

A UDP Project Report On

# **RETAIL NET**

**Prepared by**

**Sanjay Bhagchandani-160260107001**

**Rishabh Khale -160260107040**

**Kushal Thakar-160260107047**

*Guided By:*

**Prof.Shilpa Serasiya**  
(Professor, CE Department)



**Gujarat Technical University**

**COMPUTER DEPARTMENT**

**KALOL INSTITUTE OF TECHNOLOGY  
&  
RESEARCH CENTRE  
GUJARAT TECHNOLOGICAL UNIVERSITY  
May-2020**



## KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE

### *CERTIFICATE*

**Date:**

The report entitled “Retail Net” prepared by Rishabh Khale, Kushal Thakar, Sanjay Bhagchandani for Project Phase-II (Semester - 8) for the partial fulfillment of degree of Bachelor of Engineering (Computer Engineering), has been carried out under my supervision in Department of Computer Engineering, Kalol Institute of Technology & Research Centre. His/ Her present work has been found satisfactory.

**Date of Submission:**

**Project Guide**

Prof. Shilpa Serasiya  
HOD,CE Department,KIRC

**Head of Department**

Prof. Shilpa Sherasiya  
CE Department,KIRC

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1. INTRODUCTION Problem Summary • All of the supply chain market trades currently involve a lot of paperwork and they have to wait longer for even normal orders. So it is a very time consuming and tedious task. We therefore decided to develop Retail Net, a system for such networks. The system we have developed is specifically for one particular and can be extended to its multiple branches. Project Introduction • E-commerce is an online selling network. This effective way of buying allows the customer to create a bulk order online, this, therefore, cuts out the hassle and is a quicker and easier transaction. Meaning you doesn't even need reps to sell your product. • "Retail Net" is a web application that provides interacting medium between entities like Manufactures, Whole-sellers, Distributors and Retailers. • "Retail Net" is not for common users. This is a web application that provides service to business related entities. • Using this system entity's can manage the task of getting the resources or raw materials or product from other entities. • It is a cost and time efficient E-commerce web application which provides the communicating medium between the above mentioned entities. • Details of product will be visible to each entity according to their requirements. Invoice will be generated which can reduce paper work and time Aim & Objective • The main purpose of using "Retail Net" is that it benefits the business and the customer. The wholesaler can reduce their prices of the products that they sell which will allow the consumer to purchase more stock at a more suitable price. The wholesaler can sell more products at a reduced price but will gain profit from this as it benefits both parties. • Also it cuts out the unwanted wasted time. Without the e-commerce application wholesalers and consumers or any other entity used a paperback catalogue, this wastes time that companies can't afford. An advantage of using this web application is that it saves time and fuss of visiting the other entities. Milestones & Deliverables • As the Spiral approach of software development is followed the milestones and deliverables are dynamically decided. • Each primary module completion is a milestone. • Each primary module consists of various secondary modules that are also considered as milestones. • Spiral approach specifies development of a prototype after each iteration of the spiral. • Until and unless the product satisfies the user need the spiral iterations are increased and so are the prototypes. Modules and Functionality • In this module user have to register himself with our web-app. • once users have registered itself they will have their Username and password for login the web-app. • Entity's can add or remove product according to their needs • Seller can add any number of images to its product. • Entity can search for relevant product and can get that product at profitable price. • Here entity can see the detail of each and every product. • Email verification would happen once the user is registered and has entered the website • Buyer can check for the availability of the product and can contact to the supplier with the inquiry module and can specify the needs of a product. • User can edit his/her profile • Seller can make changes to his/her product and the images. • User can makes changes to his/her firm details. • Admin can access to every user and make changes. Design: Analysis, Design Methodology and Implementation Strategy Implementation Strategy The following implementation strategy will be followed for The Retail Net. • Pre Evaluation Screening: A screening process is carried out to evaluate the system design. • Evaluation: A thorough evaluation of the system design is carried out. • Project Plan: Complete project for the Retail Net is developed. • Gap Analysis: The Gap Analysis of the Retail Net is to decide where the project is right now and where it is supposed to go. • Configuration: The process of customizing the design according to the environment of the user. • Testing: The testing of system design is important in order to successfully implement the system. • Actual Implementation: The system is actually implemented in the environment and ready to be used by the users • Post Implementation Maintenance and Monitoring: After the system is implemented it is monitored for feedback and necessary changes are done. 3. Implementation Implementation Environment The Retail Net is implemented over the Internet for users all across the country. India consists of various religions, castes, creeds, color, etc. The aim of implementation is to respect and honor those. As the Retail Net is a strictly English Language website, regional languages are forbidden. The user must have to follow a BNBR

(Be Nice-Be Respectful) policy of the Retail Net. The Retail Net has a large user base from all age categories, thus the implementation environment is a wholesome package. Benefits • A web application that provides interacting medium between Manufactures, Whole-sellers, Distributors and Retailers. • A cost and time efficient application which provides the communicating medium between the entities. This could relief an entity from fuss of visiting the other entities that saves time and provides more attention to their business. • Details of product will be visible to the entity which can reduce paper work and time. Entity will also know the address of other entities along with the products that they sell. • Using this platform entity can manage the task of getting the resources or raw materials from other entities.

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**Team: 85549**

<b>Enrollment Number</b>	<b>Name</b>	<b>Signature</b>
<b>160260107040</b>	<b>Rishabh Khale</b>	
<b>160260107047</b>	<b>Kushal Thakar</b>	
<b>160260107001</b>	<b>Sanjay Bhagchandani</b>	

**Place:** Kalol

**Date:**

## **SELF-DECLARATION**

We **Rishabh Khale , Sanjay Bhagchandani , Kushal Thakar** the students of CSE Branch, having enrolment numbers **160260107040, 160260107001, 160260107047** enrolled at **Kalol Institute Of Technology & Research Centre** hereby certify and declare the following:

- 1.** We have defined our project based on the work we have done under the guidance of **HOD. Shilpa Serasia** and each of us will make significant efforts to make attempt to solve the challenges. We will attempt the project work at my college or at any location under the direct and consistent monitoring of **HOD Shilpa Serasia**. We will adopt all ethical practices to share credit amongst all the contributors based on their contributions during the project work.
- 2.** We have not purchased the solutions developed by any 3rd party directly and the efforts are made by us under the guidance of guides.
- 3.** The project work is not copied from any previously done projects directly. (Same project can be done in different ways but if it has been done in same manner before then it may not be accepted).
- 4.** Our project Retail Net is genuine to the best of my knowledge
- 5.** We understand and accept that he above declaration if found to be untrue, it can result in punishment/cancellation of project definition to us including failure in the subject of project work.

**Name/Names:** Rishabh Khale, Sanjay Bhagchandani, Kushal Thakar

**Contact number/numbers:** 8849243757, 9601863441, 9925535509

**Date:**

**Sign/signs:**

**Place:**

## **Acknowledgement**

We are so glad to take this opportunity to express our heartfelt gratitude towards Kalol Institute Of Technology and Research Centre, for giving us an opportunity to develop this project and all possible helps they have given.

We would like to give our sincere thanks to HOD. Shilpa Serasiya, Professor of Information & Technology Department who motivated us to select a UDP project with the title “Retail Net”. We are very thankful to her to provide us a huge knowledge about Everything and we are always eager to know more about our particular topic if any subject.

She always has inspired us to innovate new things and to research about new ideas which Are necessary in upcoming days of our life. We thank our team guide and friends for their Encouraging us without which this project work would not be possible.

## **Abstract**

Retail Net is a Supply chain management (SCM), the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers.

Retail Net spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption (supply chain).

Another definition SCM is the "design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand, and measuring performance globally."

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# 1. INTRODUCTION

## 1.1 Problem Summary

- All of the supply chain market trades currently involve a lot of paperwork and they have to wait longer for even normal orders. So it is a very time consuming and tedious task. We therefore decided to develop Retail Net, a system for such networks. The system we have developed is specifically for one particular and can be extended to its multiple branches.

## 1.2 Project Introduction

- E-commerce is an online selling network. This effective way of buying allows the customer to create a bulk order online, this, therefore, cuts out the hassle and is a quicker and easier transaction. Meaning you doesn't even need reps to sell your product.
- “Retail Net” is a web application that provides interacting medium between entities like Manufactures, Whole-sellers, Distributors and Retailers.
- “Retail Net” is not for common users. This is a web application that provides service to business related entities.
- Using this system entity's can manage the task of getting the resources or raw materials or product from other entities.
- It is a cost and time efficient E-commerce web application which provides the communicating medium between the above mentioned entities.
- Details of product will be visible to each entity according to their requirements. Invoice will be generated which can reduce paper work and time

### 1.3 Aim & Objective

- The main purpose of using “Retail Net” is that it benefits the business and the customer. The wholesaler can reduce their prices of the products that they sell which will allow the consumer to purchase more stock at a more suitable price. The wholesaler can sell more products at a reduced price but will gain profit from this as it benefits both parties.
- Also it cuts out the unwanted wasted time. Without the e-commerce application wholesalers and consumers or any other entity used a paperback catalogue, this wastes time that companies can't afford. An advantage of using this web application is that it saves time and fuss of visiting the other entities.

### 1.4 Problem Specifications

- Functional and Non-functional Requirements

#### Functional Requirements

- A user should be able to filter their requirements related to their needs.
- The system shall provide necessary authentication required to verify the user or entity for security reasons.
- Every user will have their unique identity.
- Entity's can add or remove their product.
- An entity shall be able to search product.
- Invoice shall be generated for the entity once the business had taken place.

#### Non-Functional Requirements

- The Web-Application shall be available for businesses related company or stores only.
- This Web-Application shall be available anytime and anywhere
- Without registration user cannot use this Web- Application.

## 1.5 Purpose System and Target Users

- “Retail Net” is an E-Commerce web application which is used by Manufactures, Whole-sellers, Distributors and Retailers.
- This web-app includes features like online ordering, order tracking, invoice generation, product update etc and it also provide security with beautiful interface so that user can easily interact with the web-app.
- The main focus is to maintain the trade between the entities through the means of internet, which will be done by this web Application.
- This web application does not concern with the customers or the end users in the supply chain network. But the future scope can include them

## 1.6 Plan of Work

### 1.6.1 Project Plan

- The Automobile Forum is planned to be completed at the end of the 8<sup>th</sup> semester.
- The project span is of 2 semesters i.e. 7<sup>th</sup> and 8<sup>th</sup>.
- 7<sup>th</sup> semester's work is only of analysis to strengthen the project development process.
- 8<sup>th</sup> semester's work is actual development, implementation and maintenance of the project.

### 1.6.2 Milestones & Deliverables

- As the Spiral approach of software development is followed the milestones and deliverables are dynamically decided.
- Each primary module completion is a milestone.
- Each primary module consists of various secondary modules that are also considered as milestones.
- Spiral approach specifies development of a prototype after each iteration of the spiral.
- Until and unless the product satisfies the user need the spiral iterations are increased and so are the prototypes.

## 1.7 Tools and Technology

### Developer Side Requirements

- A developer machine which can support various developer tools.
- Adequate hardware requirements such as RAM, processor, HDD, graphics processor, etc.
- Operating systems such as Linux, Mac OSX, Windows, etc.
- Various web browsers such as Google Chrome, Mozilla Firefox, etc.
- Eclipse / Netbeans IDE
- MySQL Database
- MySQL Workbench
- JDK
- Apache Tomcat Server
- Latest versions of softwares are preferred.
- An Internet Connection.
- Various devices such as tablet, smartphone, laptop, etc. for testing purpose.

### Client Side Requirements

- A device such as smartphone, computer, tablet, laptop, etc.
- A web browser such as Google Chrome, Mozilla Firefox, etc.
- An Internet Connection.

## Frontend Technology

- HTML
- CSS
- BOOTSTRAP
- JAVA SCRIPT
- JQUERY
- AJAX
- JSON

## Backend Technology

- Spring MVC
- Hibernate
- Mysql
- Xampp
- Tomcat Server
- Java libraries
- Java Server Pages
- JSP Taglib

## Technology Used for Building Project: --- Java 11.0

Java is a general purpose programming language with a number of features that make the language well suited for use on the World Wide Web. Small Java applications are called Java applets and can be downloaded from a Web server and run on your computer by a Java compatible Web browser.

Java source code files (files with a .java extension) are compiled into a format called byte code (files with a .class extension), which can then be executed by a Java interpreter. Compiled Java code can run on most computers because Java interpreters and runtime environments, known as Java Virtual Machines (JVMs).

## 1.8 Literature Review and Prior Art Search

Below is the list of websites that are been referred so far.

- <https://www.alibaba.com/>
- <https://my.indiamart.com/>
- <https://www.amazon.com/>
- <https://www.ebay.com/>
- <https://www.target.com/>
- <https://www.walmart.com/>

We started our literature review on the basis of the analysis that we have done on meeting our entities such as Retailers, Manufacturers, Wholesalers' and Distributors. They all were working on the old systems where they use their template and send their agents to get the orders and after getting orders they use to deliver the product. On the other side of selling the product online on such E-Commerce sites like Amazon , Flipkart

, Snapdeal etc, the customers are ordering their items online. So we thought that why not our entities should get the same service as their customers are obtaining from the E-commerce sites. So we thought to provide an online interface to our entities so that they also can order and sell their resources and create an online medium of their trade and business and further providing features such as creating Online Invoice for faster transactions, Product Updation etc.

We can create a web application that can perform such tasks. Then we searched some of patents on google which can help us in our system.

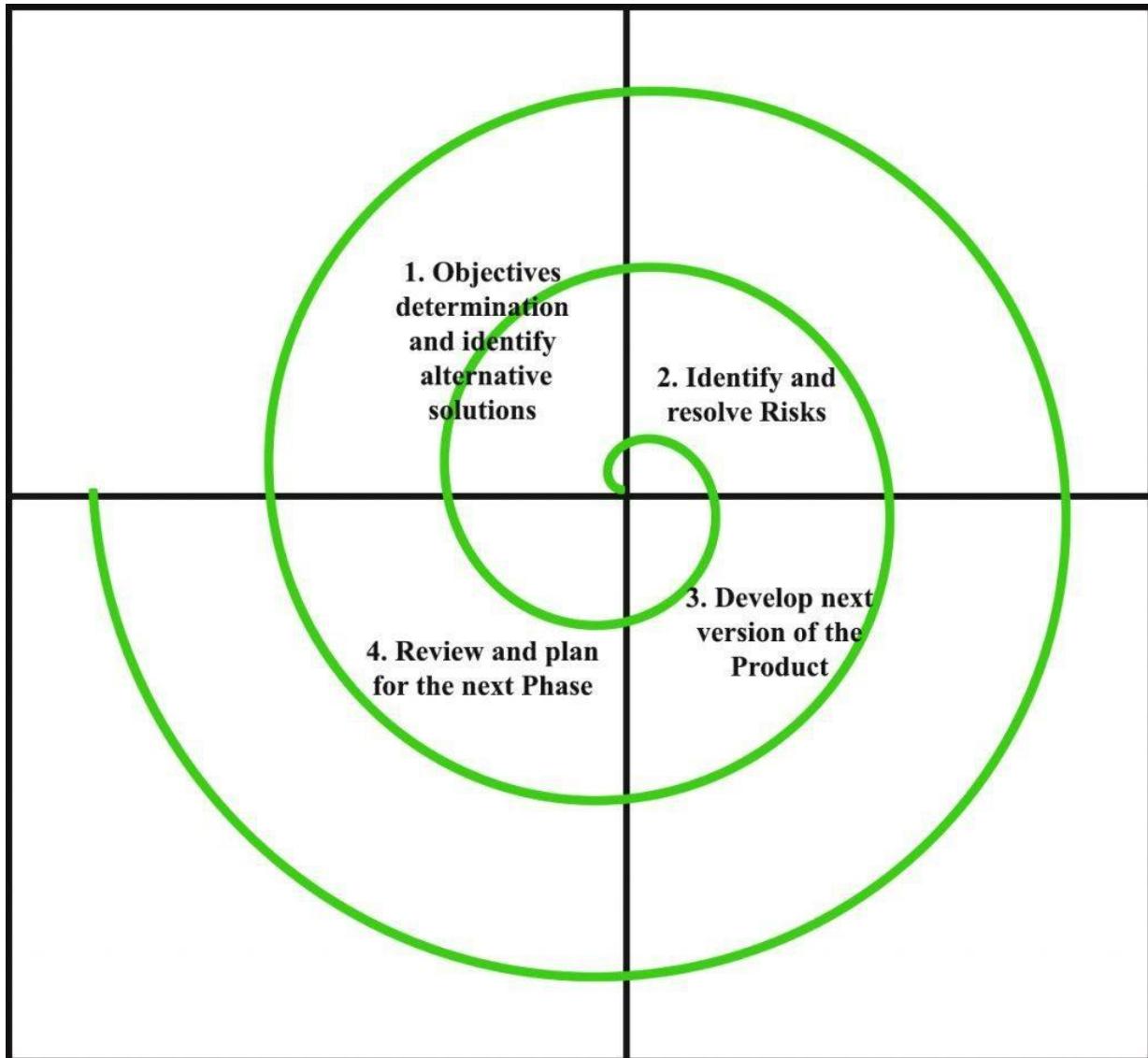
## 1.9 Modules and Functionality

- **Registration**: In this module user have to register himself with our web-app.
- **Login**: once users have registered itself they will have their Username and password for login the web-app.
- **Add/remove Product**: Entity's can add or remove product according to their needs
- **Add Image**: Seller can add any number of images to its product.
- **Search**: Entity can search for relevant product and can get that product at profitable price.
- **Product Details**: Here entity can see the detail of each and every product.
- **Email Verification**: Email verification would happen once the user is registered and has entered the website
- **Inquiry**: Buyer can check for the availability of the product and can contact to the supplier with the inquiry module and can specify the needs of a product.
- **Edit Profile**: User can edit his/her profile
- **Edit Product**: Seller can make changes to his/her product and the images.
- **Edit Firm**: User can makes changes to his/her firm details.
- **ADMIN Panel**: Admin can access to every user and make changes.

## 2. Design: Analysis, Design Methodology and Implementation Strategy

### 2.1 Software Development Model

#### Design of Spiral model



## Advantages of spiral model

- High amount of risk analysis hence, avoidance of Risk is enhanced.
- Good for large and mission-critical projects.
- Strong approval and documentation control.
- Additional Functionality can be added at a later date.

## Disadvantages of spiral model

- Can be a costly model to use.
- Risk analysis requires highly specific expertise.
- Project's success is highly dependent on the risk analysis phase.
- Doesn't work well for smaller projects.

## When to use spiral model

- When costs and risk evaluation is important.
- For medium to high-risk projects.
- Long-term project commitment unwise because of potential changes to economic priorities.
- Users are unsure of their needs.
- Requirements are complex.
- New product line.
- Significant changes are expected (research and exploration).

## 2.2 Design Analysis

The design analysis of The Retail Net is carried out to reduce the need of physical prototyping and testing. The system design is developed so that the project is better understood. The Finite Element Analysis (FEA: Design Analysis employs the finite element analysis (FEA) method to simulate physical behavior of a product design. The FEA process consists of subdividing all systems into individual components or "elements" whose behavior is easily understood and then reconstructing the original system from these components. This is a natural way of performing analysis in engineering and even in other analytical fields, such as economics. For example in real life the mechanism of the supply chain management is to be analyzed and further the methods that can be implemented on the online bases of real world scenario can be done. this will make the task faster and simpler.

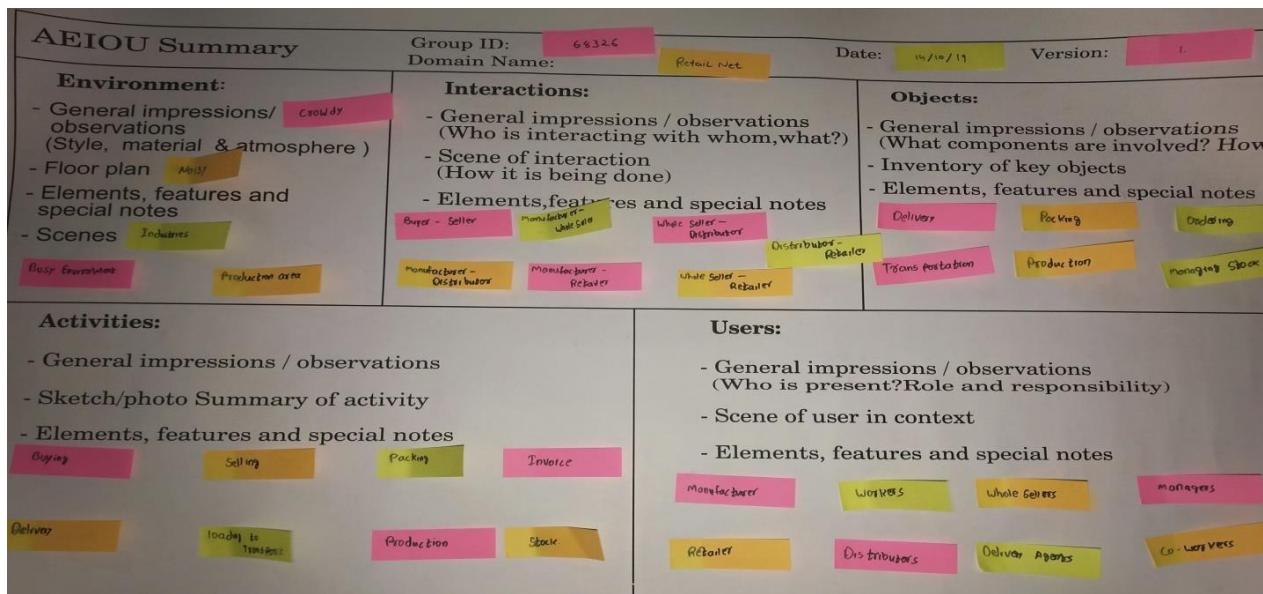
## 2.3 Implementation Strategy

The following implementation strategy will be followed for The Retail Net.

- Pre Evaluation Screening: A screening process is carried out to evaluate the system design.
- Evaluation: A thorough evaluation of the system design is carried out.
- Project Plan: Complete project for the Retail Net is developed.
- Gap Analysis: The Gap Analysis of the Retail Net is to decide where the project is right now and where it is supposed to go.
- Configuration: The process of customizing the design according to the environment of the user.
- Testing: The testing of system design is important in order to successfully implement the system.
- Actual Implementation: The system is actually implemented in the environment and ready to be used by the users
- Post Implementation Maintenance and Monitoring: After the system is implemented it is monitored for feedback and necessary changes are done..

## 2.4 Design Engineering Canvas

### 2.4.1 AEIOU



### Environment

- Crowds ,Noisy
- Busy employment
- Production area

### Interaction

- Buyer-seller
- Manufacturer-whole seller
- Whole seller-distributor
- Distributor-retailer
- Manufacturer- retailer, Whole seller- retailer

## Objects

- Delivery
- packing
- ordering
- production
- Transportation
- Managing stocks

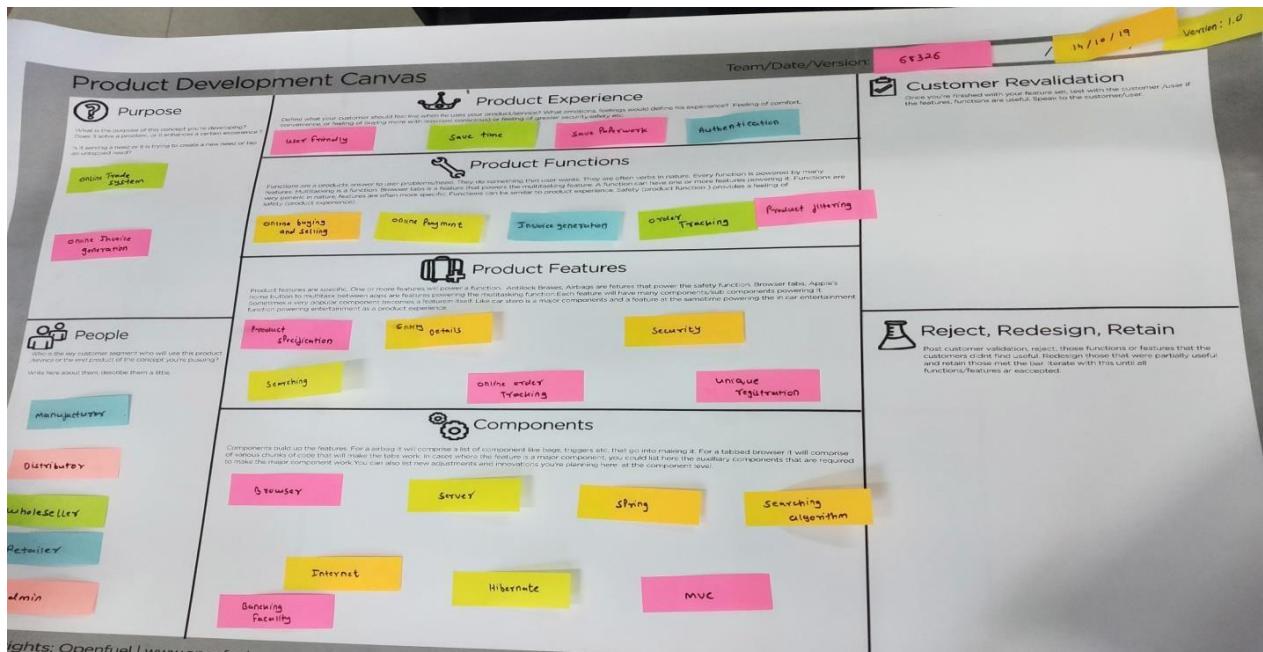
## Activities

- Buying
- Selling
- packing
- invoice
- delivery
- production

## Users

- Manufacturer
- Workers
- managers
- Retailer
- Distributor
- whole seller

## 2.4.2 Product Development Canvas



## Purpose

-Online trading

-online invoice generation

## People

## -Manufacturer

-Distributor

-Whole seller

-Retailer

-Admin

## **Product Experience**

- User Friendly
- Save time
- Save Paperwork
- Authentication

## **Product Function**

- Online Buying and Selling
- Online Payment
- Invoice generation
- Order Tracking
- Product filtering

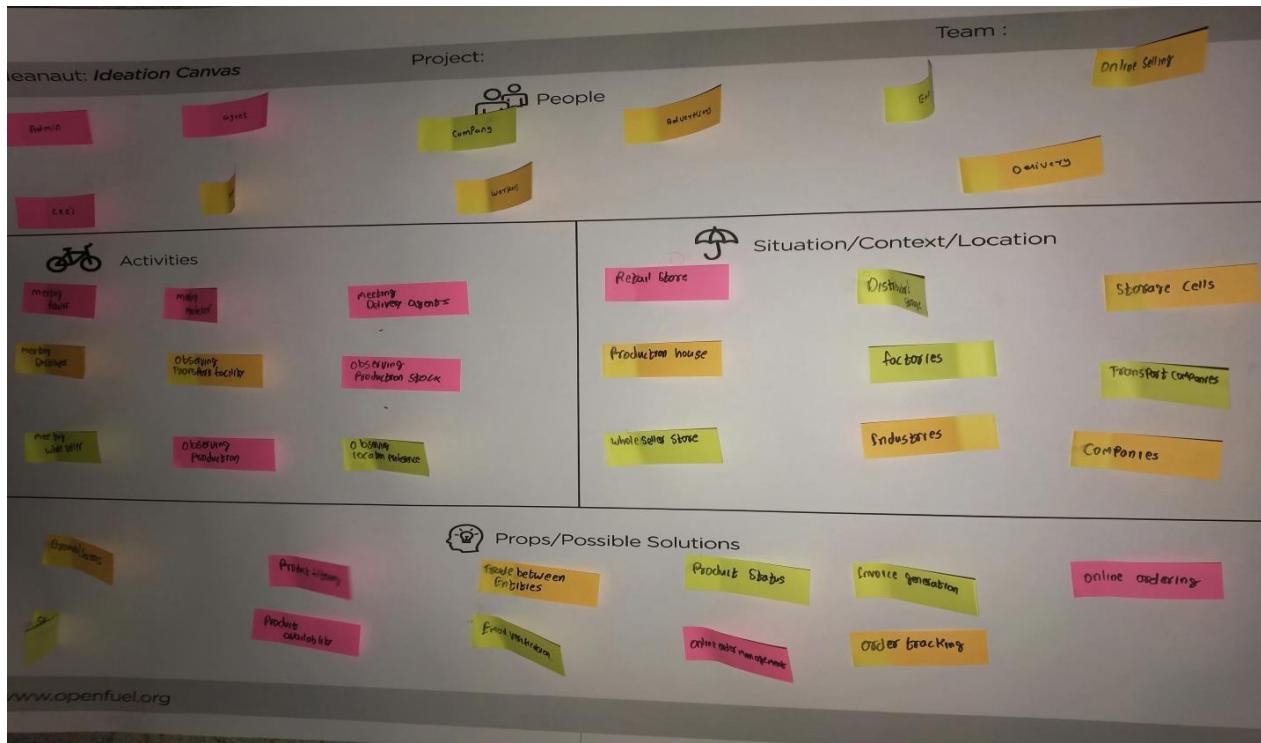
### Product Features

- Product Specifications
- Searching
- Entity Details
- Online order Tracking
- Security
- Unique Registration

## Components

- Browser
- Server
- Internet
- Banking facility
- Hibernate
- Mvc
- Searching algorithm

### 2.4.3 Ideation Canvas



### People

- Admin
- Agent
- Ceo
- Manager
- Workers
- Adventure
- company

## Activities

- Meeting Retailers
- Meeting Manufacturers
- Meeting Delivery agent
- Meeting Distributor
- Observing Transport facility
- Observing Production Stock
- Meeting Whole Seller
- Observing Production

## Situation

- Retail store
- Production house
- Whole seller
- Distributor
- Industries
- Storage cells
- Transport Company
- Companies

## Pros/Possible Solution

- Brands
- Production Filtering
- Trade between entities
- product status
- Invoice generation
- online ordering
- Order Tracking
- Order management
- Email Verification
- product availability

## 2.4.4 Empathy Canvas



STORY BOARDING	
HAPPY	Mayank had a Small Store so he had limited access to the distributor of the product but by using our web-application. Now he can have access to any of the distributor from anywhere.
HAPPY	Suresh had newly opened his Shop and has contact his list No. after using this web-application and registering into it he can easily know the product details their price and from where he can get in low price and More quantity.
SAD	Keshav is an employee in a Manufacturing Company his job is to look at the detail of the product. His job is very hectic as he had to manage too much of paper work.
SAD	Ramesh is a distributor his job is very much important he had to go to the store or Company to see or get the product detail it wastes lot of time and money.

## Users

- Manufacturer
- Workers
- Retailers
- Delivery agent
- Whole seller

## Stakeholders

- Admin
- Entity's

## Activities

- Buying
- Selling
- Production
- Packing
- Login
- verification
- Filtering
- Delivery
- Stock
- Sorting
- Invoice
- Searching

## **Story Boarding**

### **Happy:**

Mayank had a small store so he had limited reach to the distributor of the product but by using our web-application he can have access to any of the distributor from anywhere

### **Happy:**

Suresh had newly opened his shop and has certified GST no. after using this web-application and Registering into it he can easily know the product details that price and from where he can get in low price and more quantities.

### **Sad:**

Keshav is a employee in a manufacturing company his job is to look at the details of the product. His job is very hectic as he had to manage too much of paper work

### **Sad:**

Ramesh is a distributor his job is very much important he had to go to the store or company to see or get the product details; it wastes lot of time and money.

### 3. Implementation

#### 3.1 Implementation Environment

The Retail Net is implemented over the Internet for users all across the country. India consists of various religions, castes, creeds, color, etc.

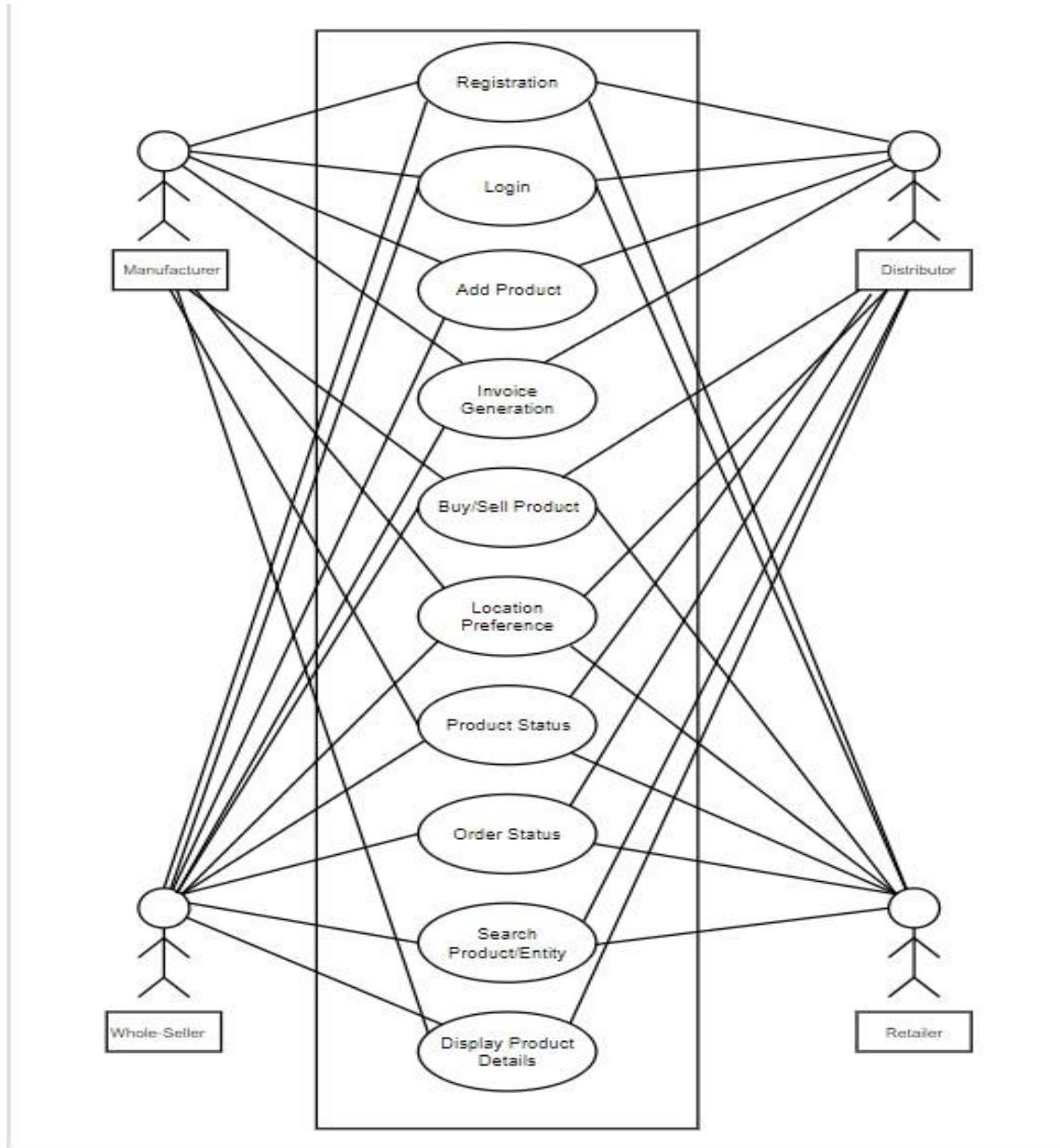
The aim of implementation is to respect and honor those. As the Retail Net is a strictly English Language website, regional languages are forbidden.

The user must have to follow a BNBR (Be Nice-Be Respectful) policy of the Retail Net.

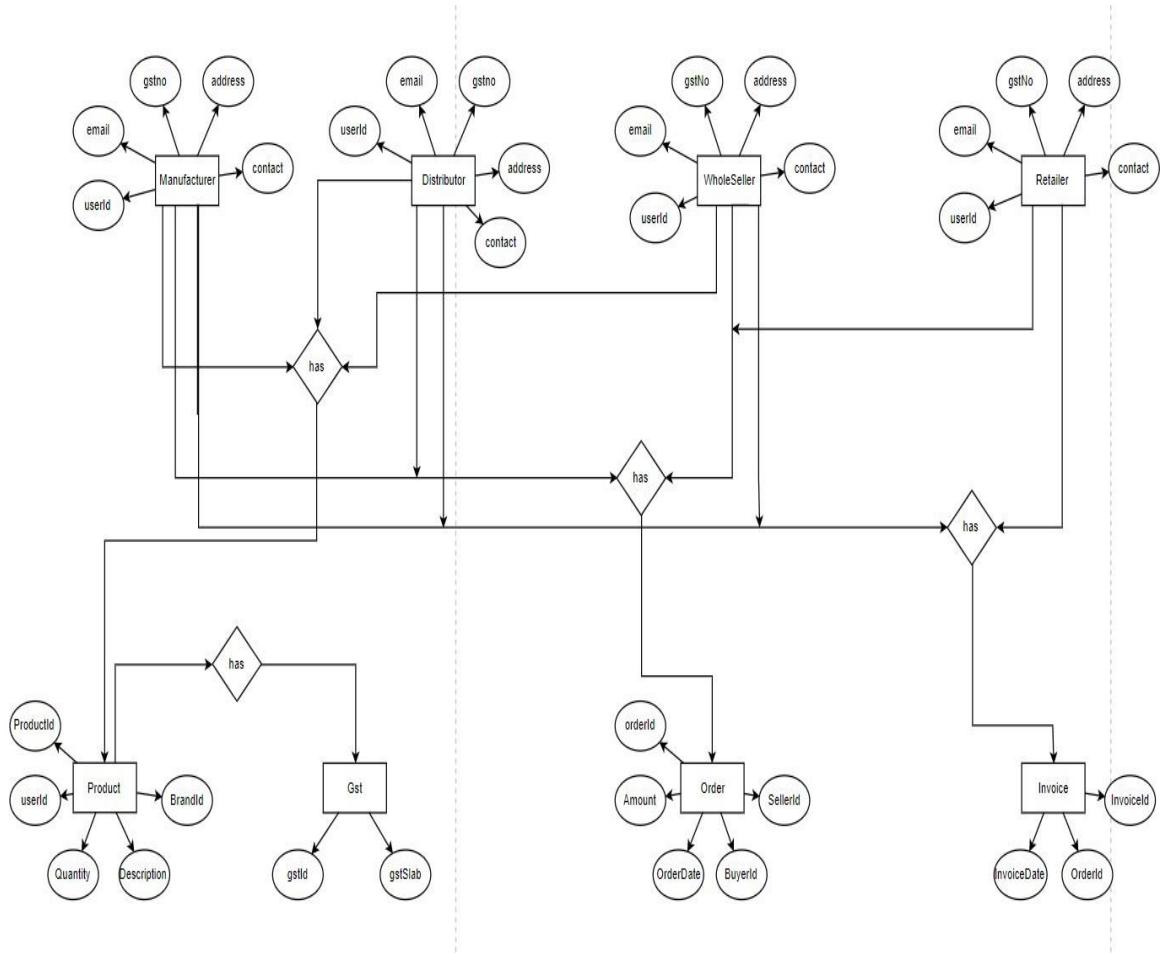
The Retail Net has a large user base from all age categories, thus the implementation environment is a wholesome package.

## 3.2 Diagrams

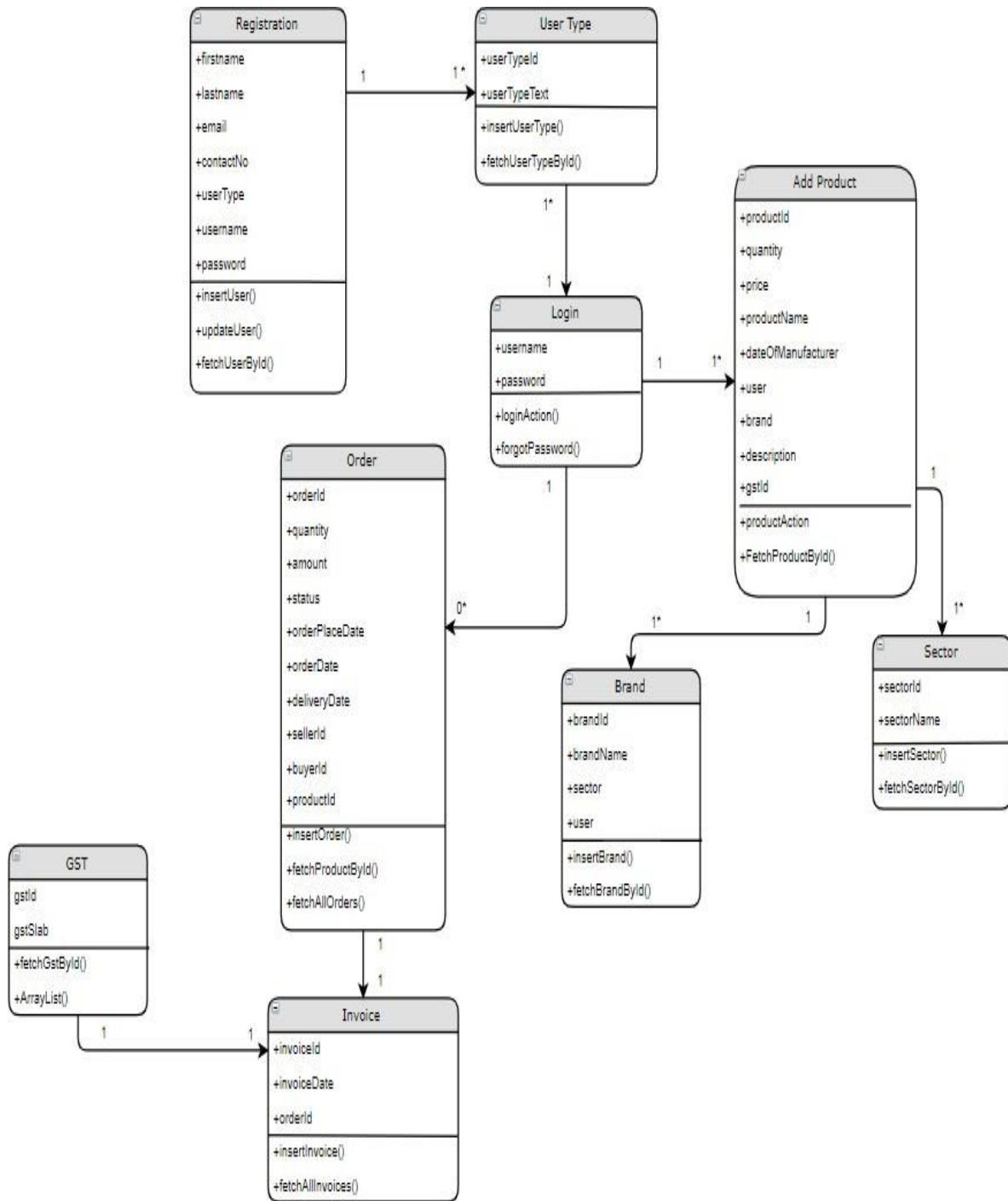
### 3.2.1 Use-Case Diagram



### 3.2.2 Entity Relation Diagram

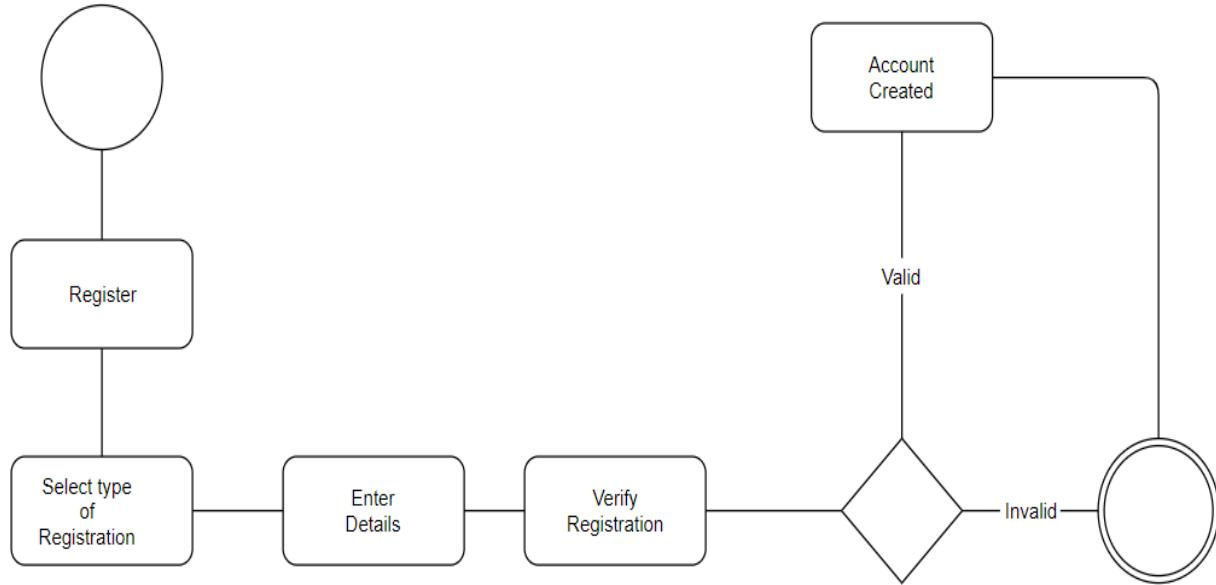


### 3.2.3 Class Diagram

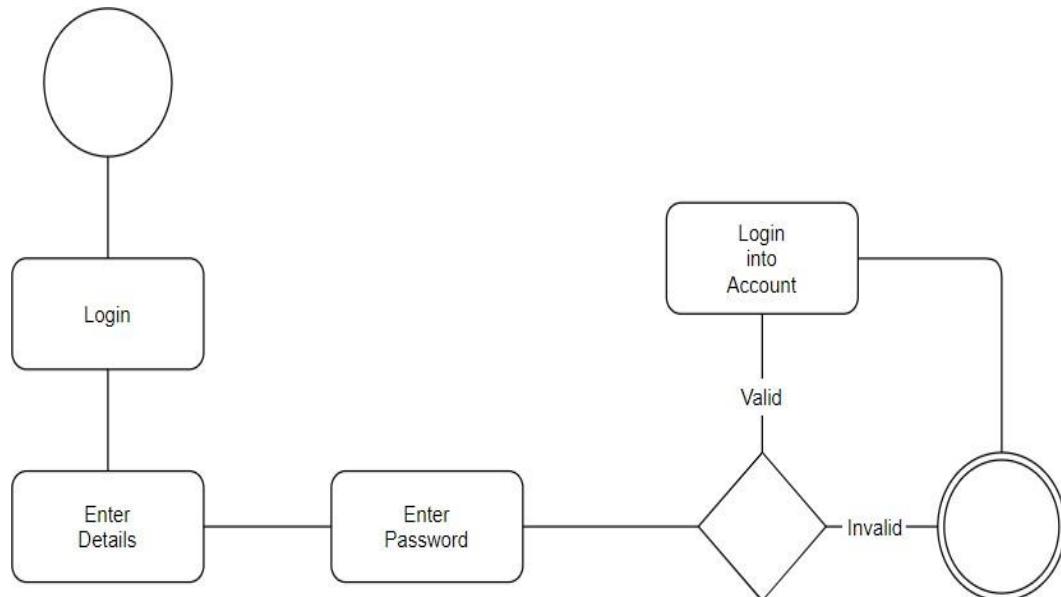


### 3.2.4 Activity Diagram

#### 3.2.4.1 Activity Diagram for Register

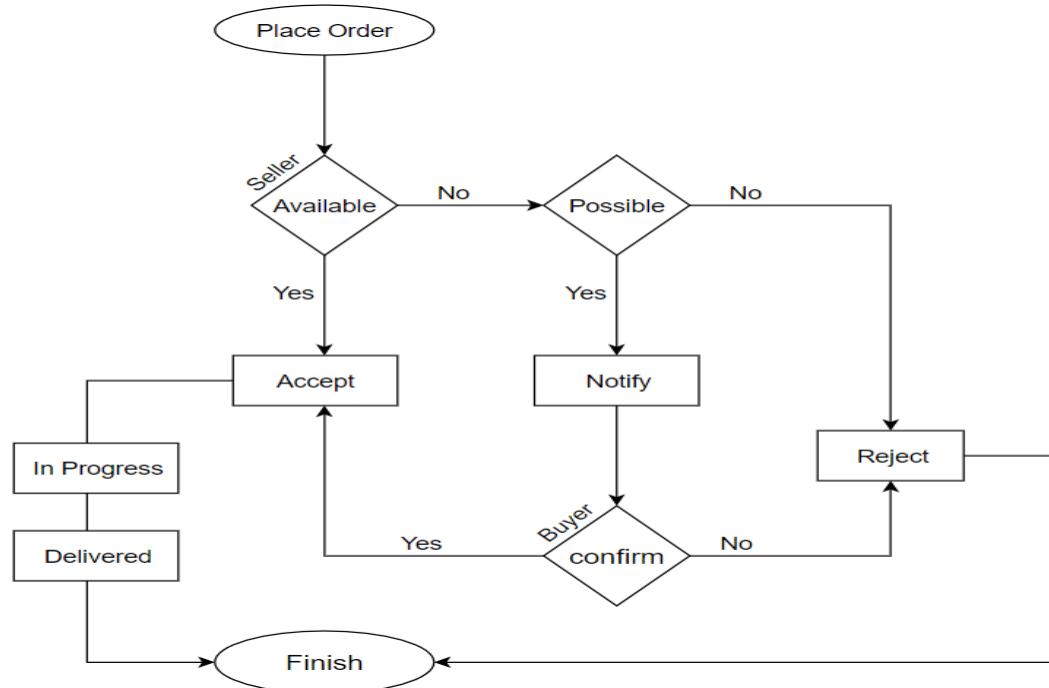


#### 3.2.4.2 Activity Diagram for Login

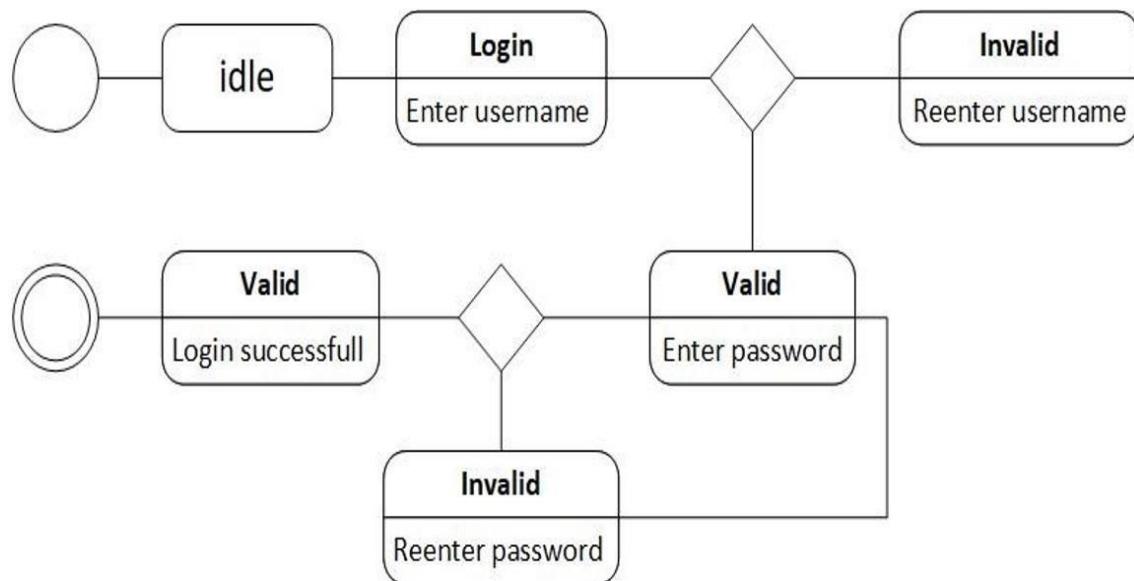


### 3.2.5 State Diagram

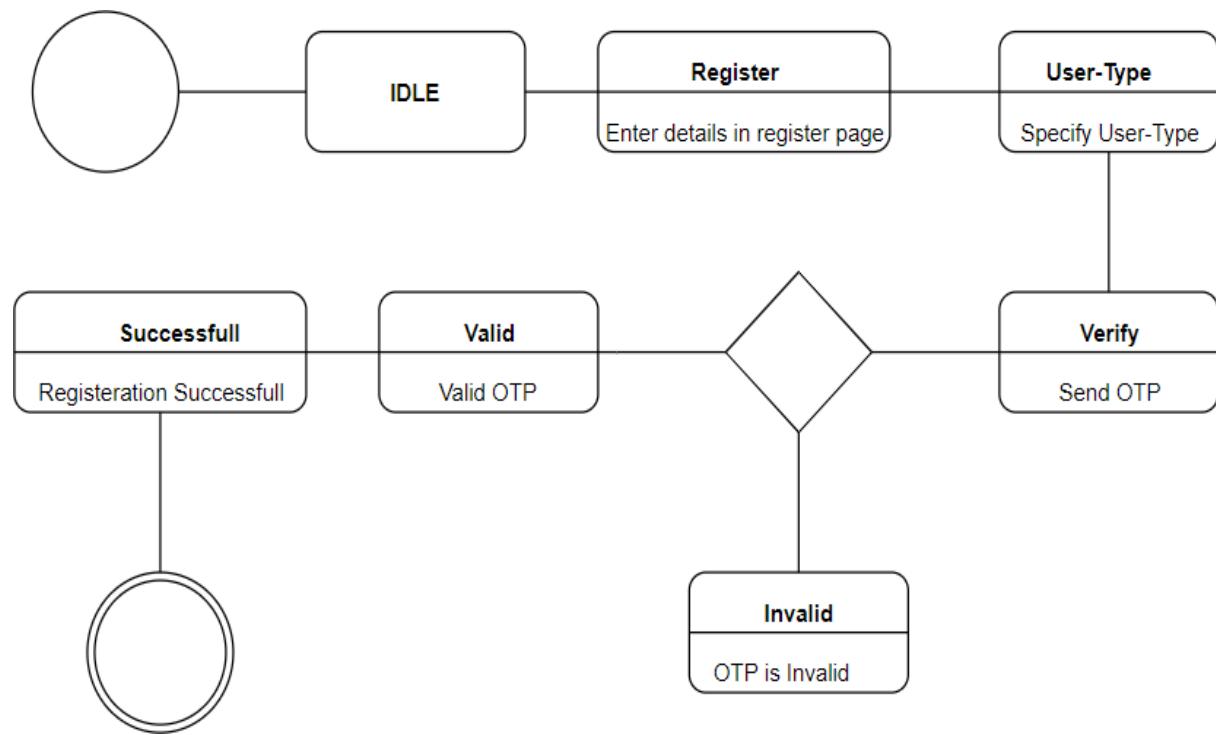
#### 3.2.5.1 State Diagram for Place Order



#### 3.2.5.2 State Diagram for Place Login

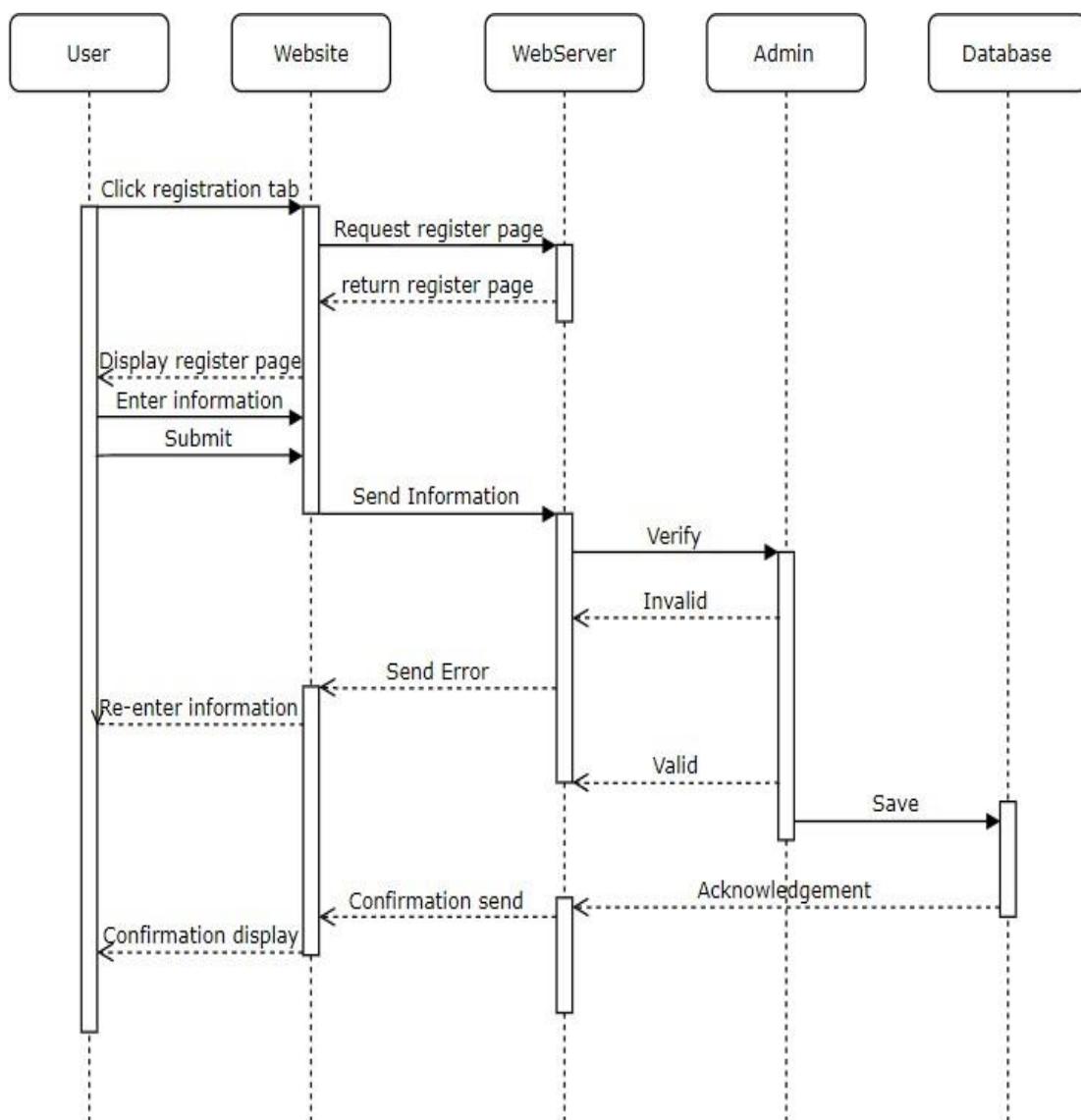


### 3.2.5.3 State Diagram for Place Register

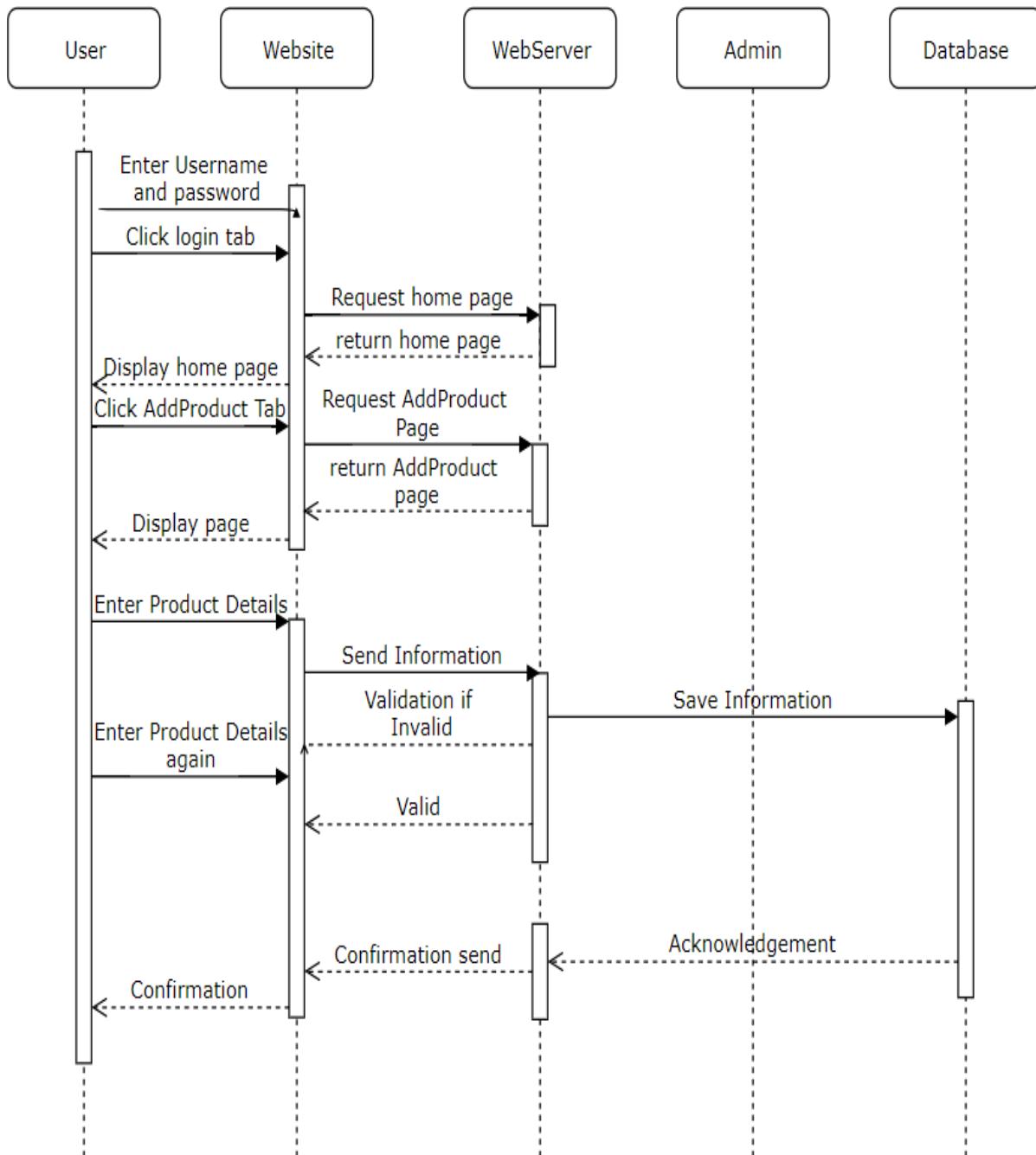


### 3.2.6 Sequence Diagram

#### 3.2.6.1 Sequence Diagram for Registration

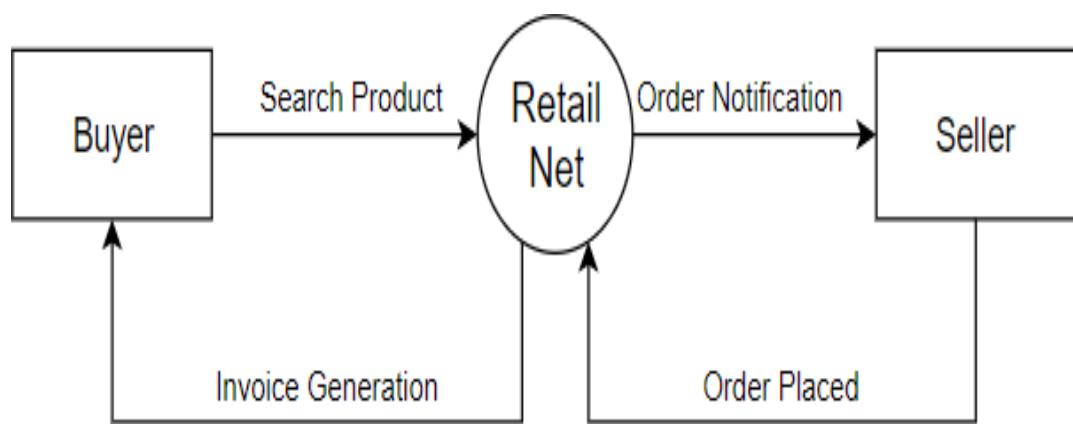


### 3.2.6.2 Sequence Diagram for Add Product

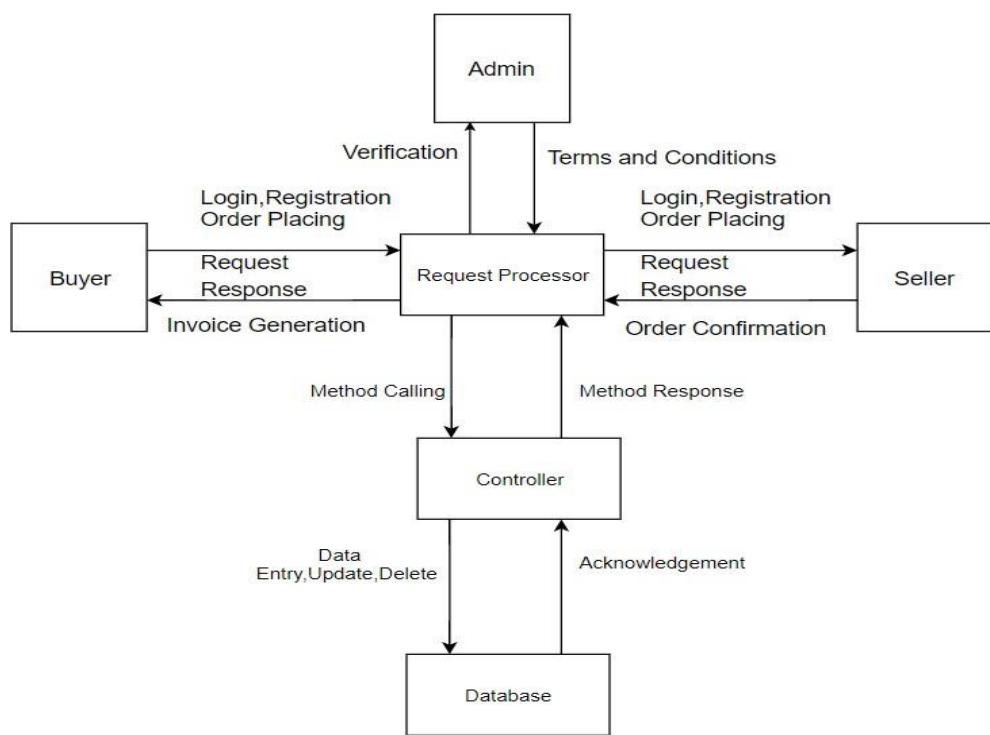


### 3.2.7 Data Flow Diagram

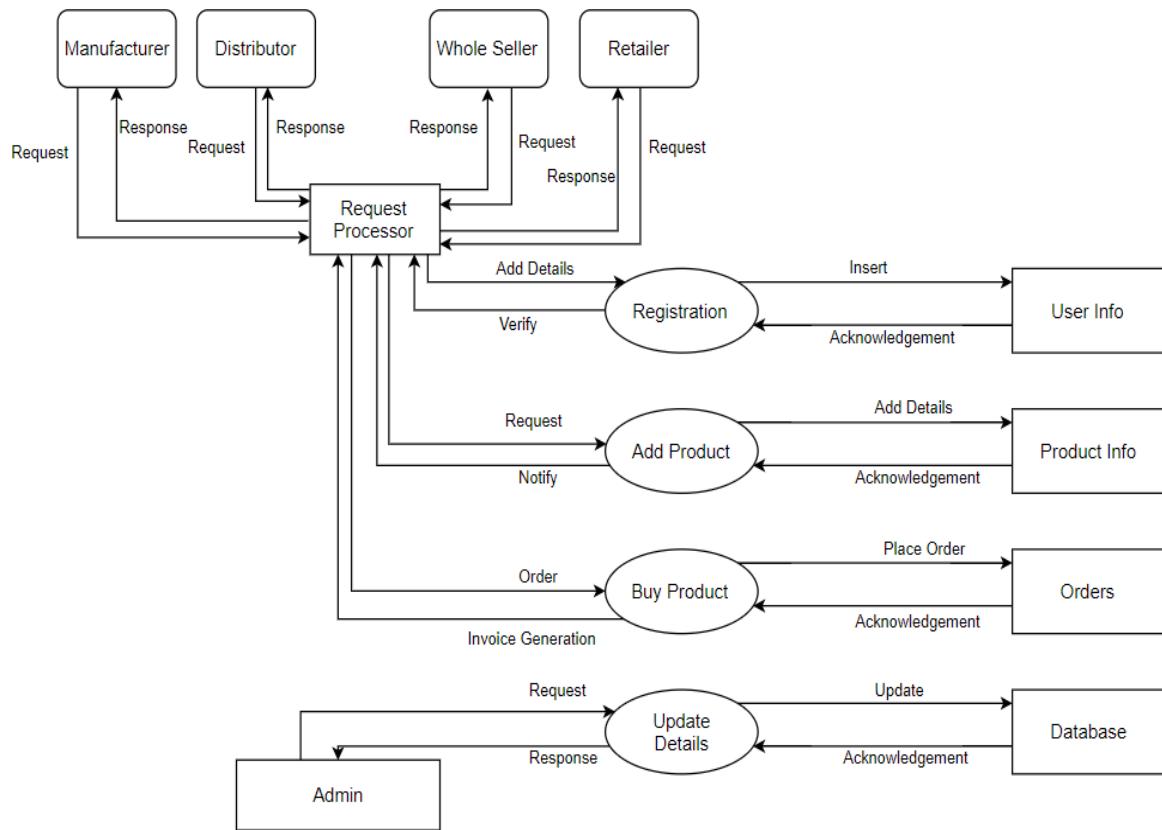
#### 3.2.7.1 DFD Level 0



#### 3.2.7.2 DFD Level 1

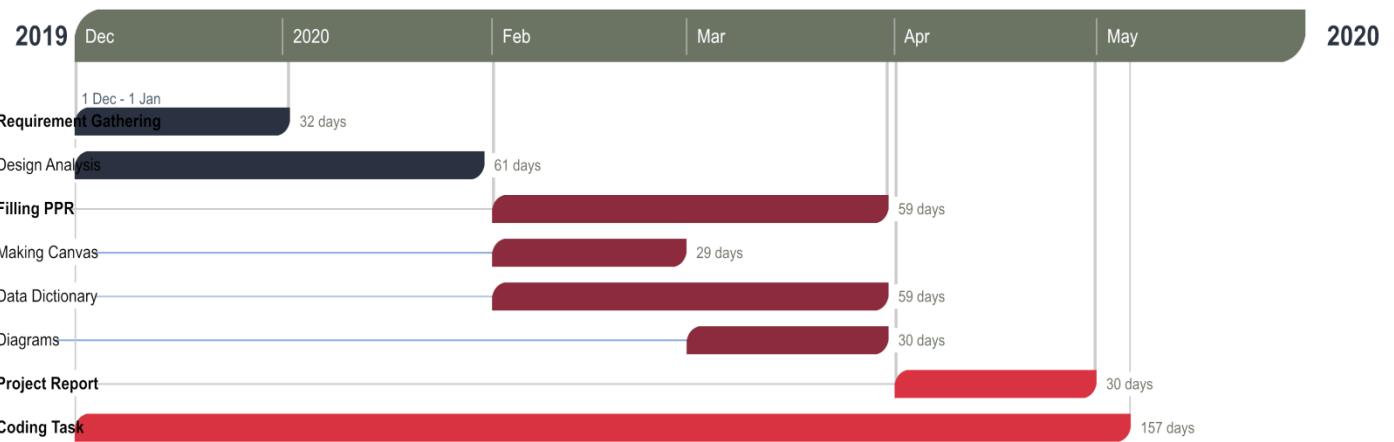


### 3.2.7.3 DFD Level 2



### 3.3 Gantt Chart

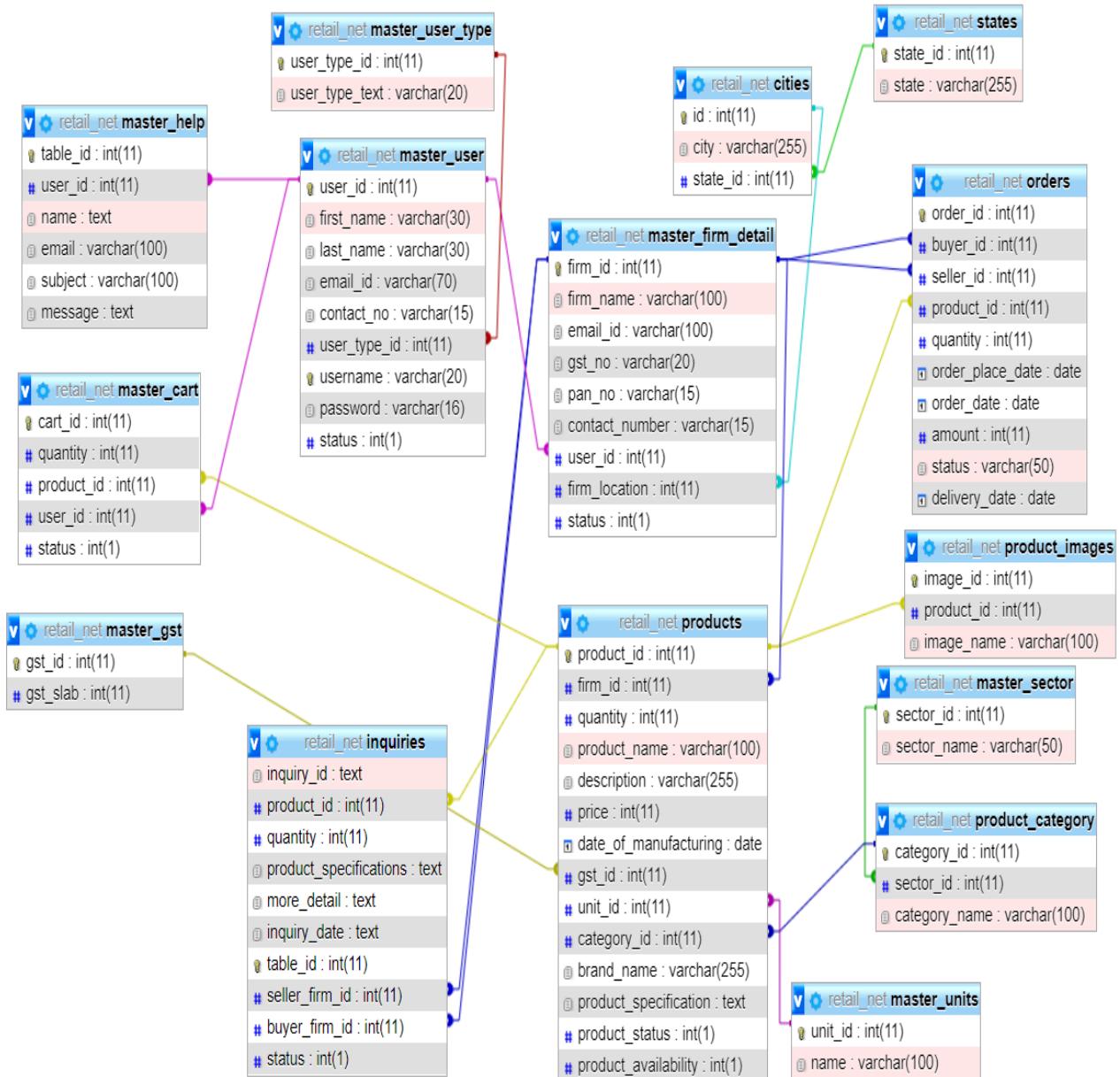
## Gantt Chart



Retail Net

## 3.2 Data Dictionary

### 3.4.1 Database Design



### 3.4.2 Database Tables

The screenshot shows the MySQL Workbench Tables browser. At the top, there are tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, Events, and Triggers. Below the tabs is a 'Filters' section with a search input field labeled 'Containing the word:'.

Table	Action	Rows	Type	Collation	Size	Overhead
cities	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	603	InnoDB	utf8mb4_general_ci	64.0 Kib	-
inquiries	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	64.0 Kib	-
master_cart	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	48.0 Kib	-
master_firm_detail	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	2	InnoDB	latin1_swedish_ci	64.0 Kib	-
master_gst	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	5	InnoDB	latin1_swedish_ci	16.0 Kib	-
master_help	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	utf8mb4_general_ci	32.0 Kib	-
master_sector	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	32	InnoDB	latin1_swedish_ci	16.0 Kib	-
master_units	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	99	InnoDB	utf8mb4_general_ci	16.0 Kib	-
master_user	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	2	InnoDB	latin1_swedish_ci	64.0 Kib	-
master_user_type	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	5	InnoDB	latin1_swedish_ci	16.0 Kib	-
orders	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	64.0 Kib	-
products	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	1	InnoDB	latin1_swedish_ci	80.0 Kib	-
product_category	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	701	InnoDB	latin1_swedish_ci	80.0 Kib	-
product_images	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	32.0 Kib	-
states	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	35	InnoDB	utf8mb4_general_ci	16.0 Kib	-
15 tables	Sum	1,485	InnoDB	utf8mb4_general_ci	672.0 Kib	0 B

At the bottom left, there are navigation icons for back, forward, and search. A 'Check all' checkbox and a 'With selected:' dropdown are also present.

### 3.4.3 Cart

The screenshot shows the MySQL Workbench Table structure browser for the 'cart' table. It has two tabs: 'Table structure' (selected) and 'Relation view'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	cart_id	int(11)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	quantity	int(11)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	product_id	int(11)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	user_id	int(11)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	status	int(1)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

Below the table, there are buttons for Print, Propose table structure, Track table, Move columns, Normalize, Add, and Go. There is also a dropdown for column selection and a 'Indexes' section.

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
<a href="#">Edit</a> <a href="#">Drop</a>	PRIMARY	BTREE	Yes	No	cart_id	0	A	No	
<a href="#">Edit</a> <a href="#">Drop</a>	FK_product_id_master_cart_products	BTREE	No	No	product_id	0	A	No	
<a href="#">Edit</a> <a href="#">Drop</a>	FK_user_id_master_cart_master_user	BTREE	No	No	user_id	0	A	No	

### 3.4.4 Category

The screenshot shows the 'Table structure' tab for the 'Category' table. The table has three columns: 'category\_id', 'sector\_id', and 'category\_name'. Primary key constraints are defined on 'category\_id' and 'sector\_id'. An index constraint is defined on 'category\_name'. The 'Indexes' section lists two indexes: 'PRIMARY' (primary key) and 'FK\_sector\_id\_product\_category\_master\_sector' (foreign key).

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	category_id	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	sector_id	int(11)			No	None			Change  Drop  More
3	category_name	varchar(100)	latin1_swedish_ci		No	None			Change  Drop  More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	category_id	701	A	No	
Edit  Drop	FK_sector_id_product_category_master_sector	BTREE	No	No	sector_id	70	A	No	

### 3.4.5 Cities

The screenshot shows the 'Table structure' tab for the 'Cities' table. The table has three columns: 'id', 'city', and 'state\_id'. Primary key constraints are defined on 'id' and 'state\_id'. An index constraint is defined on 'city'. The 'Indexes' section lists two indexes: 'PRIMARY' (primary key) and 'FK\_state\_id\_cities\_states' (foreign key).

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None			Change  Drop  More
2	city	varchar(255)	utf8mb4_general_ci		No	None			Change  Drop  More
3	state_id	int(11)			No	None			Change  Drop  More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	id	603	A	No	
Edit  Drop	FK_state_id_cities_states	BTREE	No	No	state_id	67	A	No	

### 3.4.6 Firm

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	<b>firm_id</b>	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	<b>firm_name</b>	varchar(100)	latin1_swedish_ci		No	None			Change  Drop  More
3	<b>email_id</b>	varchar(100)	latin1_swedish_ci		No	None			Change  Drop  More
4	<b>gst_no</b>	varchar(20)	latin1_swedish_ci		No	None			Change  Drop  More
5	<b>pan_no</b>	varchar(15)	latin1_swedish_ci		No	None			Change  Drop  More
6	<b>contact_number</b>	varchar(15)	latin1_swedish_ci		No	None			Change  Drop  More
7	<b>user_id</b>	int(11)			No	None			Change  Drop  More
8	<b>firm_location</b>	int(11)			No	None			Change  Drop  More
9	<b>status</b>	int(1)			No	None			Change  Drop  More

Check all    With selected:  Change Drop Primary

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after status

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	firm_id	2	A	No	
Edit  Drop	FK_user_id_master_firm_detail_master_user	BTREE	No	No	user_id	2	A	No	
Edit  Drop	FK_firm_location_master_firm_detail_cities	BTREE	No	No	firm_location	2	A	No	

### 3.4.7 GST

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	<b>gst_id</b>	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	<b>gst_slab</b>	int(11)			No	None			Change  Drop  More

Check all    With selected:  Change Drop Primary

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after gst\_slab

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	gst_id	5	A	No	

### 3.4.8 Help

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	table_id	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	user_id	int(11)			No	None			Change  Drop  More
3	name	text	utf8mb4_general_ci		No	None			Change  Drop  More
4	email	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
5	subject	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
6	message	text	utf8mb4_general_ci		No	None			Change  Drop  More

With selected: Primary Unique Index Fulltext Add to central columns

1 column(s) after message

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	table_id	0	A	No	
Edit  Drop	FK_user_id_master_help_master_user	BTREE	No	No	user_id	0	A	No	

### 3.4.9 Inquiries

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	inquiry_id	text	latin1_swedish_ci		No	None			Change  Drop  More
2	product_id	int(11)			No	None			Change  Drop  More
3	quantity	int(11)			No	None			Change  Drop  More
4	product_specifications	text	latin1_swedish_ci		No	None			Change  Drop  More
5	more_detail	text	latin1_swedish_ci		No	None			Change  Drop  More
6	inquiry_date	text	latin1_swedish_ci		No	None			Change  Drop  More
7	table_id	int(11)			No	None	AUTO_INCREMENT		Change  Drop  More
8	seller_firm_id	int(11)			No	None			Change  Drop  More
9	buyer_firm_id	int(11)			No	None			Change  Drop  More
10	status	int(1)			No	None			Change  Drop  More

With selected: Primary Unique Index Fulltext Add to central columns

1 column(s) after status

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	table_id	2	A	No	
Edit  Drop	FK_product_id_invoice_products	BTREE	No	No	product_id	2	A	No	
Edit  Drop	FK_buyer_firm_id_inquiries_master_firm_detail	BTREE	No	No	buyer_firm_id	2	A	No	
Edit  Drop	FK_seller_firm_id_inquiries_master_user	BTREE	No	No	seller_firm_id	2	A	No	

### 3.4.10 Product

Table structure for table `product`:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	product_id	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	firm_id	int(11)			No	None			Change  Drop  More
3	quantity	int(11)			No	None			Change  Drop  More
4	product_name	varchar(100)	latin1_swedish_ci		No	None			Change  Drop  More
5	description	varchar(255)	latin1_swedish_ci		No	None			Change  Drop  More
6	price	int(11)			No	None			Change  Drop  More
7	date_of_manufacturing	date			No	None			Change  Drop  More
8	gst_id	int(11)			No	None			Change  Drop  More
9	unit_id	int(11)			No	None			Change  Drop  More
10	category_id	int(11)			No	None			Change  Drop  More
11	brand_name	varchar(255)	latin1_swedish_ci		No	None			Change  Drop  More
12	product_specification	text	latin1_swedish_ci		No	None			Change  Drop  More
13	product_status	int(1)			No	None			Change  Drop  More
14	product_availability	int(1)			No	None			Change  Drop  More

---

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after product\_availability Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	product_id	0	A	No	
Edit  Drop	FK_gst_id_products_master_gst	BTREE	No	No	gst_id	0	A	No	
Edit  Drop	FK_category_id_products_product_category	BTREE	No	No	category_id	0	A	No	
Edit  Drop	FK_unit_id_products_master_units	BTREE	No	No	unit_id	0	A	No	
Edit  Drop	FK_firm_id_products_master_user	BTREE	No	No	firm_id	0	A	No	

### 3.4.11 Sector

Table structure for table `sector`:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	sector_id	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	sector_name	varchar(50)	latin1_swedish_ci		No	None			Change  Drop  More

---

Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns

Print Propose table structure Track table Move columns Normalize

Add 1 column(s) after sector\_name Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	sector_id	32	A	No	

### 3.4.12 User

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	<b>user_id</b>	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	<b>first_name</b>	varchar(30)	latin1_swedish_ci		No	None			Change  Drop  More
3	<b>last_name</b>	varchar(30)	latin1_swedish_ci		No	None			Change  Drop  More
4	<b>email_id</b>	varchar(70)	latin1_swedish_ci		No	None			Change  Drop  More
5	<b>contact_no</b>	varchar(15)	latin1_swedish_ci		No	None			Change  Drop  More
6	<b>user_type_id</b>	int(11)			No	None			Change  Drop  More
7	<b>username</b>	varchar(20)	latin1_swedish_ci		No	None			Change  Drop  More
8	<b>password</b>	varchar(16)	latin1_swedish_ci		No	None			Change  Drop  More
9	<b>status</b>	int(1)			No	None			Change  Drop  More

Check all    With selected:  Change Drop Primary Unique   Add to collection

Track table  Normalize

Add  column(s)

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	user_id	1	A	No	
Edit  Drop	UQ_Master_User_username	BTREE	Yes	No	username	1	A	No	
Edit  Drop	FK_user_type_id_master_user_master_user_type	BTREE	No	No	user_type_id	1	A	No	

### 3.3.13 Units

Table structure    Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	<b>unit_id</b>	int(11)			No	None		AUTO_INCREMENT	Change  Drop  More
2	<b>name</b>	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More

Check all    With selected:  Change Drop Primary Unique   Add to collection

Track table  Normalize

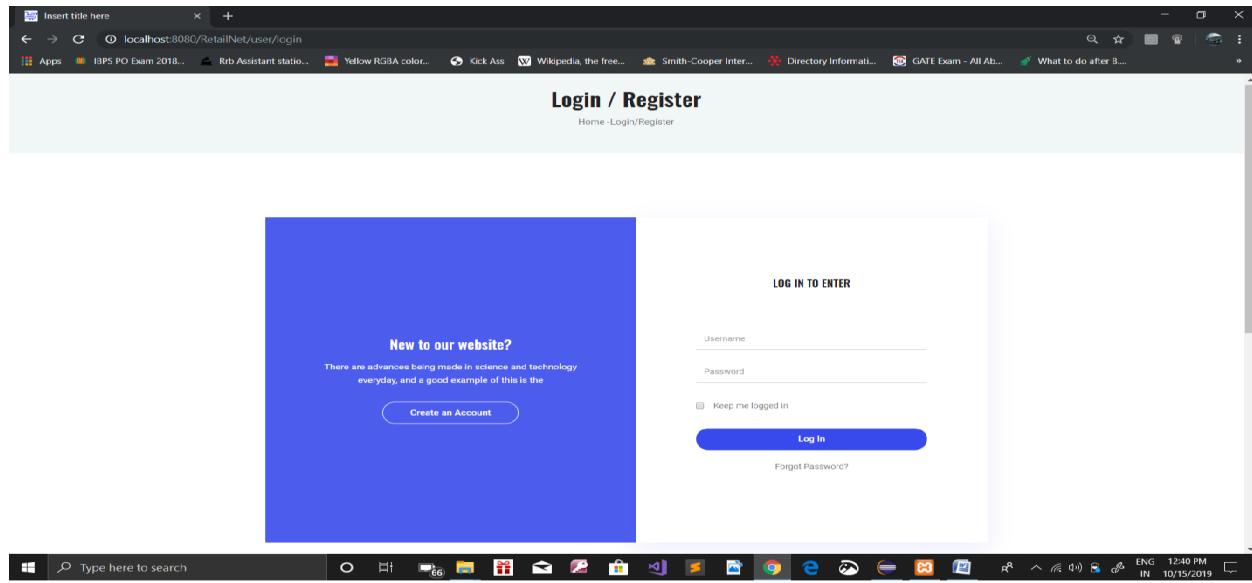
Add  column(s)

Indexes

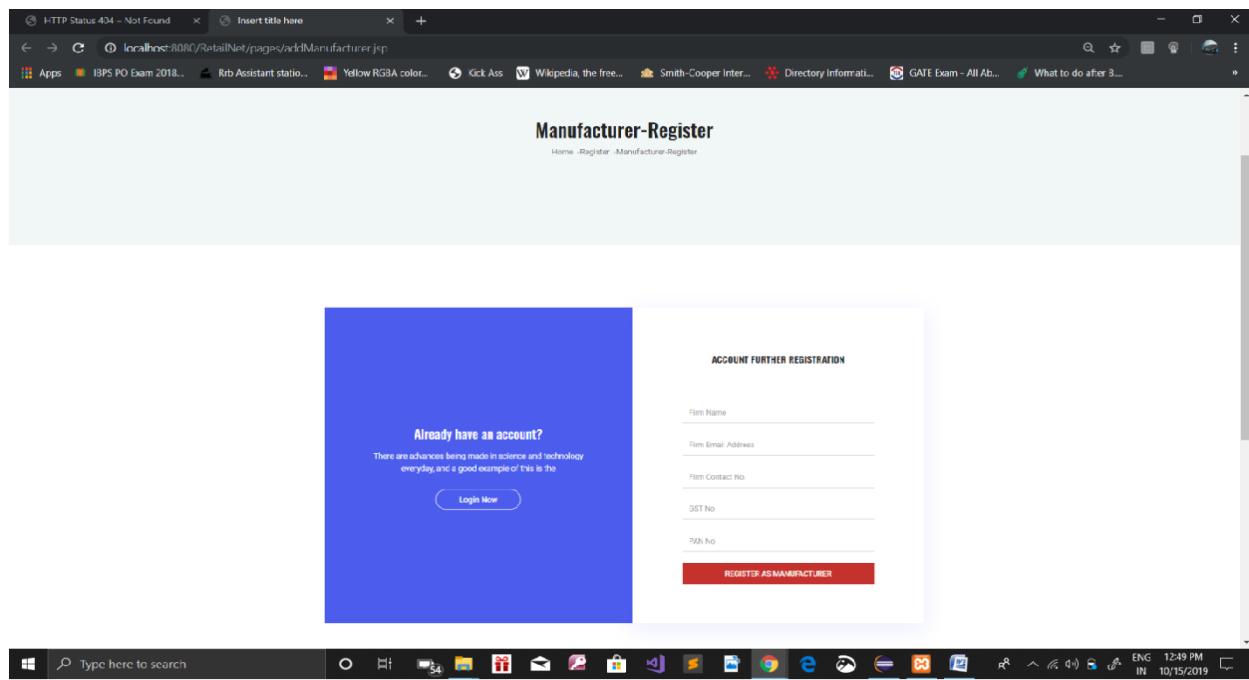
Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit  Drop	PRIMARY	BTREE	Yes	No	unit_id	99	A	No	

## 3.5 Snapshots

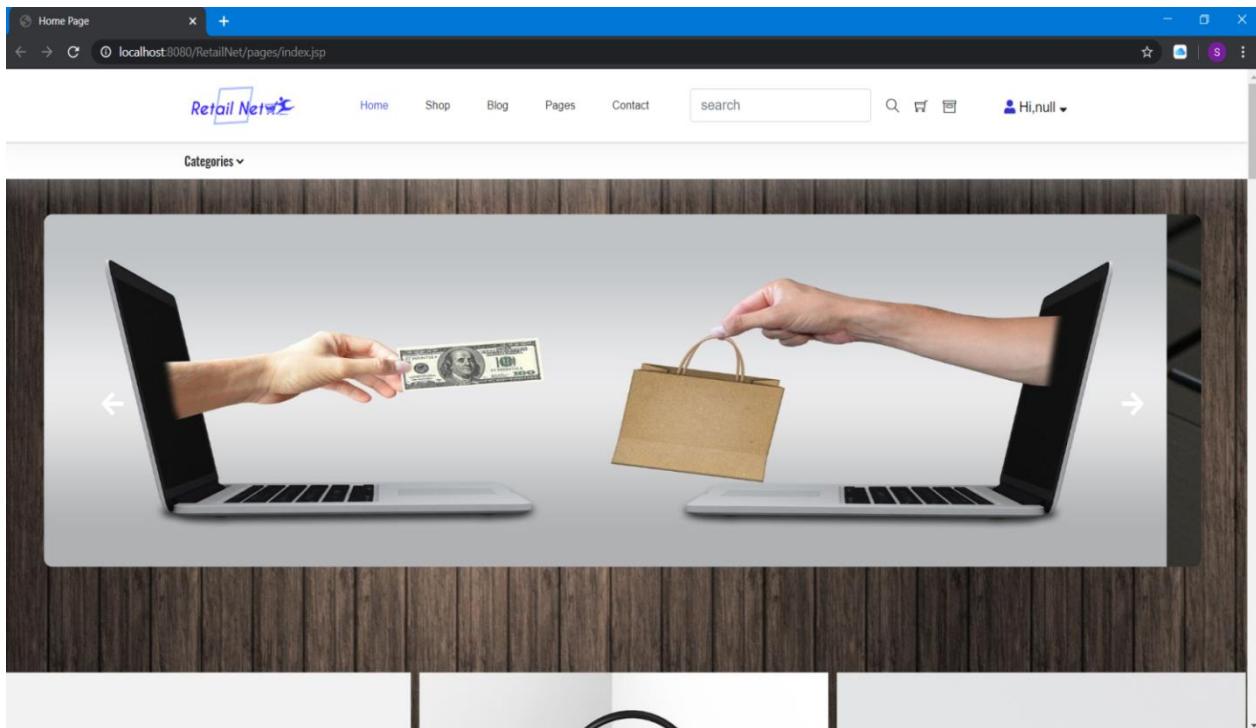
### 3.5.1 Login



### 3.5.2 Register



### 3.5.3 Index



### 3.5.4 Add Product

A screenshot of a web browser displaying the 'Add Product' form. The URL in the address bar is 'localhost:8080/RetailNet/products/addProducts'. The page has a title 'Add Product' and a subtitle 'Home -AddProduct'. The form contains fields for Product ID, Product Name, Product Description FR, Product Category, Available Quantity, Product Weight, Product Description, Product Description FR, Percentage Discount, Comment, and Approved By. There is also a 'Button' at the bottom. The browser's taskbar and system tray are visible at the bottom.

## 4. SUMMARY

### 4.1 Benefits

- A web application that provides interacting medium between Manufacturers, Whole-sellers, Distributors and Retailers.
- A cost and time efficient application which provides the communicating medium between the entities. This could relief an entity from fuss of visiting the other entities that saves time and provides more attention to their business.
- Details of product will be visible to the entity which can reduce paper work and time. Entity will also know the address of other entities along with the products that they sell.
- Using this platform entity can manage the task of getting the resources or raw materials from other entities.

### 4.2 Future Work

- Expansion in terms of business.
- Make it more attractive.
- More Dynamic by involving common users in it.
- Business-Consumer relation can also be established.
- Range and scope to be expanded

### 4.3 References

- <https://wordpress.org>
- <https://help.eclipse.org/2019-09/index.jsp>
- <https://docs.oracle.com/en/java/>
- <https://www.w3schools.com/js/>
- <https://www.w3schools.com/css/>
- <https://www.w3schools.com/bootstrap4/>
- <https://www.javatpoint.com/hibernate-tutorial>
- <https://www.javatpoint.com/spring-tutorial>
- [Head First Java: A Brain-Friendly Guide, 2nd Edition](#)
- [Effective Java](#)

# Appendix 1: Periodic Progressive Report

Sanjay Bhagchandani (160260107047)

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Bhagchandani Sanjay Khushalbhai

EnrollmentNo : 160260107001 Department : Computer Engineering

MobileNo : 9601863441 Discipline : BE

Email : sanjaybhagchandani007@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : First PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

We Have completed the login-logout module,Forget password and verification module that contains OTP Generation.

2. What challenge you have faced ?

We face some database issues and dealing with the new jar files that use to send mails were difficult.

3. What support you need ?

We need to study about the mail jar files and more about hibernate queries.

4. Which literature you have referred ?

We referred to the online notes of hibernate queries and hibernate.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#)[Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Bhagchandani Sanjay Khushalbhai  
EnrollmentNo : 160260107001 Department : Computer Engineering  
MobileNo : 9601863441 Discipline : BE  
Email : sanjaybhagchandani007@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : Second PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

So Far we have completed the edit module in which we can edit/update users profile and other details.Every detail can be updated individually.

2. What challenge you have faced ?

We faced some front end issues of css files but we managed to built it by basic use of html,css.

3. What support you need ?

We studied more about html and css.

4. Which literature you have referred ?

We reffered to w3school and other online sources.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Bhagchandani Sanjay Khushalbhai

EnrollmentNo : 160260107001

Department : Computer Engineering

MobileNo : 9601863441

Discipline : BE

Email : sanjaybhagchandani007@gmail.com

Semester : Semester 8

## PPR Details

Periodic Progess Report : Third PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

We have started working on new module namely product module. Now user can add their products and even images to it. We are currently working on editing/updating the product detail.

2. What challenge you have faced ?

There were some issues of dynamic updation of front end website.

3. What support you need ?

We studied about the ajax and its features that can be used for creating asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously without interfering with the display and behavior of the existing page.

4. Which literature you have referred ?

We reffered to wikipedia and ajax notes and examples from youtube.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#)[Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Bhagchandani Sanjay Khushalbhai  
EnrollmentNo : 160260107001 Department : Computer Engineering  
MobileNo : 9601863441 Discipline : BE  
Email : sanjaybhagchandani007@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : Forth PPR

Project : Retail Net

Status : Submitted

1. What Progress you have made in the Project ?

We have started working on add to cart and enquiry module. These two modules are used after a buyer views a single product. USer tables and Product Tables are completed.

2. What challenge you have faced ?

There were issues of dynamic loading of data in website.

3. What support you need ?

We studied about Json and Jquery.

4. Which literature you have referred ?

We reffered to online notes of Json and Jquery.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

# Rishabh Khale(160260107040)

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Rishabh Shailendra Khale  
EnrollmentNo : 160260107040 Department : Computer Engineering  
MobileNo : 8849243757 Discipline : BE  
Email : khalerishabh998@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : First PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

We Have completed the login-logout module,Forget password and verification module that contains OTP Generation.

2. What challenge you have faced ?

We face some database issues and dealing with the new jar files that use to send mails were difficult.

3. What support you need ?

We need to study about the mail jar files and more about hibernate queries.

4. Which literature you have referred ?

We referred to the online notes of hibernate queries and hibernate.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Rishabh Shailendra Khale  
EnrollmentNo : 160260107040 Department : Computer Engineering  
MobileNo : 8849243757 Discipline : BE  
Email : khalerishabh998@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : Second PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

So Far we have completed the edit module in which we can edit/update users profile and other details.Every detail can be updated individually.

2. What challenge you have faced ?

We faced some front end issues of css files but we managed to built it by basic use of html,css.

3. What support you need ?

We studied more about html and css.

4. Which literature you have referred ?

We referred to w3school and other online sources.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Rishabh Shailendra Khale  
EnrollmentNo : 160260107040 Department : Computer Engineering  
MobileNo : 8849243757 Discipline : BE  
Email : khalerishabh998@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : Third PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

We have started working on new module namely product module. Now user can add their products and even images to it. We are currently working on editing/updating the product detail.

2. What challenge you have faced ?

There were some issues of dynamic updation of front end website.

3. What support you need ?

We studied about the ajax and its features that can be used for creating asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously without interfering with the display and behavior of the existing page.

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Comment by HOD :

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None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Rishabh Shailendra Khale

EnrollmentNo : 160260107040

Department : Computer Engineering

MobileNo : 8849243757

Discipline : BE

Email : khalerishabh998@gmail.com

Semester : Semester 8

## PPR Details

Periodic Progess Report : Forth PPR

Project : Retail Net

Status : Submitted

1. What Progress you have made in the Project ?

We have started working on add to cart and enquiry module. These two modules are used after a buyer views a single product. USer tables and Product Tables are completed.

2. What challenge you have faced ?

There were issues of dynamic loading of data in website.

3. What support you need ?

We studied about Json and Jquery.

4. Which literature you have referred ?

We reffered to online notes of Json and Jquery.

## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

# Kushal Thakar(160260107047)

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Thakar Kushalkumar Dipakbhai

EnrollmentNo : 160260107047

Department : Computer Engineering

MobileNo : 9925535509

Discipline : BE

Email : kushalthakar555@gmail.com

Semester : Semester 8

## PPR Details

Periodic Progess Report : First PPR

Project : Retail Net

Status : Reviewed

1. What Progress you have made in the Project ?

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None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#)[Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Thakar Kushalkumar Dipakbhai

EnrollmentNo : 160260107047

Department : Computer Engineering

MobileNo : 9925535509

Discipline : BE

Email : kushalthakar555@gmail.com

Semester : Semester 8

## PPR Details

Periodic Progress Report : Second PPR

Project : Retail Net

Status : Submitted

1. What Progress you have made in the Project ?

So Far we have completed the edit module in which we can edit/update users profile and other details. Every detail can be updated individually.

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None

Comment by External Guide :

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Comment by HOD :

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Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#) [Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL  
StudentName : Thakar Kushalkumar Dipakbhai  
EnrollmentNo : 160260107047 Department : Computer Engineering  
MobileNo : 9925535509 Discipline : BE  
Email : kushalthakar555@gmail.com Semester : Semester 8

## PPR Details

Periodic Progess Report : Third PPR

Project : Retail Net

Status : Submitted

1. What Progress you have made in the Project ?

We have started working on new module namely product module. Now user can add their products and even images to it. We are currently working on editing/updating the product detail.

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Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

4/30/2020

Periodic Progress Report (PPR) Details

[Print](#)[Back](#)

College : KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL

StudentName : Thakar Kushalkumar Dipakbhai

EnrollmentNo : 160260107047

Department : Computer Engineering

MobileNo : 9925535509

Discipline : BE

Email : kushalthakar555@gmail.com

Semester : Semester 8

## PPR Details

Periodic Progess Report : Forth PPR

Project : Retail Net

Status : Submitted

1. What Progress you have made in the Project ?

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## Comments

Comment by Internal Guide :

None

Comment by External Guide :

None

Comment by HOD :

None

Comment by Principal :

None

Comment by University Admin :

None

## Appendix 2: Patent Drafting Exercise

4/14/2020

PDE Details

College	: KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL
Department	: Computer Engineering
Discipline	: BE
Semester	: Semester 8
Project Name	: Retail Net
Team ID	: 85549

### **Form 1 – APPLICATION FOR GRANT OF PATENT**

Applicants :

<b>Sr. No</b>	<b>Name</b>	<b>Nationality</b>	<b>Address</b>	<b>Mobile No.</b>	<b>Email Id</b>
1	Bhagchandani Sanjay Khushalbhai	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL , Gujarat Technological University.	9601863441	sanjaybhagchandani007@gmail.co
2	Thakar Kushalkumar Dipakbhai	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL , Gujarat Technological University.	9925535509	kushalthakar555@gmail.com
3	Rishabh Shailendra Khale	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL , Gujarat Technological University.	8849243757	khalerishabh998@gmail.com

Inventors :

<b>Sr. No</b>	<b>Name</b>	<b>Nationality</b>	<b>Address</b>	<b>Mobile No.</b>	<b>Email Id</b>
1	Bhagchandani Sanjay Khushalbhai	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY &	9601863441	sanjaybhagchandani007@gmail.com

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4/14/2020

PDE Details

			RESEARCH CENTRE, KALOL , Gujarat Technological University.		
2	Thakar Kushalkumar Dipakbhai	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL , Gujarat Technological University.	9925535509	kushalthakar555@gmail.com
3	Rishabh Shailendra Khale	Indian	Computer Engineering , KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE, KALOL , Gujarat Technological University.	8849243757	khalerishabh998@gmail.com

I/We, the applicant(s) hereby declare(s) that:

Following are the attachments with the applications :

## Form 2 - PROVISIONAL/COMPLETE SPECIFICATION

1 . Title of the project/invention :

Retail Net

2. Preamble to the description :

Provisional

3. Description

a) Field of Project / Invention / Application :

Supply chain management

b) Prior Art / Background of the Project / Invention :

online supply chain management

c) Summary of the Project / Invention :

Our first phase was Preliminary Investigation in which we collected all the information related to our project with the help of Internet and other applications. In this phase, we made our minds clear for what we were going to develop.

Second phase was the Analysis phase. In that, we collected all requirements from company. We have also studied non-functional requirement and domain requirements that were not told by the company. We analysed the requirements and made UML diagrams for our system.

After that design came into place, where we have fixed our databases and decided the different

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PDE Details

modules that would work for the system. There is also lots of help provided by our college department regarding how to prepare document how to follow each principle regarding software engineering.

All the hospitals currently involve a lot of paperwork and patients have to wait in long queues for even normal check-ups. So it is a very time consuming and tedious task. We therefore decided to develop Retail Net, a system for such networks. The system we have developed is specifically for one particular and can be extended to its multiple branches.

d) Objects of Project / Invention :

The main purpose of using “Retail Net” is that it benefits the business and the customer. The wholesaler can reduce their prices of the products that they sell which will allow the consumer to purchase more stock at a more suitable price. The wholesaler can sell more products at a reduced price but will gain profit from this as it benefits both parties. Also it cuts out the unwanted wasted time. Without the e-commerce application wholesalers and consumers or any other entity used a paperback catalogue, this wastes time

that companies can't afford. An advantage of using this web application is that it saves time and fuss of visiting the other entities.

e) Drawings :

f) Description of Project / Invention : (full detail of project) :

E-commerce is an online selling network. This effective way of buying allows the customer to create a bulk order online, this, therefore, cuts out the hassle and is a quicker and easier transaction. Meaning you doesn't even need reps to sell your product.

“Retail Net” is a web application that provides interacting medium between entities like Manufactures, Whole-sellers, Distributors and Retailers.

“Retail Net” is not for common users. This is a web application that provides service to business related entities.

Using this system entity's can manage the task of getting the resources or raw materials or product from other entities.

It is a cost and time efficient E-commerce web application which provides the communicating medium between the above mentioned entities.

Details of product will be visible to each entity according to their requirements. Invoice will be generated which can reduce paper work and time.

g) Examples :

h) Claims (Not required for Provisional Application) / Unique Features of Project

“Retail Net” is an E-Commerce web application which is used by Manufactures, Whole-sellers, Distributors and Retailers.

4/14/2020

PDE Details

This web-app includes features like online ordering, order tracking, invoice generation, product update etc and it also provide security with beautiful interface so that user can easily interact with the web-app.

The main focus is to maintain the trade between the entities through the means of internet, which will be done by this web Application.

This web application does not concern with the customers or the end users in the supply chain network.

But the future scope can include them.

4. Claims

5. Date and signature

6. Abstract of the project / invention :

This application will be applicable to a particular supply chain entities in a city.

Retail net will be a web based supply chain management system. So it will reduce paperwork and will be time saving. This will be most beneficial for the entities.

entities can register with their details and they can login using email and password.

entities can search for a particular product by name and specialization. They can place orders as per their need and check for the availability

Seller will confirm Buyers order only if they can accept. By logging in, they can view all other products of other entities .

This application will simplify all the entities and their products.various activities – Managing Orders and Product information.

After logging in, seller can confirm the order's and update /delete the product information.  
Admin can add, manage and delete all the entries.

### **Form 3 – STATEMENT AND UNDERTAKING UNDER SECTION 8**

Name of the applicant(s) : I/We, Bhagchandani Sanjay Khushalbhai ,Thakar Kushalkumar Dipakbhai ,Rishabh Shailendra Khale

Hereby declare :

Name,Address and Nationality of the joint applicant : (i) that I/We have not made any application for the same/substantially the same victim invention outside India.

(ii) that the rights in the application(s) has/have been assigned to

Name of the Country	Date of Application	Application Number	Status of the Application	Date of Publication	Date of Grant
N/A	N/A	N/A	N/A	N/A	N/A

(iii)That I/We undertake that upto the date of grant of the patent by the Controller, I/We would keep him informed in writing the details regarding corresponding applications for patents filed outside India within three months from the date of filing of such application.

Dated this 14 day of April 2020

To be signed by the applicant or Signature.....

4/5

4/14/2020

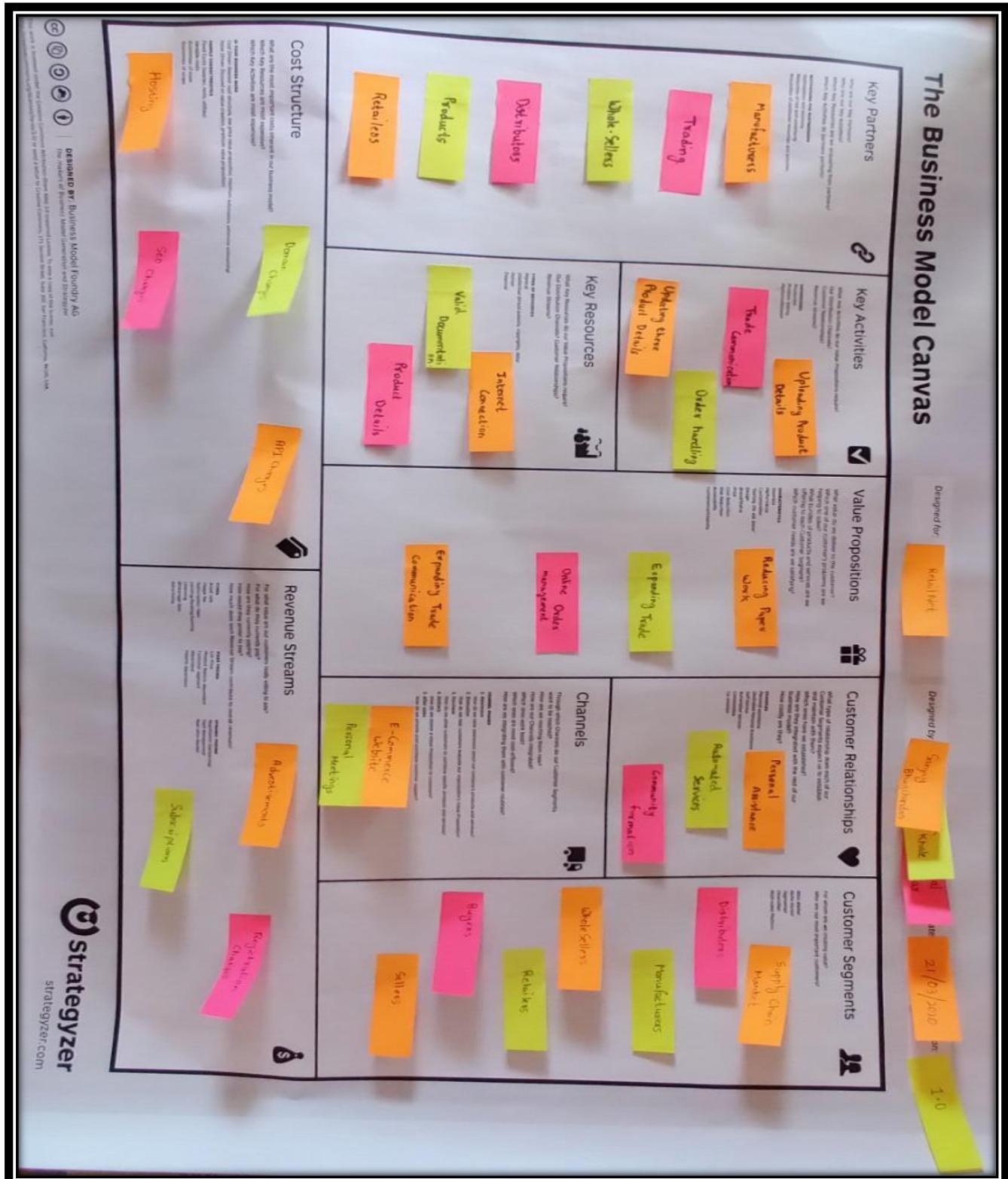
PDE Details

his authorised registered patent  
agent :

Name of the Natural Person who Bhagchandani Sanjay Khushalbhai ,Thakar Kushalkumar Dipakbhai  
has signed : ,Rishabh Shailendra Khale

To,  
The Controller of Patents,  
The Patent Office,  
At Mumbai

# Appendix 3: Business Model Canvas



**Team ID: 85549**

**Retail Net**

**Team ID: 85549**

**Retail Net**