Project Report

On

Pick N Save Mart

Submitted in partial fulfillment for the award of

Diploma in Advance Computing(E-DAC) from

TABLE OF CONTENTS

1. Introduction of Project

2. Product Overview and Summary
   Purpose
   Scope
   Overview
   Feasibility Study

3. Overall Description
   Product Feature
   Technology Used
   User Classes
   3.3 General Constraints

4. Requirement
   Functional Requirements
   User Interface Requirements

5. Design
   High Level Design
   Database Design

6. Interface (UI)

7. Test Report

8. Project Management Methodology

9. Future Scope

1. Introduction of Project:

We have created an e-Commerce website where the user can visit different shops and buy different products according to their choice .
The platform displays and provides various numbers of goods and services which are available to purchase for end users. User Interface, developed in React uses user email to authenticate and data is imported using REST. UI makes secure calls to Spring Boot. In the backend, JAVA is used tofetch and manipulate the data and used MySQL as database.

The Pick N Save allow user to buy products and add them to the cart .Pick N Save provides facilities for adding, deleting, updating products and also user can sort the product list on price based criteria. Pick N Save also allows users to see their order details in my order section. It can be used as the fully developed e-commerce website.

For all this a lot of API's is used for the ease of user. API allows two applications to talk to each other and then the application interprets that data and presents the user with the information the user wanted in a readable way.
For the login of users into this website we use the user email authentication, which allows users to sign up with their email. This platform is based on REST services and it tends to independency of all services. This platform is rapid and frequent due to this technique.

2. Product Overview and Summary

Purpose:

We need an e-Commerce website where user can buy different types of products from local shops. There are very few websites which sell products from local shops which are present in local area . so that's why we have created this website so that customers can get more platforms to purchase the products. We are providing numerous shops and products available on shops to the customer and also providing user friendly UI to the customer which will help in maintaining the relationship of customer with the company.

Scope:

Pick N Save Mart is a platform where customer can explore the varieties of products and able to buy anyof them according to their needs.

Overview:

Section 3.0, the Overall Description, provides an overview of the components and the relationship between them. Section 4.0 provides the Specific Requirements of the product. In the subsection (4.1) and (4.2) of which the various functional requirements and various interface respectively are discussed. Section 5.0 describes Database Design details.

Feasibility Study

Feasibility is determination of whether a projects worth doing or not. Before actually recommending the new system it is important to investigate if it is feasible to develop the new system.

Before developing and implementing a system we have sure that our system is feasible in the following ways:

1. **Technical Feasibility.**
2. **Operational Feasibility.**

- **Technical Feasibility:**

In the type of feasibility study, the system analyst has to check whether it is possible or not to develop the requested system with availability of manpower, software, hardware, etc. The system which we run in Linux as well as windows platform and hence are suitable for the end-user. The system is technically feasible because it does not require too many resources and runs with the browser. A proof of concept was implemented to verify the technical feasibility to retrieve data from various APIs.

- **Operational Feasibility:**

In this type of feasibility study the operation implementation of the system is considered. Checking is done regarding whether it is feasible for the users to use the application. Thus the proposed system is said to be operationally feasible only of the end users are able to understand the system clearly and correctly and can use the system with ease and with the minimum training.

3. Overall Description:

Product Features

The project's aim is to provide an e-Commerce website for local shpos which are available in local area using technologies java (platformindependent), React, API's for user

Technology Used

BACK END
Spring Boot Hibernate.
MYSQL as a Databases.

FRONT END
React
CSS
Hooks

Platform:
Web Development: J2EE Spring Boot, ReactJs, MySQL

J2EE Spring Boot

Spring Boot has been built for Rapid Application Development. The goal of Spring Boot is to provide a way to create Java applications quickly and simply, through an embedded server. By default, it used an embedded version of Tomcat and hence eliminating the need of Java EE containers.
It is a framework to ease the bootstrapping and development of new Spring Applications. Bootstrapping with defaults included in the configuration/ jar-dependencies. Easy to create standalone applications with embedded Tomcat/Jetty/Undertow. It provides defaults for code and annotation configuration to quick start new spring projects within no time. Plenty of Spring Boot Starter to quickly get up and running.
No code generation and no requirement for XML configuration. It reduces lots of development time and increases productivity.

React

React is a JavaScript library for building user interfaces. It has transformed the way we think about front-end development. React.js has clasped the engagement of the open-source community. And its demand is irreversible in the coming future. It is here to stay.

Improved performance: React uses Virtual DOM, thereby creating web applications faster. Virtual DOM compares the components' previous states and updates only the items in the Real DOM that were changed, instead of updating all of the components again, as conventional web applications do.

MySQL

MySQL is an open-source relational database management system (RDBMS).A list of commonly used MySQL queries to create database, use database, create table, insert record, update record, delete record, select record, truncate table and drop table etc. MySQL is a relational database management system based on SQL – Structured Query Language. The application is used for a wide range of purposes, including data warehousing, e-commerce, and logging applications.
The most common use for MySQL, however, is for the purpose of a web database. It can be used to store anything from a single record of information to an entire inventory of available products for an online store. In association with a scripting language such as PHP or Perl (both offered on our hosting accounts) it is possible to create websites which will interact in real-time with a MySQL database to rapidly display categorized and searchable information to a website user.

User Classes

There is two type of user which can access this website. One is customer and the second one is Vendor which will manage to add shop , add products to their shop, delete shop, delete product, edit shop, edit product.

General Constraints

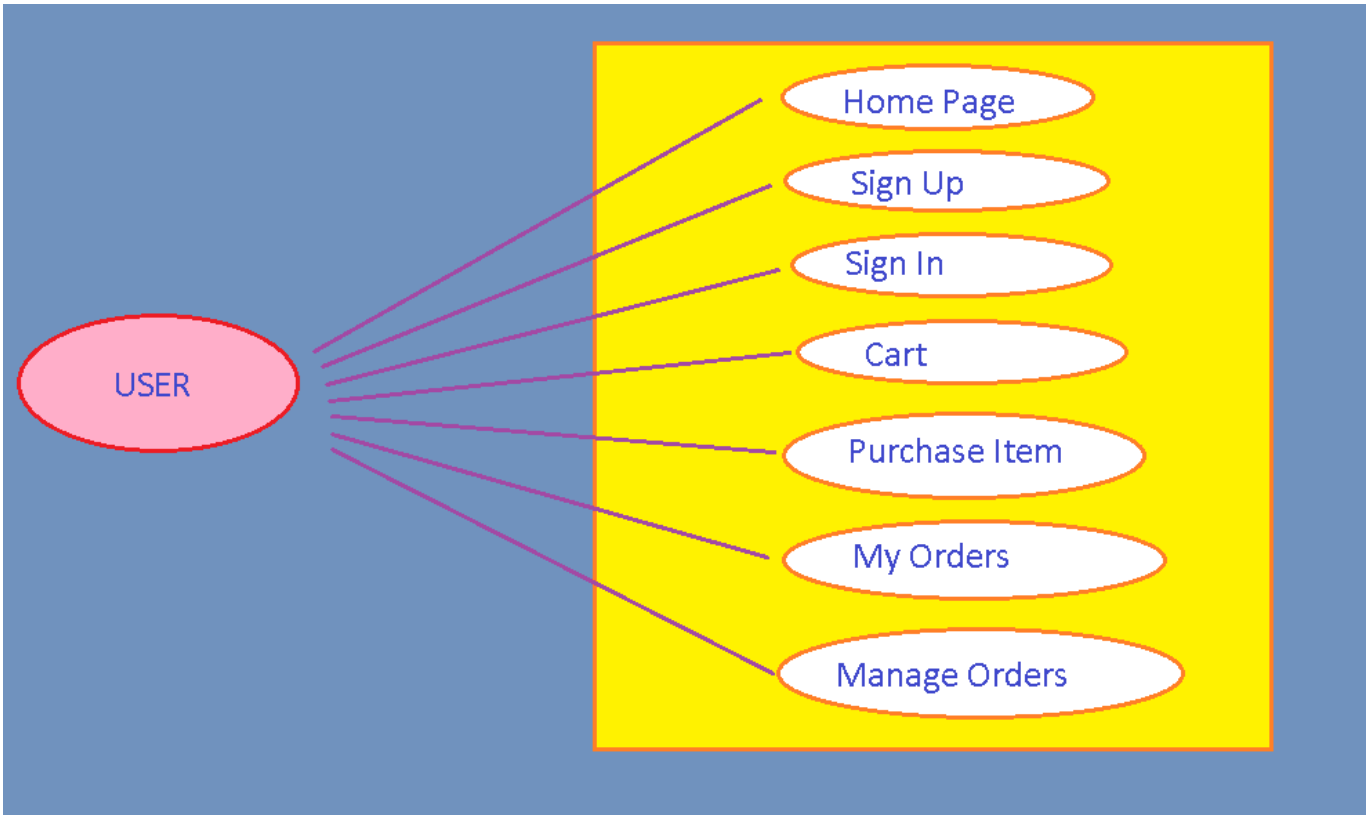
Users should have an email and have a browser

4. REQUIREMENTS

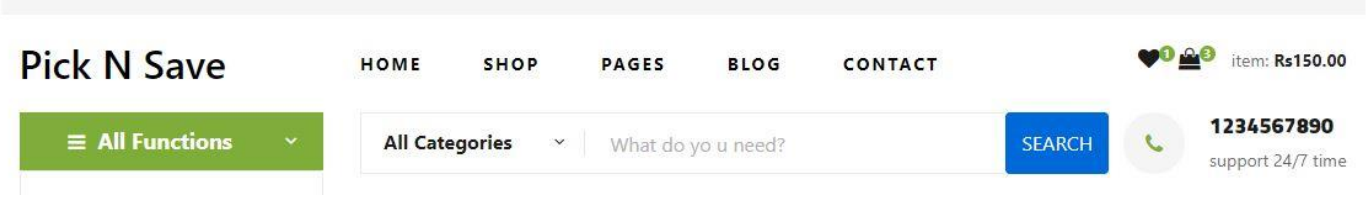
FUNCTIONAL REQUIREMENTS

Complete System:

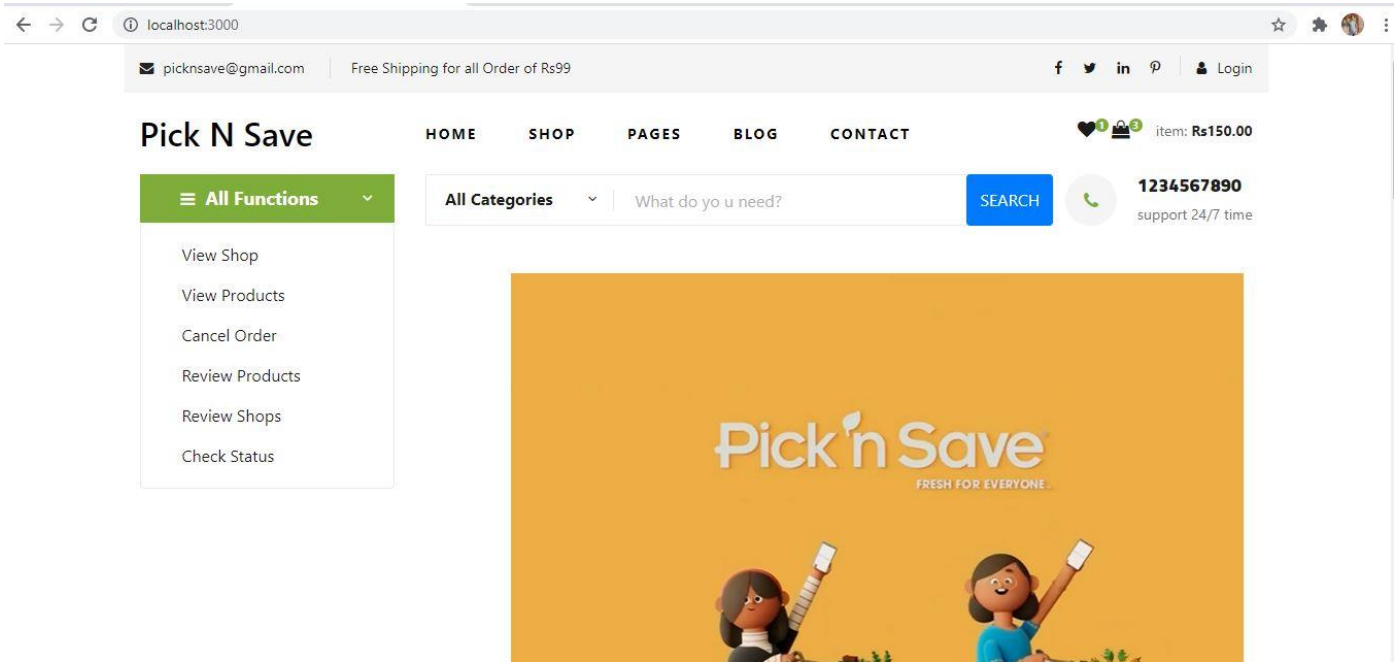
USER



4.1 USER INTERFACE REQUIREMENTS

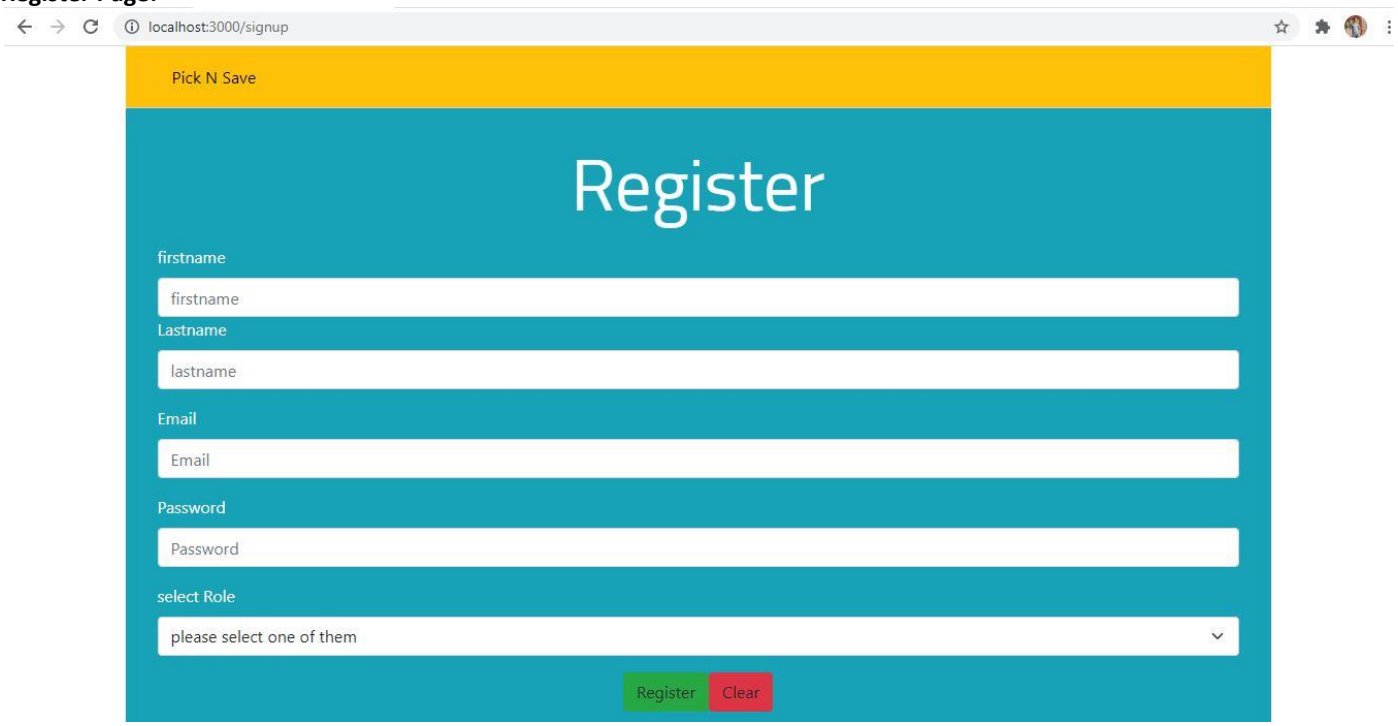


Home Page


localhost:3000
picknsave@gmail.com
Free Shipping for all Order of Rs99
Login
Pick N Save
HOME
SHOP
PAGES
BLOG
CONTACT
item: Rs150.00
All Functions
View Shop
View Products
Cancel Order
Review Products
Review Shops
Check Status
All Categories
What do yo u need?
SEARCH
1234567890
support 24/7 time
Pick 'n Save
FRESH FOR EVERYONE

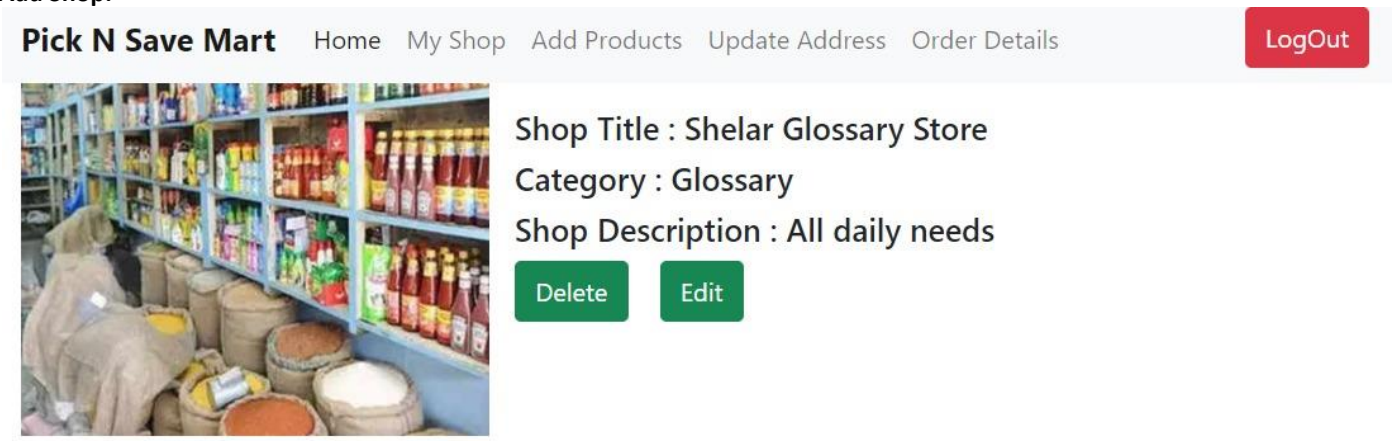
Login page:

Register Page:

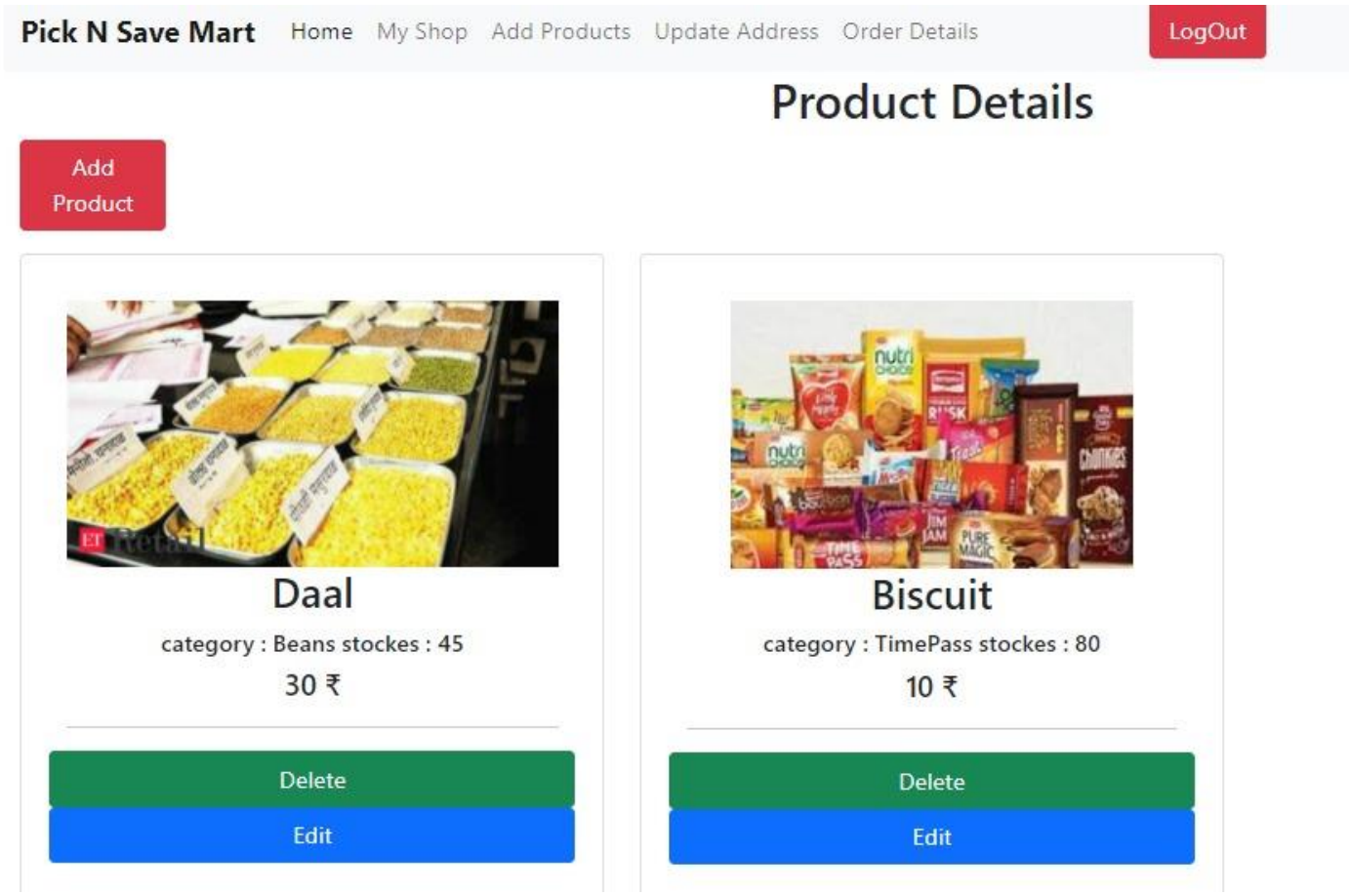


Vendor Home page:

Add Shop:



Add Products:



Visit Shop:

Pick N Save Mart Home Shops Products MyProfile Cart LogOut

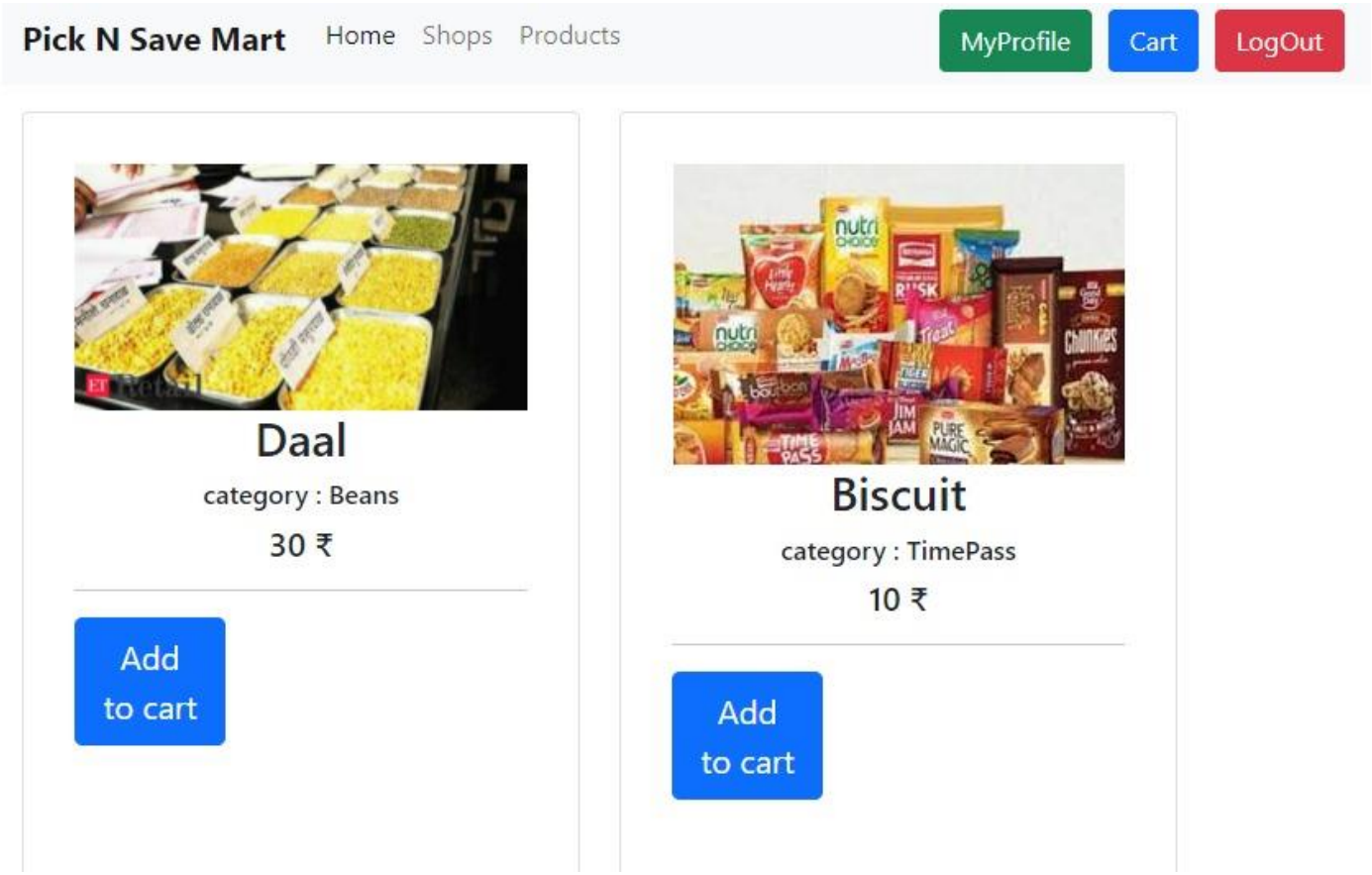
Shop Title : Shelar Glossary Store

Category : Glossary

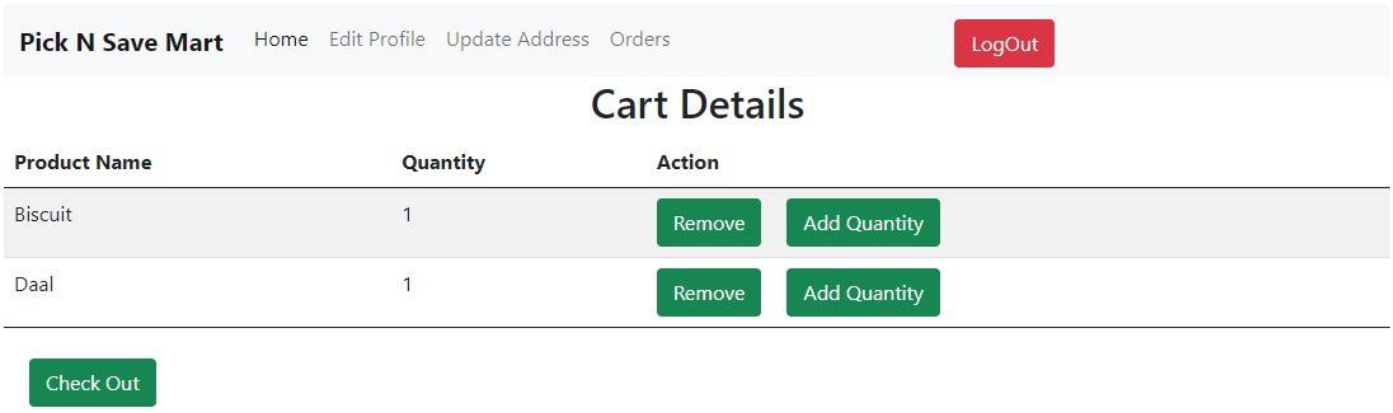
Shop Description : All daily needs

Visit Shop

Add to cart Product:



Cart Details:



Order Placed:

Pick N Save Mart Home Edit Profile Update Address Orders LogOut

Product Name	Unit Price	Quantity	SubTotal	Status	Action
Biscuit	10	1	10	PACK	Cancel Order
Daal	30	2	60	PACK	Cancel Order
Biscuit	10	2	20	PACK	Cancel Order
Daal	30	1	30	PACK	Cancel Order
Biscuit	10	7	70	PACK	Cancel Order
Daal	30	2	60	PACK	Cancel Order

Order Details:

Pick N Save Mart Home My Shop Add Products Update Address Order Details LogOut

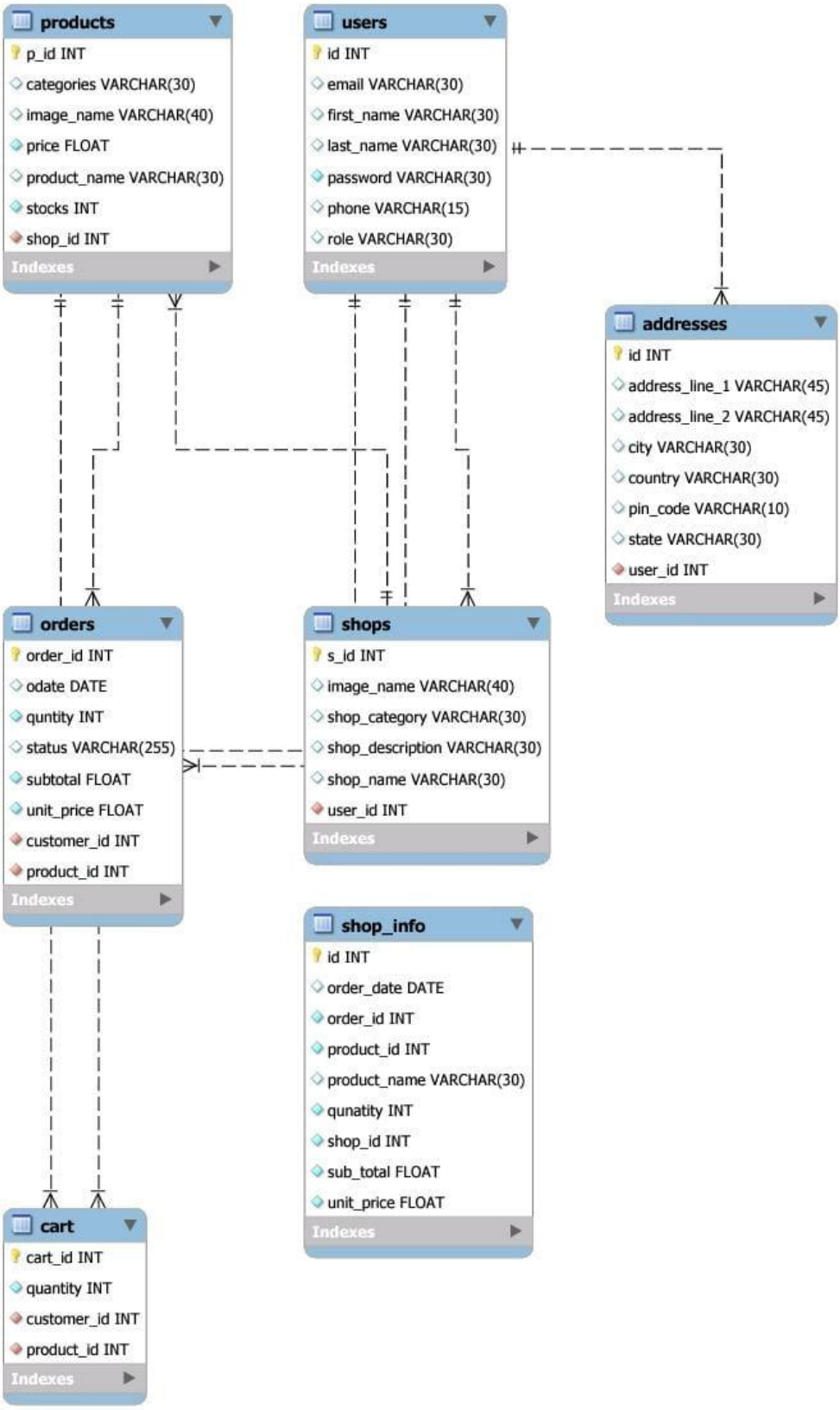
Shop Order Details

Product Name	Qunatity	Unit Price	Sub Total	Date
Biscuit	2	10	20	2021-09-26
Daal	1	30	30	2021-09-26
Biscuit	7	10	70	2021-09-27
Daal	2	30	60	2021-09-27

5.2 Database Design

The following table structures depict the database design.

ER Diagram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categories VARCHAR(30)
image_name VARCHAR(40)
price FLOAT
product_name VARCHAR(30)
stocks INT
shop_id INT
Indexes
users
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email VARCHAR(30)
first_name VARCHAR(30)
last_name VARCHAR(30)
password VARCHAR(30)
phone VARCHAR(15)
role VARCHAR(30)
Indexes
addresses
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address_line_2 VARCHAR(45)
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country VARCHAR(30)
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state VARCHAR(30)
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Indexes
orders
order_id INT
odate DATE
quntity INT
status VARCHAR(255)
subtotal FLOAT
unit_price FLOAT
customer_id INT
product_id INT
Indexes
shops
s_id INT
image_name VARCHAR(40)
shop_category VARCHAR(30)
shop_description VARCHAR(30)
shop_name VARCHAR(30)
user_id INT
Indexes
shop_info
id INT
order_date DATE
order_id INT
product_id INT
product_name VARCHAR(30)
qunatity INT
shop_id INT
sub_total FLOAT
unit_price FLOAT
Indexes
cart
cart_id INT
quantity INT
customer_id INT
product_id INT
Indexes

7. Testing:

The report of the testing is given here under.

Test Cases

Sr. No	Test Case Title	Description	Expected Outcome	Error Message	Result
1	Login Page	User should see loginpage when user will enter email and password.	After signing in user to be directed to home page	Invalid Crede n	Passed
2	Home page Displayed	Home page display for every successful log in.	Home Page Displayed	No Error	Passed
3	Vendor Page	Users Can see different shops	Able to Add cart	No Error	Passed
4	Categories Page	Users can see different categories of the products available.	Category to be selected.	No Error	Passed
5	My Orders Page	Here, user can see his all its order and can also cancel the order.	User can manage is order.	No Error	Passed
6	Add Shop	Vendor can be able to add shop.	User can write his problem to the company.	No Error	Passed
7	Add Product	Shop vendor will Add product to their shop	Product added	NO Error	Passed
8	Checkout Page	User can review its product details.	After clicking on checkout user will place the order.	No Error	Passed
9	Sign Up	Should not allow any control to be empty if not null	If validated Allow to go to home page	Validation Error	Passed
10	Cart	User should be able to see its product details.	All product added to the cart be seen.	No error	Passed
11	Sign Out	User should be able to logout from the website	User will logout and will be redirected to the Sign In page.	No Error	Passed

8. Project Management Methodology:

Scrum Agile Methodology was used.

9. FUTURE SCOPE :

1. We will provide payment gateway to the user so that he can also pay through online mode.
2. We will be adding more vendors to the website so that it will give more options to the customer to select their favorite products.
3. We will also give the order tracking functionality to the user.