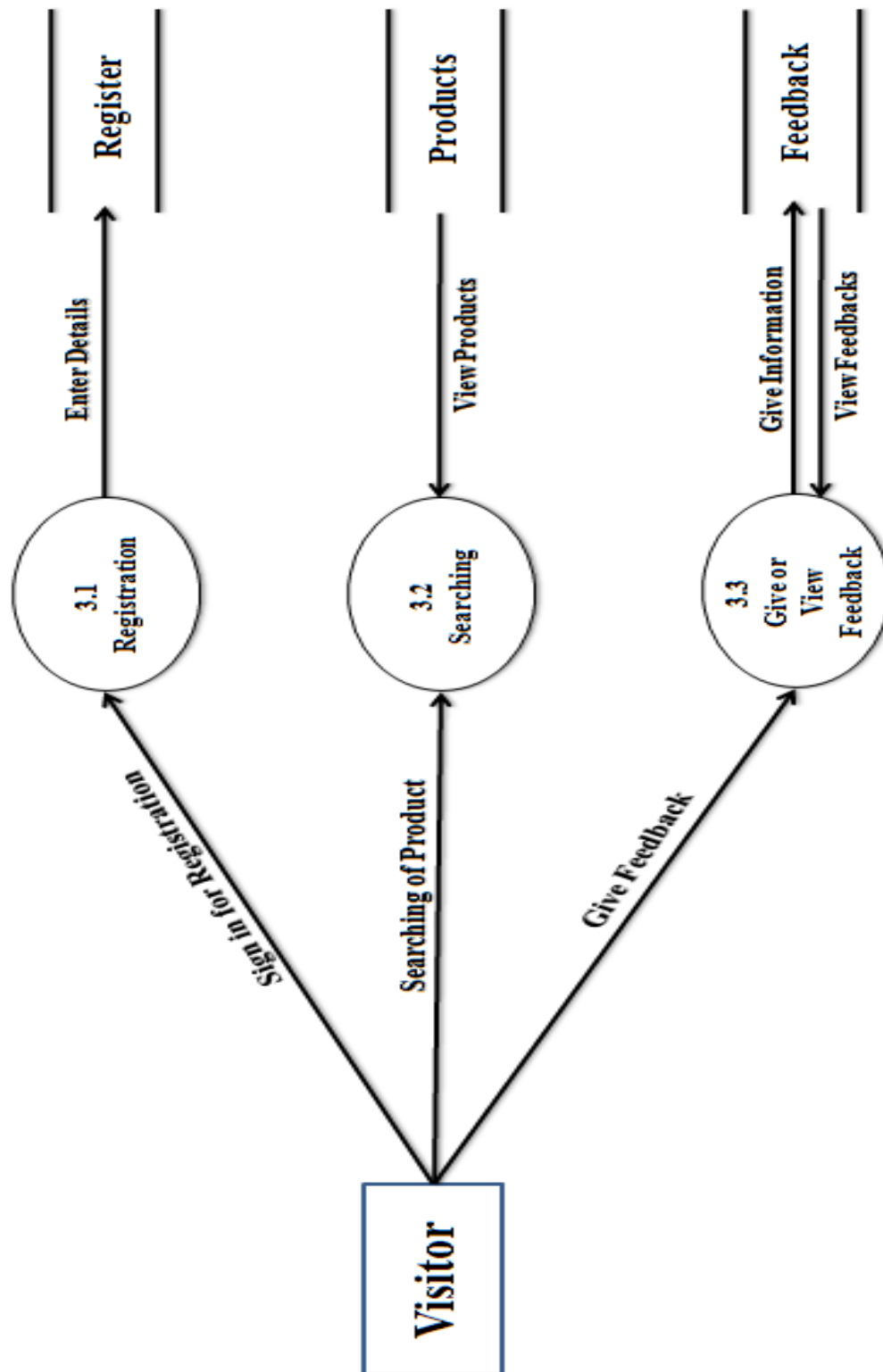


Figure 3.4 DFD Visitor (level 1)

### Data Flow Diagram For Admin (Level 2)



Figure 3.5 L-2 Admin-Login

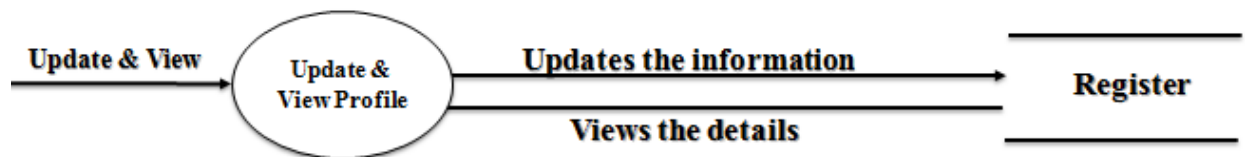


Figure 3.6 L-2 Admin-Update Profile

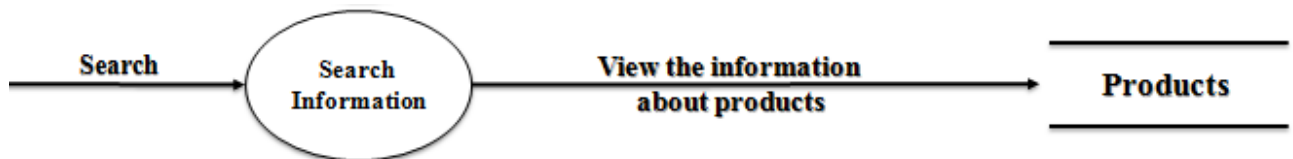


Figure 3.7 L-2 Admin-Search Information

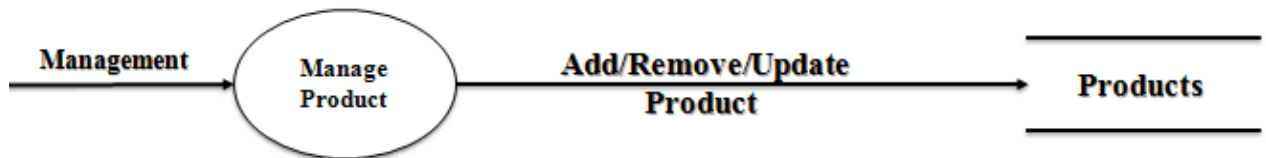


Figure 3.8 L-2 Manage Product

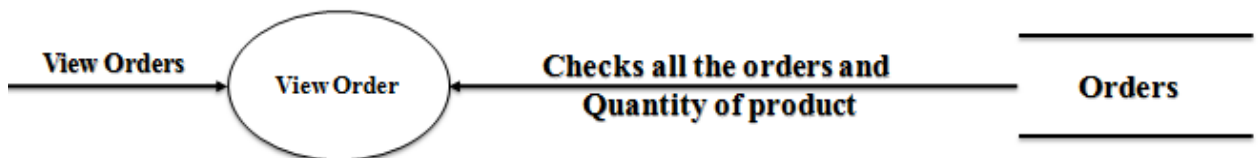


Figure 3.9 L-2 Admin-View Order



Figure 3.10 L-2 Admin-View Feedback

## Data Flow Diagram For User (Level 2)



Figure 3.11 L-2 User-Login

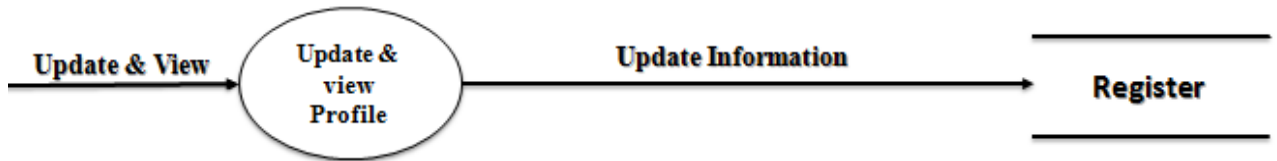


Figure 3.12 L-2 User-Update & View Profile



Figure 3.13 L-2 User-Search Product

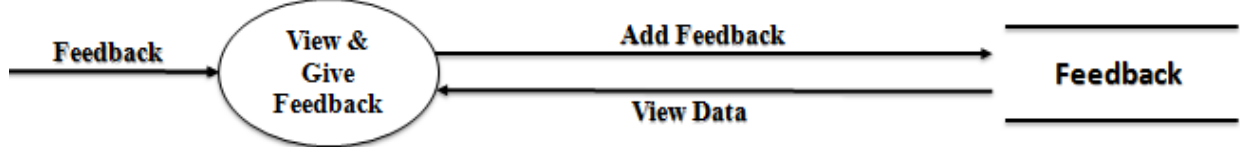


Figure 3.14 L-2 View & Give Feedback

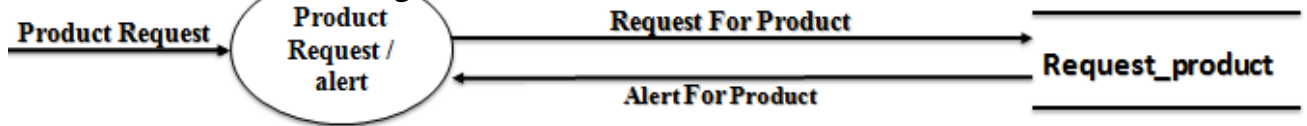


Figure 3.15 L-2 User-Product Request

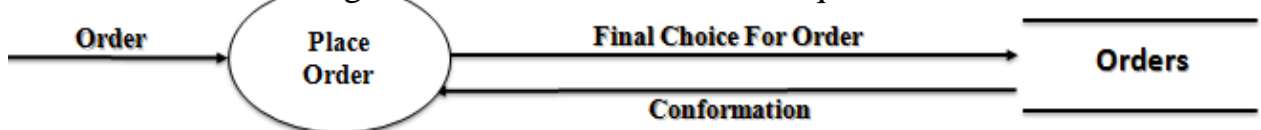


Figure 3.16 L-2 User-Place Order



### Data Flow Diagram For Visitor (level 2)



Figure 3.17 L-2 Visitor-Registration



Figure 3.18 L-2 Visitor-Searching

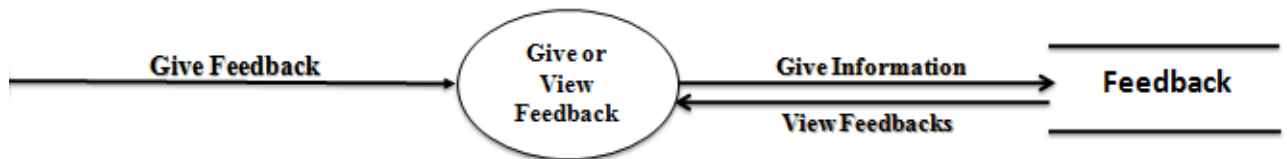

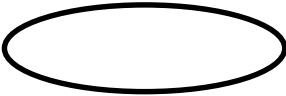
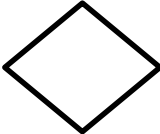






Figure 3.19 L-2 Visitor-Give or View Feedback

### 3.3 E-R Diagram

#### 3.3.1 Notation :-

<b><i>SYMBOLS</i></b>	<b><i>DESCRIPTION</i></b>
	DATA OBJECT
	ATTRIBUTES
	RELATIONSHIP
	LINKS ATTRIBUTES AND ENTITY SET
1  1	ONE-TO-ONE MAPPING CARDINALITY
1  M	ONE-TO-MANY MAPPING CARDINALITY
M  M	MANY-TO-MANY MAPPING CARDINALITY

#### 3.2.1 ENTITIES

Entities are objects or concepts that represent important data. They are typically nouns, e.g. customer, supervisor, location, or promotion.

Strong entities exist independently from other entity types. They always possess one or more attributes that uniquely distinguish each occurrence of the entity.

Weak entities depend on some other entity type. They don't possess unique attributes (also known as a primary key) and have no meaning in the diagram without depending on another entity. This other entity is known as the owner.

Associative entities are entities that associate the instances of one or more entity types. They also contain attributes that are unique to the relationship between those entity instances.

### **3.2.2 RELATIONSHIPS**

Relationships are meaningful associations between or among entities. They are usually verbs, e.g. assign, associate, or track. A relationship provides useful information that could not be discerned with just the entity types.

Weak relationships, or identifying relationships, are connections that exist between a weak entity type and its owner.

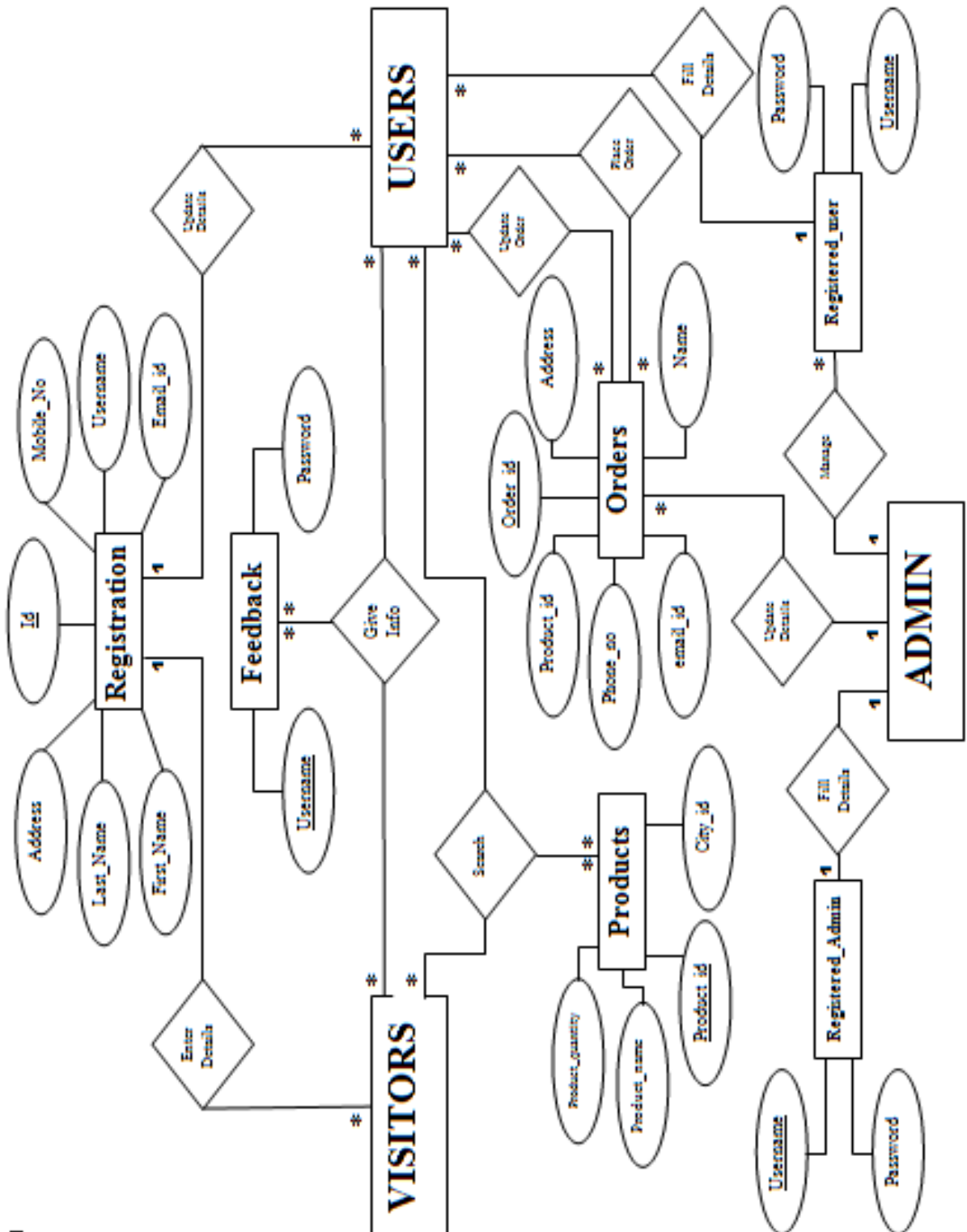
### **3.3.3 ATTRIBUTES**

Attributes are characteristics of either an entity, a many-to-many relationship, or a one-to-one relationship.

Multivalued attributes are those that are capable of taking on more than one value.

Derived attributes are attributes whose value can be calculated from related attribute values.

### 3.3.4 DIAGRAM



**4.1 Database Design****1) Table Name :- city**

Primary Key :- city\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
city_id	int (11)	Primary Key	Unique Id Of City
city_name	varchar (30)	Not Null	Name Of City
state_id	int (11)	Foreign Key	Uniquely Identifying State

**2) Table Name :- feedback**

Primary Key :- feedback\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
feedback_id	int (11)	Primary Key	Identity Of User
feedback	varchar (500)	Not Null	Review
user_id	int (11)	Foreign Key	Uniquely Identifying User
username	varchar (30)	Foreign Key	Uniquely Identifying Username

### **3) Table Name :- orders**

Primary Key :- order\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTAINS</b>	<b>DESCRIPTION</b>
order_id	int (11)	Primary Key	Unique Id Of Order
product_id	int (11)	Foreign Key	Uniquely Identifying Product
user_id	int (11)	Foreign Key	Uniquely Identifying User
product_quantity	int (11)	Not Null	Quantity Of Products
name	varchar (30)	Not Null	Name Of Person
address	varchar (80)	Not Null	Delivery Address
state_id	int (11)	Foreign Key	Uniquely Identifying State
city_id	int (11)	Foreign Key	Uniquely Identifying City
pin	int (6)	Not Null	Pin code Of Area
mobile_no	bigint (12)	Not Null	Mobile Number Of Person
e_mail	varchar (40)	Not Null	E-mail Address Of Person
deliverytype_id	int (11)	Foreign Key	When Or How To Delivery
order_time	datetime	Not Null	Date & Time Of Order

### **4) Table Name :- state**

Primary Key :- state\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
state_id	int (11)	Primary Key	Unique Id Of State
state_name	varchar(30)	Not Null	Name Of State

**5) Table Name :- product\_image**

Primary Key :- productimage\_id

FIELD	DATATYPE	CONSTARINS	DESCRIPTION
productimage_id	int (11)	Primary Key	Unique Id Of Product Image
product_id	int (11)	Foreign Key	Uniquely Identifying Product
image_url	varchar(50)	Not Null	URL of image

**6) Table Name :- products**

Primary Key :- product\_id

FIELD	DATATYPE	CONSTARINS	DESCRIPTION
product_id	int (11)	Primary Key	Unique Id Of Product
product_name	varchar (30)	Not Null	Name Of Product
product_price	decimal (11,2)	Not Null	Price Of Product
city_id	int (11)	Foreign Key	Uniquely Identifying City
product_quantity	int (11)	Not Null	Quantity Of Product
weight	int (11)	Not Null	Weight Of Product

### **7) Table Name :- register**

Primary Key :- user\_id

<b>Field</b>	<b>Datatype</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
user_id	int (11)	Primary ID	Unique Id Of User
first_name	varchar(30)	Not Null	First Name of user
last_name	varchar(30)	Not Null	Last Name Of user
address	varchar(255)	Not Null	User's Address
pin	int (8)	Not Null	Pin Code Of Area
country_name	varchar (6)	Not Null	Country Of User
state_id	int (11)	Foreign Key	Uniquely Identifying State
mobile_no	bigint (12)	Not Null	Contact Detail of User
birth_date	date	Not Null	Users Date Of Birth
e_mail	varchar(40)	Not Null	E-mail ID of user
gender	enum('Male','Female')	Not Null	Gender Of User
username	varchar(30)	Not Null	Unique Name Of User
password	blob	Not Null	Password For Login
role_id	int (1)	Foreign Key	Identify User Or Admin
fav_food	varchar (25)	Not Null	Favorite Food Of User
fav_sports	varchar (25)	Not Null	Favorite Sports Of User



**8) Table Name :- invoice**

Primary Key :- invoice\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
invoice_id	int (11)	Primary Key	Unique Id Of Invoice
user_id	int (11)	Foreign Key	Uniquely Identifying User
order_id	int (11)	Foreign Key	Uniquely Identifying Order
product_id	int (11)	Foreign Key	Uniquely Identifying Product
time	datetime	Not Null	Time Of Invoice Generated
amount	decimal (11,2)	Not Null	Total Amount To Be Paid
address	varchar (255)	Not Null	Address Of User
mobile_no	bigint (12)	Not Null	Contact Details Of User
deliverytype_id	int (11)	Foreign Key	When Or How To Deliver

**9) Table Name :- delivery type**

Primary Key :- deliverytype\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
deliverytype_id	int (11)	Primary Key	Unique Id Of Deliver
type	varchar (20)	Not Null	Delivery Type
amount	float(5,2)	Not Null	Amount Of Delivery

**10) Table Name :- feedback\_product**

Primary Key :- feedback\_product\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
feedback_product_id	int (11)	Primary Key	Unique Id Of Products Feedback
product_id	int (11)	Foreign Key	Uniquely Identifying Product
product_name	varchar (30)	Foreign Key	Uniquely Identifying Product Name
user_id	int (11)	Foreign Key	Uniquely Identifying User
description	varchar (500)	Not Null	Feedback / Description About Product
date	date/time	Not Null	Date & Time Of Give Feedback

**11) Table Name :- inquiry**

Primary Key :- inquiry\_id

<b>FIELD</b>	<b>DATATYPE</b>	<b>CONSTARINS</b>	<b>DESCRIPTION</b>
inquiry_id	int (11)	Primary Key	Unique Id Of Inquiry
name	varchar (30)	Not Null	Name Of User
email	varchar (50)	Not Null	E-mail Id Of User
Phone	int (12)	Not Null	Contact Details Of User
address	varchar (50)	Not Null	Address Of User
message	varchar (50)	Not Null	Inquiry Description

**12) Table Name :- role\_master**

Primary Key :- role\_id

FIELD	DATATYPE	CONSTARINS	DESCRIPTION
role_id	int (11)	Primary Key	Unique Id Of Role
rolename	varchar (30)	Not Null	Name Of Role (User/Admin)

**13) Table Name :- user**

Primary Key :- id

FIELD	DATATYPE	CONSTARINS	DESCRIPTION
id	int (11)	Primary Key	Unique Id Of User Login
username	varchar (30)	Foreign Key	Uniquely Identifying Name
password	blob	Not Null	Authentication
rolename	varchar(30)	Foreign Key	User / Admin Login Role

## Chapter – 5

### TECHNICAL SPECIFICATION

#### 5.1 Hardware Specification

- Operating System (Windows XP/7/8/8.1/Linux/mac)
- Ram: 256MB & above
- Processor: Pentium 4

#### 5.2 Additional Hardware Specification

- Printer ( to generate bills )

#### 5.3 Platform

- Java

#### 5.4 Programming Language Used

- JSP & SERVLET
- Java script

#### 5.5 Software Tools Used

- IDE (Integrated Development Environment) : ECLIPSE LUNA (4.4.0)
- Back End: SQLYOG (v10.00 Beta)

## 5.6 Screenshot's

### 1. Home Page

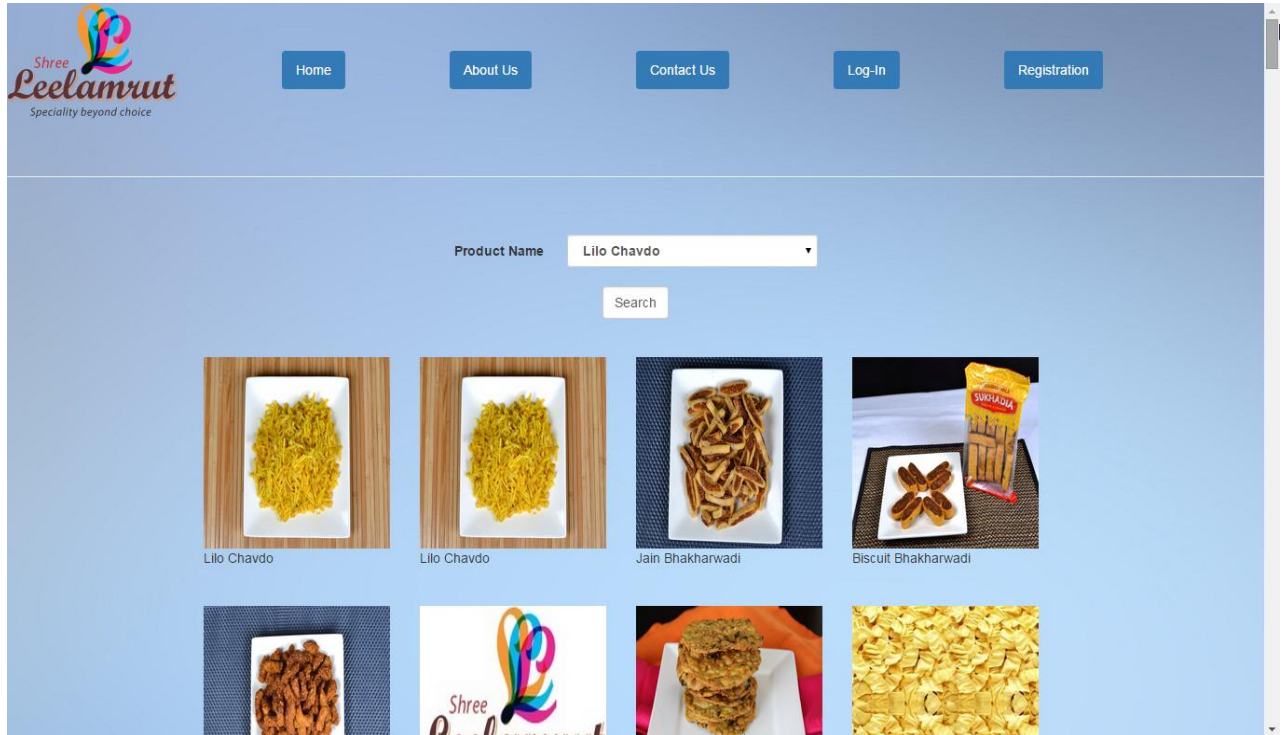
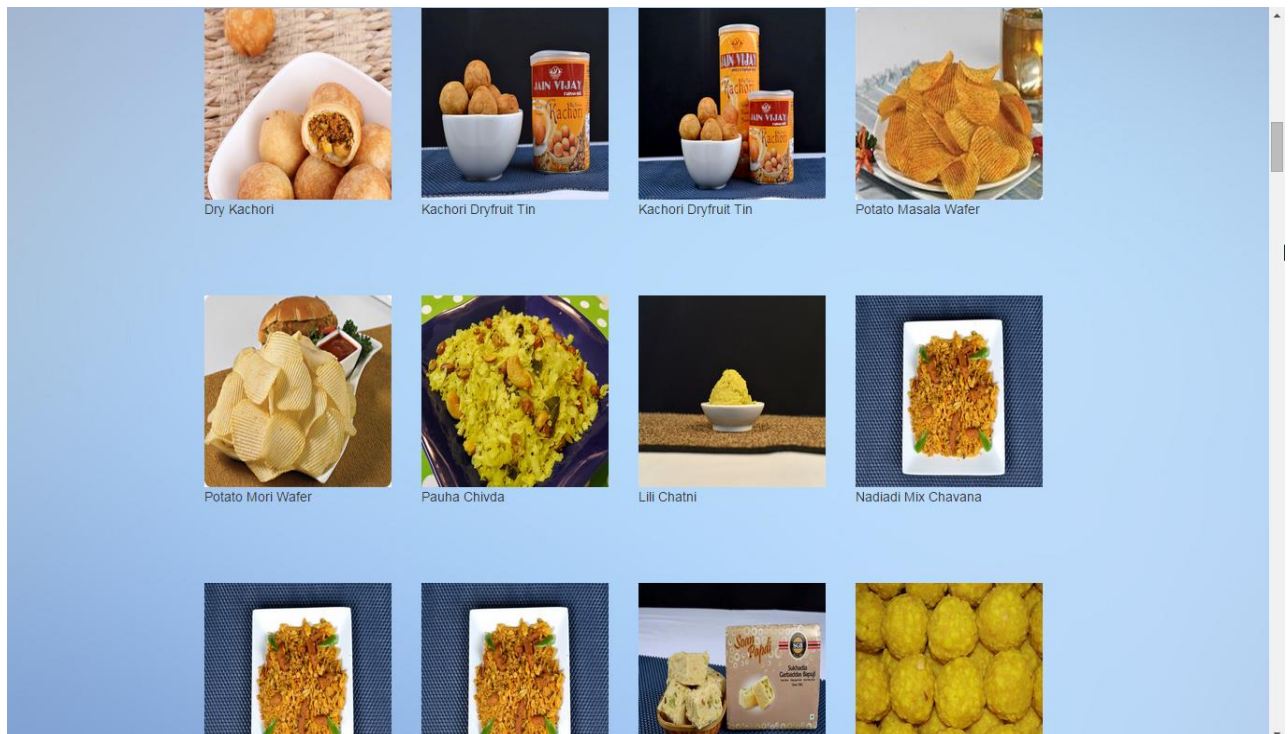


Figure 5.1 – Home Page



## 2. About Us

**Shree Leelamrut**  
Speciality beyond choice

[HOME](#) [ABOUT US](#) [CONTACT US](#) [LOG-IN](#) [REGISTRATION](#)

All die-hard food lovers, are you tired of waiting for your relatives and friends to bring that well-known food item of their city to you? Well then, those times have lived out their fame. Leelamrut, an initiative by Narayankrupa Universal, a well-established group of companies engaged in multifaceted business verticals; now offers you all those sweet, spicy, delicious and mouthwatering food items from around all the cities at one junction. We offer you specialty beyond choice by bringing the choicest food items of each city of Gujarat on one menu. Want famous Chatni of Rajkot, come to Leelamrut, want tasteful Nankhatai of Vapi, come to Leelamrut, in short everything from everywhere at one destination for you

The inspiration behind the birth of Leelamrut is in lacking penetration of local-food-culture. You could find Italian Pizza or French Fries or Chinese Noodles even in distant corners of the city. But what about those dishes that have been at the heart of Gujarat and Gujaratis? There are hardly any stops where you could find them all piled together. This is the very sentiment that led us to establish Leelamrut.


Each variety of food is required to be tended with different approach and technique to keep them fresh and tasteful. Dealing particularly in specialty food, at Leelamrut we take extreme measures for cleanliness and safety of food. From storage to packaging each element has been customized and specially taken care of.


About us


Thu May 14 19:27:26 IST 2015

Figure 5.2 – About Us

### 3. Contact Us

[HOME](#)[ABOUT US](#)[CONTACT US](#)[LOG-IN](#)[REGISTRATION](#)





**Contact Us**


Shop No.9, Balaji Avenue,  
Opp. Sunrise Mall,  
Nr. Mansi Circle, Vastrapur,  
Ahmedabad-15, Gujarat.


**Feel Free For Inquiry**


Name	<input type="text"/>
Email	<input type="text"/>
Phone	<input type="text"/>
Address	<input type="text"/>
Message	<input type="text"/>

Thu May 14 19:27:45 IST 2015

Figure 5.3 – Contact Us

[HOME](#)[ABOUT US](#)[CONTACT US](#)Hi jainish0124[REGISTRATION](#)[Logout](#)





**Contact Us**

Shop No.9, Balaji Avenue,  
Opp. Sunrise Mall,  
Nr. Mansi Circle, Vastrapur,  
Ahmedabad-15, Gujarat.

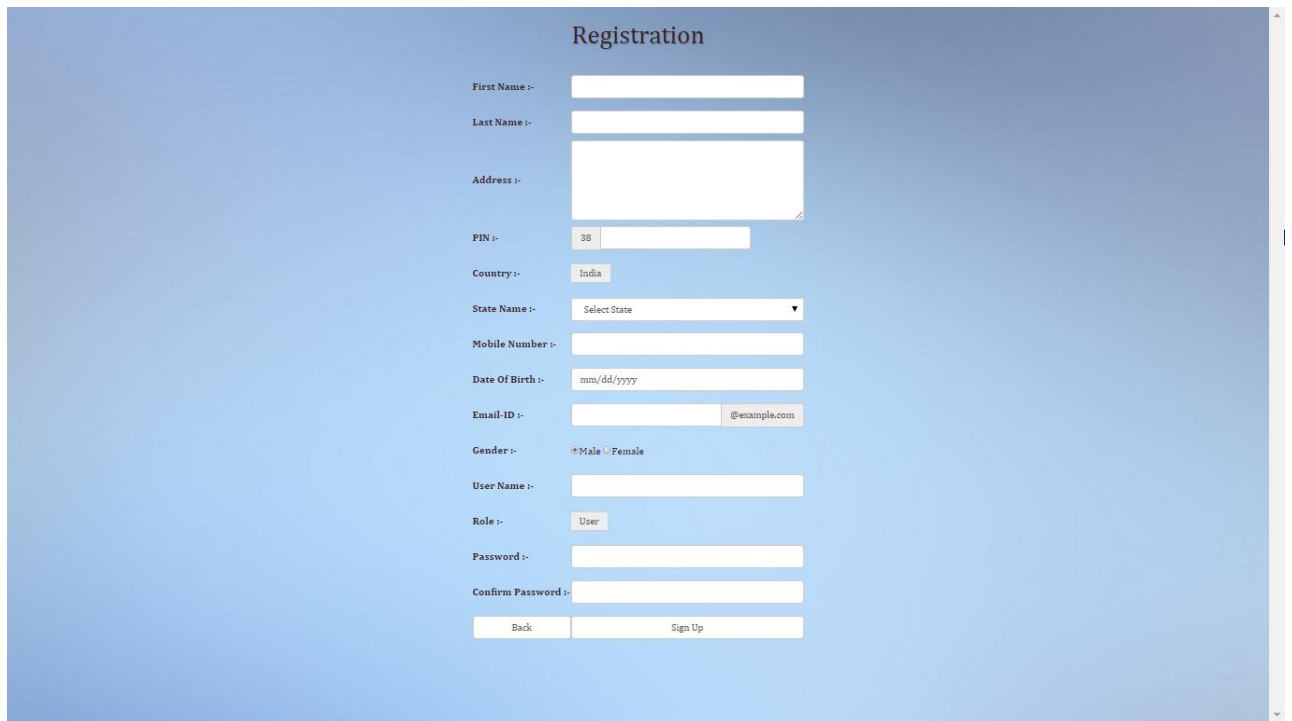
**Feel Free For Inquiry**

Name	jainsh
Email	jainishshah0124@gmail.com
Phone	1929192182
Address	7,shiasjdijas
Message	adasdasdasda

Thu May 14 19:38:17 IST 2015



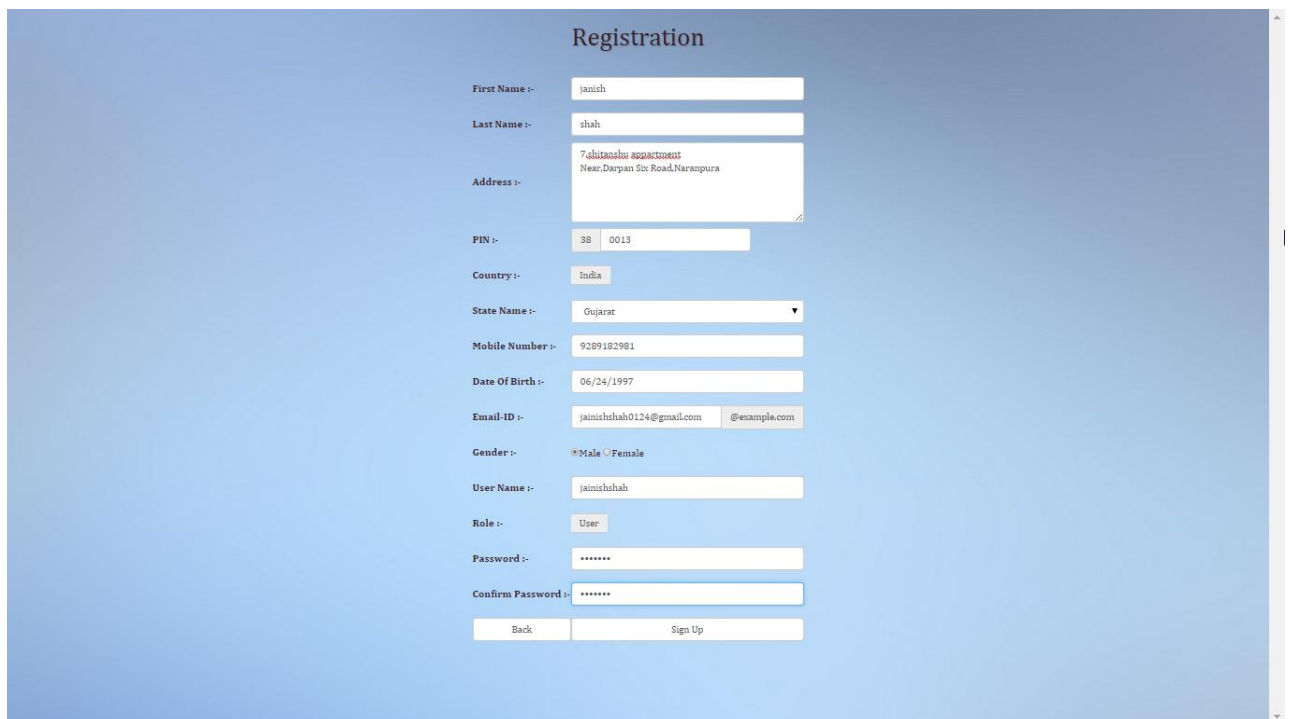
## 4. Registration



A screenshot of a web registration form titled "Registration". The form is set against a light blue gradient background. It contains the following fields and controls:

- First Name :-** A text input field.
- Last Name :-** A text input field.
- Address :-** A large text area for the address.
- PIN :-** A text input field with a small box containing "38".
- Country :-** A dropdown menu with "India" selected.
- State Name :-** A dropdown menu with "Select State" as the placeholder.
- Mobile Number :-** A text input field.
- Date Of Birth :-** A text input field with the placeholder "mm/dd/yyyy".
- Email-ID :-** A text input field with a placeholder "@example.com".
- Gender :-** Radio buttons for "Male" (selected) and "Female".
- User Name :-** A text input field.
- Role :-** A dropdown menu with "User" selected.
- Password :-** A text input field.
- Confirm Password :-** A text input field.
- Buttons:** "Back" and "Sign Up" buttons at the bottom.

Figure 5.4 – Registration



A screenshot of the same registration form, but with sample data entered into the fields:

- First Name :-** jinish
- Last Name :-** shah
- Address :-** 7 chitanshu apartment  
Near Darpan Six Road, Narasapura
- PIN :-** 38 0013
- Country :-** India
- State Name :-** Gujarat
- Mobile Number :-** 9289182981
- Date Of Birth :-** 06/24/1997
- Email-ID :-** jainishshah0124@gmail.com @example.com
- Gender :-** Male (selected)
- User Name :-** jainishshah
- Role :-** User
- Password :-** \*\*\*\*\*
- Confirm Password :-** \*\*\*\*\*
- Buttons:** "Back" and "Sign Up" buttons at the bottom.



## 5. Product

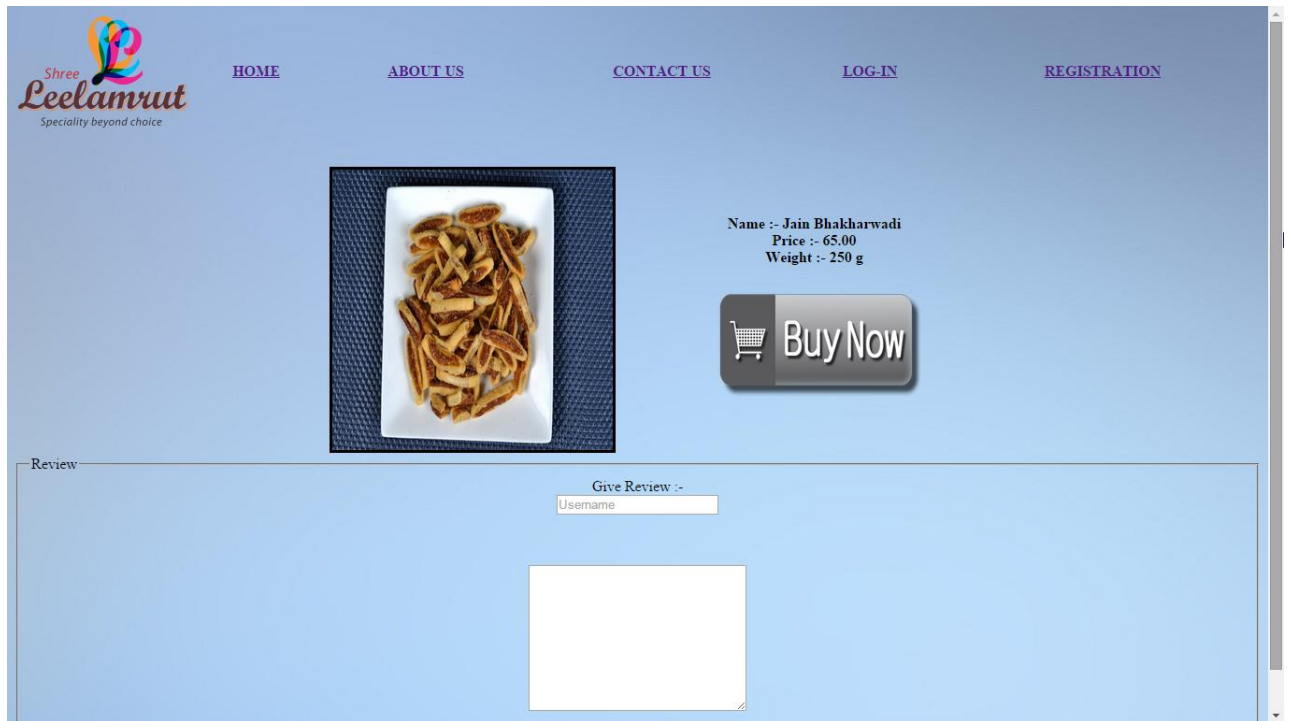
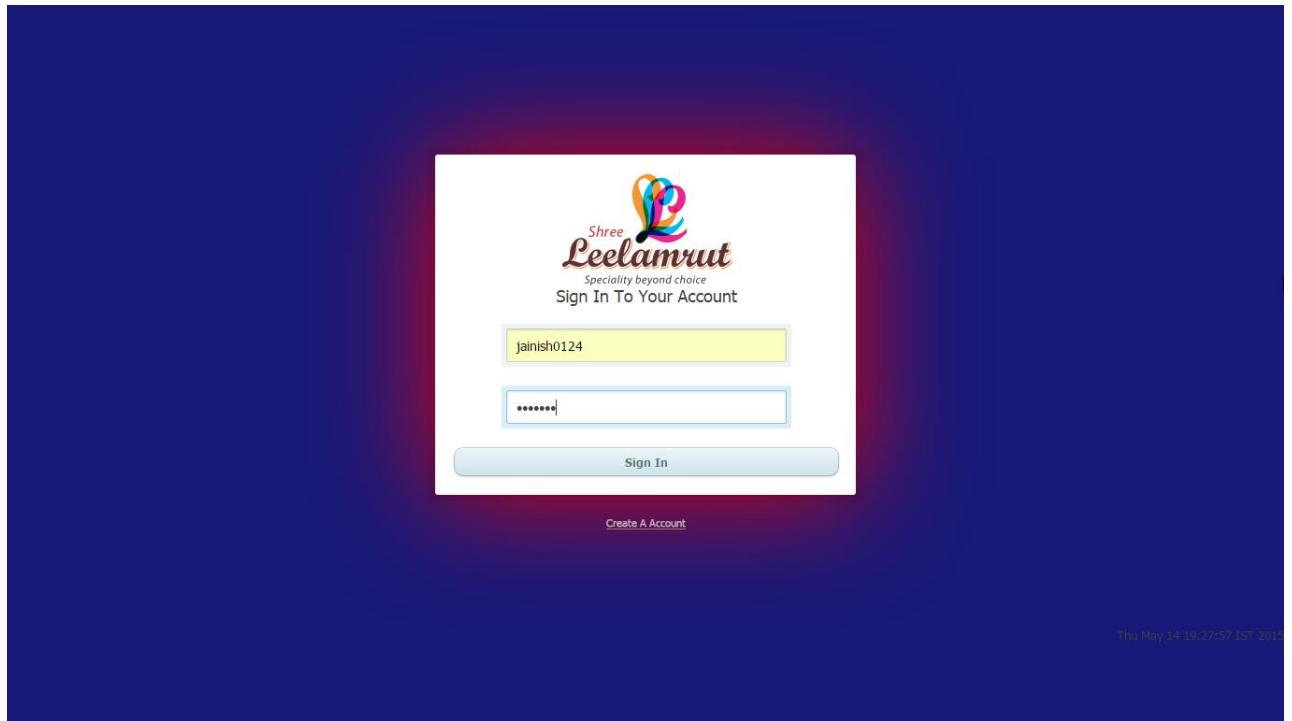


Figure 5.5 – Product

## 6. Sign Up



The screenshot shows a web application interface for signing in. The background is a solid dark blue. In the center, there is a white rectangular box containing the login form. At the top of this box is the logo for 'Shree Leelamrut', which features a colorful, stylized 'L' and 'R' intertwined. Below the logo, the text 'Shree Leelamrut' is written in a serif font, followed by the tagline 'Speciality beyond choice' in a smaller font. Below this, the text 'Sign In To Your Account' is displayed. The form consists of two input fields: the first is a yellow box containing the text 'jainish0124', and the second is a white box with a blue border containing several dots, representing a password. Below these fields is a light blue button with the text 'Sign In'. At the bottom of the white box, there is a link that says 'Create A Account' in a small, red font. In the bottom right corner of the dark blue background, there is a timestamp: 'Thu May 14 19:27:57 IST 2015'.

Figure 5.6 – Sign Up

## 7. Admin Panel

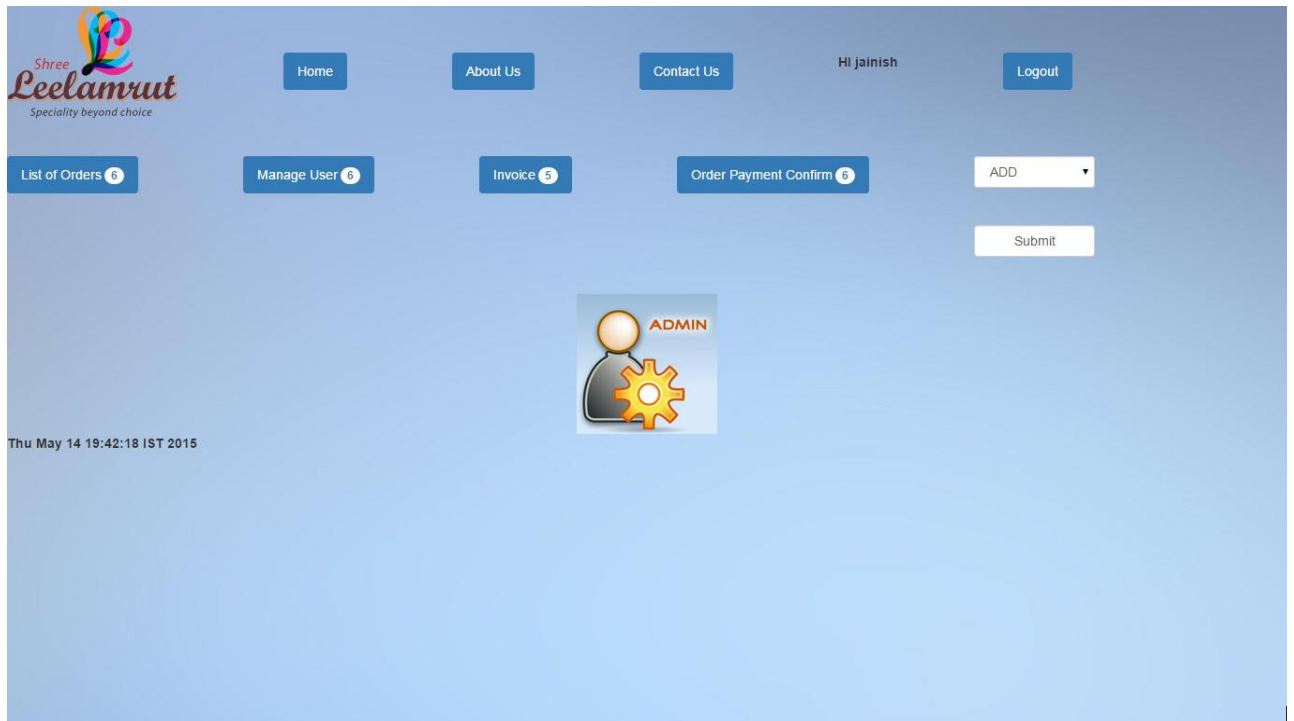


Figure 5.7 – Admin Panel

## 8. Add State

**ADD STATE**

StateName :- GUJ

State ID	State Name	Edit
1	Gujarat	
2	Rajasthan	
3	Maharashtra	
4	Uttar Pradesh	
5	Jammu And Kashmir	
6	Karnataka	
7	Andhra Pradesh	
8	Odisha	
9	Chhattisgarh	
10	Tamil Nadu	
11	Telangana	
12	Bihar	
13	West Bengal	
14	Arunachal Pradesh	
15	Jharkhand	
16	Assam	
17	Himachal Pradesh	
18	Uttarakhand	
19	Punjab	
20	Harvana	

Figure 5.8 – Add State

## 9. Add City

**Shree Leelamrut**  
Speciality beyond choice

Home About Us Contact Us Hi jainish Logout

### ADD CITY


City Name

State

City ID	City Name	State Name	Edit
1	Ahmedabad	Gujarat	
2	Surat	Gujarat	
3	Mumbai	Maharashtra	
4	Udaipur	Uttar Pradesh	
5	Mehsana	Gujarat	
10	Vadodara	Gujarat	
11	Jamnagar	Gujarat	
12	Rajkot	Gujarat	
13	Nadiad	Gujarat	
14	Anand	Gujarat	
15	Bhavnagar	Gujarat	
16	Porbandar	Gujarat	
17	Surendranagar	Gujarat	
18	Vapi	Gujarat	
19	Mandvi	Gujarat	
20	Dakor	Gujarat	
21	Talod	Gujarat	
22	Bardoli	Gujarat	
23	Utter Sanda	Gujarat	

Figure 5.9 – Add City

## 10. Add Product



[Home](#)[About Us](#)[Contact Us](#)Hi jainish[Logout](#)

### Add Product

**Product Name**  
**Product Price**  
**City Speciality**  
**Product Quantity**  
**Weight**

Product ID	Product Name	Product Price	City Name	Product Quantity	Weight	Update
1	Lilo Chavdo	55.00	10	120	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
2	Lilo Chavdo	100.00	10	100	400 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
3	Jain Bhakharwadi	65.00	10	100	250 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
4	Biscuit Bhakharwadi	65.00	10	100	250 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
5	Phoolvadi	65.00	10	100	250 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
6	Mathia Sev	60.00	10	100	250 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
7	Methi Puri	60.00	10	100	250 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
8	Masala Papdi	50.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
9	Fudina Sev	40.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
10	Roasted Bhakharwadi	55.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
11	Roasted Wheat Methi Puri	55.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
13	Roasted Kothmir Mirch Puri	55.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>
14	Roasted Baira Methi Puri	55.00	10	100	200 g	<input type="button" value="EDIT"/> <input type="button" value="X"/>

Figure 5.10 – Add Product

## 11. Edit Product Details

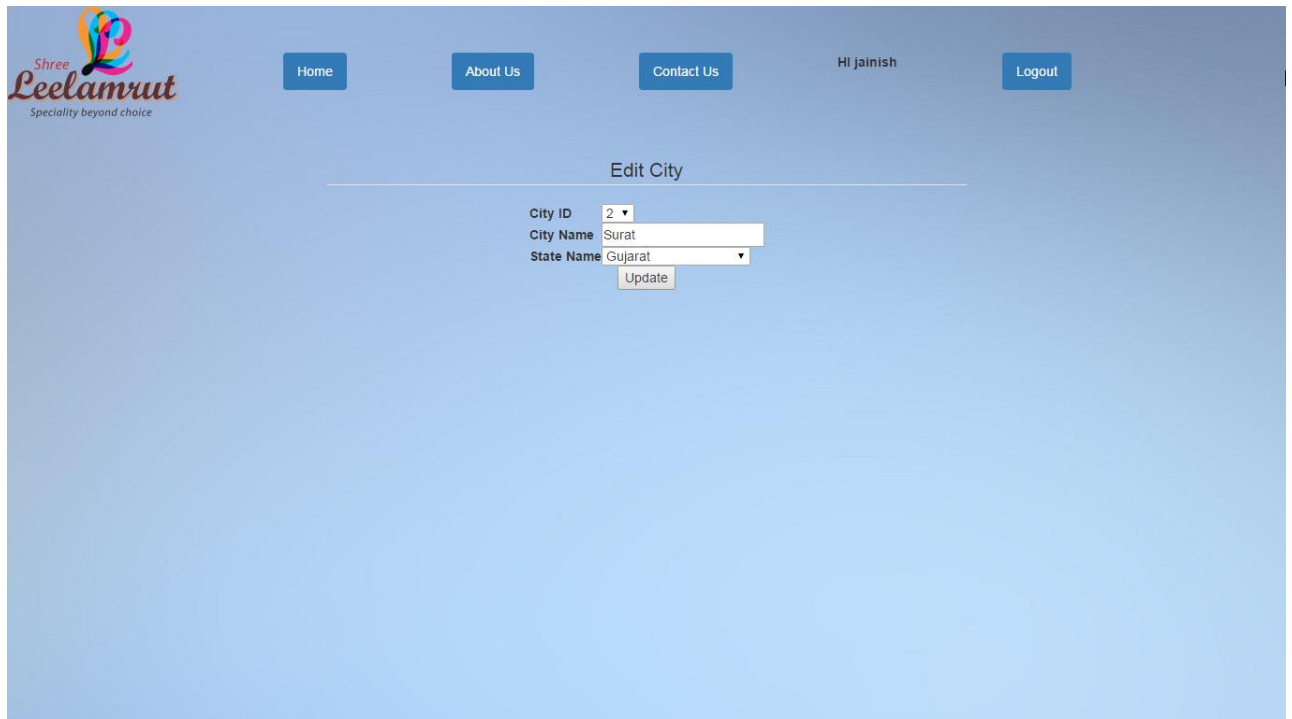
The screenshot shows a web application interface for editing product details. At the top left is the logo for 'Shree Leelamrut' with the tagline 'Speciality beyond choice'. The top navigation bar contains buttons for 'Home', 'About Us', 'Contact Us', and 'Logout', along with the text 'Hi jainish'. The main content area is titled 'Edit Details' and contains a form with the following fields:

Product ID	1
Product Name	Lilo Chavdo
Product Price	55.00
City Speciality	Vadodara
Product Quantity	120
Weight	200

Below the form is an 'Update' button.

Figure 5.11 – Edit Product Details

## 12. Edit City



The screenshot shows a web application interface for editing city information. At the top left is the logo for "Shree Leelamrut" with the tagline "Speciality beyond choice". The top navigation bar contains five buttons: "Home", "About Us", "Contact Us", "Hi jainish", and "Logout". The main content area is titled "Edit City" and contains a form with the following fields:

- City ID:** A dropdown menu currently showing the value "2".
- City Name:** A text input field containing the text "Surat".
- State Name:** A dropdown menu currently showing the value "Gujarat".
- Update:** A button located below the State Name dropdown.

Figure 5.12 – Edit City



### 13. Edit State

Shree Leelamrut  
Speciality beyond choice

Home About Us Contact Us Hi jainish Logout

State ID 1 ▼  
State Name Gujarat  
Update







Figure 5.13 – Edit State

## 14. Manage User



[Home](#)
[About Us](#)
[Contact Us](#)

Hi Jainish
[Logout](#)

User ID	First Name	Last Name	Address	Country Name	State Name	Mobile No	Birthdate	Email	Gender	Username	Role Name	Delete
14	Jainish	Shah	7,shitanshu appartment Near,Darpan Six Road,Naranpura	India	Gujarat	91829182	2015-01-20	jainishshah0124@gmail.com	Male	jainish0124	User	
15	Jainish	Shah	Naranpura	India	Gujarat	89281	1997-06-24	jaisin@gmail.com	Male	jainish	User	
18	Jainish	Shah	7,shitanshu appartment Near,Darpan Six Road,Naranpura380013	India	Gujarat	9129129182	1111-01-01	jainishsh24@gmail.com	Male	jainish14	User	
19	john	cena	jaymagal society, naranpura, ahmedabad380013	India	Gujarat	9825098250	1997-04-18	jcena@gmail.com	Male	cena007	User	
20	Alice	Solanki	tower380013	India	Gujarat	1201921021	1211-01-01	alice@gmail.com	Male	alicesolanki	User	
21	abhay	jadav	hell	India	Gujarat	1291201929	1111-12-01	adhbay@gmail.com	Male	abhay	User	

Thu May 14 19:44:00 IST 2015

Figure 5.14 – Manage User

## 15. Order

**Shree Leelamrut**  
Speciality beyond choice

[Home](#) [About Us](#) [Contact Us](#) HI jainish0124 [Logout](#)

### Order

**Product Name** Lilo Chavdo

**Product Quantity** 1 ▾

**Name** Jainish  
shitanshu appts 380013 ▾  
Vasupujya 380013 ▾

**Address** Vasupujya 380013

**State Name** Gujarat ▾

**City Name** Ahmedabad ▾

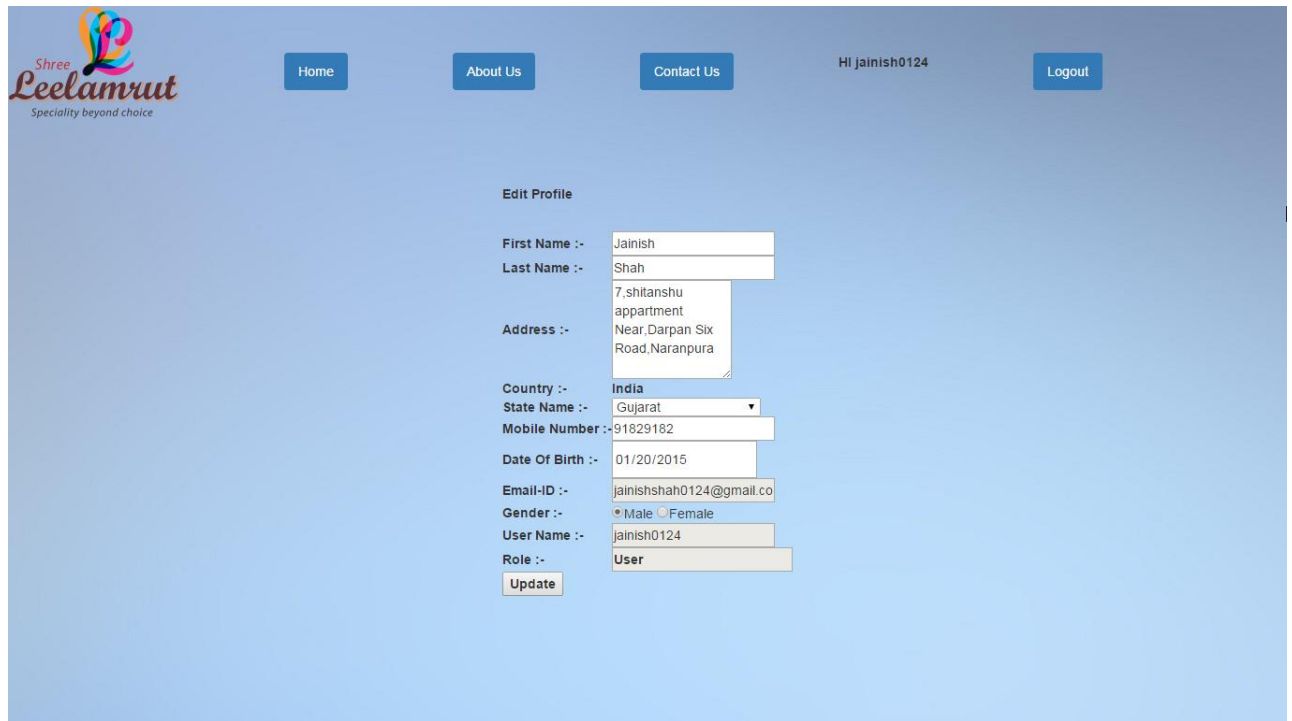
**Mobile No** 1928129182

**Email ID** jainishshah0124@gmail.co

**Delivery Type** In A Day Delivery ▾

Figure 5.15 – Order

## 16. Edit Profile



**Shree Leelamrut**  
Speciality beyond choice

[Home](#) [About Us](#) [Contact Us](#) HI jainish0124 [Logout](#)

### Edit Profile

First Name :- Jainish

Last Name :- Shah

Address :- 7,shitanshu appartment  
Near,Darpan Six Road,Naranpura

Country :- India

State Name :- Gujarat

Mobile Number :- 91829182

Date Of Birth :- 01/20/2015

Email-ID :- jainishshah0124@gmail.co

Gender :- ☒ Male ☐ Female

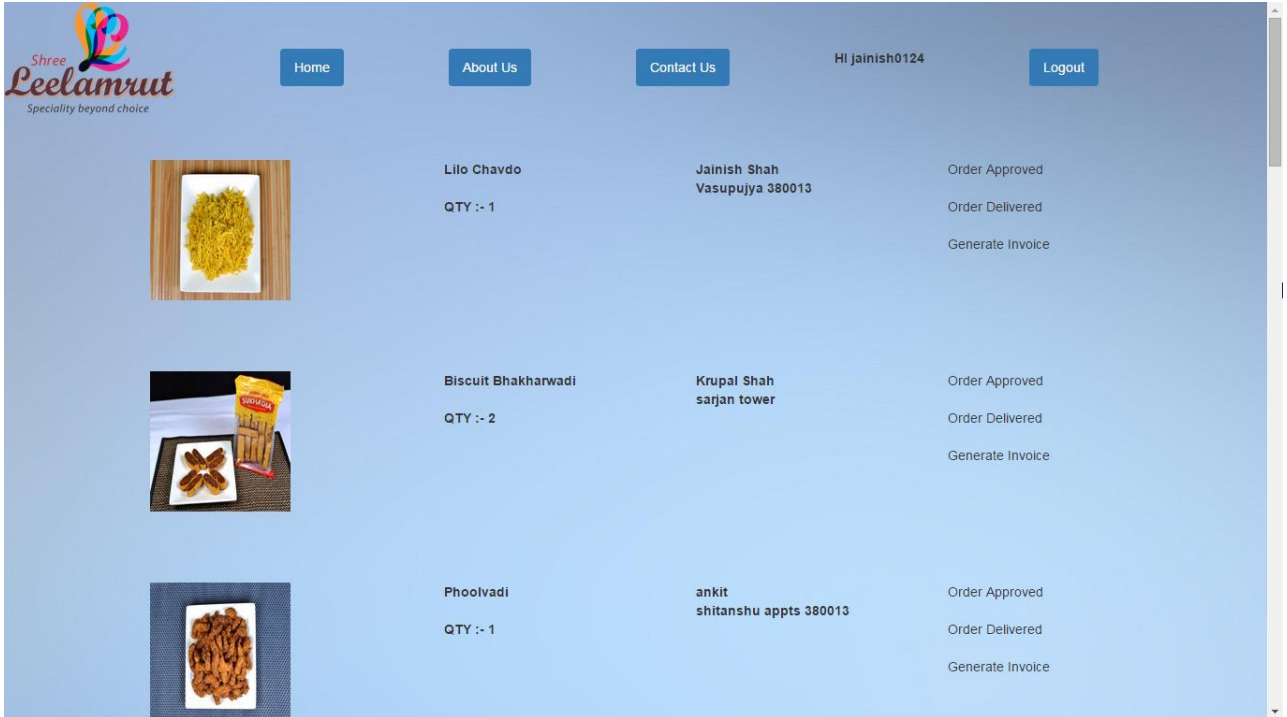
User Name :- jainish0124

Role :- User

[Update](#)

Figure 5.16 – Edit Profile

## 17. My Order



The screenshot displays the 'My Order' section of the Shree Leelamrut website. The header includes the logo, navigation links (Home, About Us, Contact Us), and user information (HI jainish0124, Logout). The main content area lists three orders:

Order Item	Quantity	Customer Name	Address	Status
Lilo Chavdo	QTY :- 1	Jainish Shah	Vasupujya 380013	Order Approved Order Delivered Generate Invoice
Biscuit Bhakharwadi	QTY :- 2	Krupal Shah	sarjan tower	Order Approved Order Delivered Generate Invoice
Phoolvadi	QTY :- 1	ankit	shitanshu appts 380013	Order Approved Order Delivered Generate Invoice

Figure 5.17 – My Order

## 18. Order Approval

<div>  <a href="#">Home</a> <a href="#">About Us</a> <a href="#">Contact Us</a> <span>Hi jainish</span> <a href="#">Logout</a> </div>												
Order ID	User Name	Product Name	Product Quantity	Name	Address	State Name	City Name	Mobile No	Email ID	Delivery Type	Order Time	Order Approved
21	jainish0124	Jain Bhakharwadi	1	Jainish Shah	Vasupujya 380013	Gujarat	Ahmedabad	1828121281	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:19:02.0	✓
22	jainish0124	Lilo Chavdo	1	Jainish Shah	Vasupujya 380013	Gujarat	Ahmedabad	8281821281	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:22:26.0	✓
23	jainish0124	Phoolvadi	1	krupal	Vasupujya 380013	Gujarat	Ahmedabad	1128182182	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:23:03.0	✓
24	jainish0124	Roasted Bhakharwadi	1	Jainish Shah	Vasupujya 380013	Gujarat	Ahmedabad	1291821928	jainishshah0124@gmail.com	In A Day Delivery	2015-05-14 18:23:30.0	✓
25	jainish0124	Biscuit Bhakharwadi	1	Jainish Shah	shitanshu appts 380013	Gujarat	Ahmedabad	1921821928	jainishshah0124@gmail.com	In A Day Delivery	2015-05-14 18:24:33.0	✓
27	jainish0124	Lilo Chavdo	1	Jainish	Vasupujya 380013	Gujarat	Ahmedabad	1928129182	jainishshah0124@gmail.com	In A Day Delivery	2015-05-14 19:38:08.0	✓
Thu May 14 19:42:40 IST 2015												

Figure 5.18 – Order Approval

## 19. List Of Invoice


<div><div><a href="#">Home</a><a href="#">About Us</a><a href="#">Contact Us</a><span>Hi jainish</span><a href="#">Logout</a></div></div>								
Invoice ID	Uusername	Order ID	Product Name	Time	Amount	Address	Mobile No	Delivery Type
10	jainish0124	11	Lilo Chavdo	2015-05-14 18:27:17.0	100.00	Vasupujya 380013	9828102918	Cash On Delivery
11	jainish0124	12	Biscuit Bhakharwadi	2015-05-14 18:27:18.0	130.00	sarjan tower	2918291822	Cash On Delivery
12	jainish0124	13	Phoolvadi	2015-05-14 18:27:19.0	65.00	shitanshu appts 380013	1829182918	Cash On Delivery
13	jainish0124	14	Mathia Sev	2015-05-14 18:27:20.0	60.00	shitanshu appts 380013	1821928121	Cash On Delivery
14	jainish0124	15	Roasted Bhakharwadi	2015-05-14 18:27:21.0	55.00	Vasupujya 380013	1828282738	Cash On Delivery
Thu May 14 19:44:40 IST 2015								

Figure 5.19 – List Of Invoice

## 20. Order Delivered

<div>  <div> <a href="#">Home</a> <a href="#">About Us</a> <a href="#">Contact Us</a> </div> <div> Hi jainish <a href="#">Logout</a> </div> </div>												
Order ID	User Name	Product Name	Product Quantity	Name	Address	State Name	City Name	Mobile No	Email ID	Delivery Type	Order Time	Order Delivered
16	jainish0124	Phoolvadi	1	anoop	Vasupujya 380013	Gujarat	Ahmedabad	1921829128	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:14:04.0	✓
17	jainish0124	Kachori Dryfruit Tin	1	Jainish Shah	shitanshu appts 380013	Gujarat	Ahmedabad	1281821728	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:15:45.0	✓
18	jainish0124	Nadiadi Mix Chavana	1	anoop	shitanshu appts 380013	Gujarat	Ahmedabad	1921828912	isjiaj@gmail.com	Cash On Delivery	2015-05-14 18:16:10.0	✓
19	jainish0124	Nadiadi Mix Chavana	1	Jainish Shah	shitanshu appts 380013	Gujarat	Ahmedabad	1281921829	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:16:33.0	✓
20	jainish0124	Soan Papdi	1	anoop	Vasupujya 380013	Gujarat	Ahmedabad	1828128182	jainishshah0124@gmail.com	Cash On Delivery	2015-05-14 18:18:32.0	✓
26	abhay	Lilo Chavdo	1	Ajaisija	hell 380013	Gujarat	Ahmedabad	2198128192	jainishshah0124@gmail.com	In A Day Delivery	2015-05-14 19:18:25.0	✓
Thu May 14 19:44:54 IST 2015												

Figure 5.20 – Order Delivered



## 21. Invoice (PDF)



Order ID 11

Name	Jainish Shah
Address	Vasupujya 380013
Mobile No	9828102918
Quantity	1
Amount	100

Figure 5.21 – Invoice (PDF)

### **6.1 Unit Testing**

In computer programming, **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 if they are fit for use. Intuitively, one can view a unit as the smallest testable part of an application. In procedural programming, a unit could be an entire module, but it is more commonly an individual function or procedure. In object-oriented programming, a unit is often an entire interface, such as a class, but could be an individual method. Unit tests are short code fragments created by programmers or occasionally by white box testers during the development process. Ideally, each test case is independent from the others. Substitutes such as method stubs, mock objects, fakes, and test harnesses can be used to assist testing a module in isolation. Unit tests are typically written and run by software developers to ensure that code meets its design and behaves as intended.

### **6.2 Test Plan**

White-box testing is a method of testing the application at the level of the source code. These test cases are derived through the use of the design techniques mentioned above: control flow testing, data flow testing, branch testing, path testing, statement coverage and decision coverage as well as modified condition/decision coverage. White-box testing is the use of these techniques as guidelines to create an error free environment by examining any fragile code. These

White-box testing techniques are the building blocks of white-box testing, whose essence is the careful testing of the application at the source code level to prevent any hidden errors later on. These different techniques exercise every visible path of the source code to minimize errors and create an error-free environment. The whole point of white-box testing is the ability to know which line of the code is being executed and being able to identify what the correct output should be.

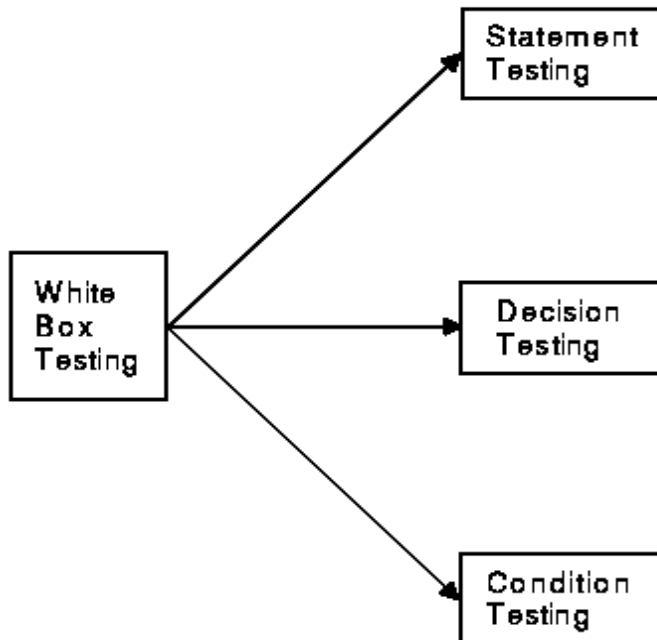


Figure 6.1 White Box Testing

**White-box test design techniques include the following code coverage criteria:**

- ☐ Control flow testing
- ☐ Data flow testing
- ☐ Branch testing

- ☐ Statement coverage
- ☐ Decision coverage
- ☐ Modified condition/decision coverage
- ☐ Prime path testing
- ☐ Path testing

## **Advantages**

White-box testing is one of the two biggest testing methodologies used today. It has several major advantages:

- ☐ Side effects of having the knowledge of the source code are beneficial to thorough testing.
- ☐ Optimization of code by revealing hidden errors and being able to remove these possible defects.
- ☐ Gives the programmer introspection because developers carefully describe any new implementation.
- ☐ Provides traceability of tests from the source, allowing future changes to the software to be easily captured in changes to the tests.
- ☐ White box tests are easy to automate.
- ☐ White box testing give clear, engineering-based, rules for when to stop testing.

## **Disadvantages**

Although white-box testing has great advantages, it is not perfect and contains some disadvantages:

- White-box testing brings complexity to testing because the tester must have knowledge of the program, including being a programmer. White-box testing requires a programmer with a high-level of knowledge due to the complexity of the level of testing that needs to be done.
- On some occasions, it is not realistic to be able to test every single existing condition of the application and some conditions will be untested.

## **CONCLUSION**

The Internet has become a major resource in modern business, thus electronic shopping has gained significance not only from the entrepreneur's but also from the customer's point of view.

We have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much as possible.

This project helps in understanding the creation of an interactive web page and the technologies used to implement it, how it connect to the database to access the data and how the data and web pages are modified to provide the user with a online shopping application.

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