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“E-Grocery Management System”

Software Project-2

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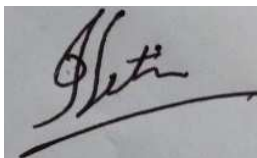
We declare that this Project is our own work and it's not been submitted in any form for another degree or diploma at any university. Information from the other published and unpublished work which has been acknowledged in the text and a list of references is given.

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Abstract

E-commerce is fast gaining easily accepted and business paradigm. Everyday a lots of business companies & institutions are implementing web-sites over the web. So that, we can say that the process of online shopping on the website is becoming popular day by day, easy and common place. Ecommerce website is an online web application where the customer can purchase product and vendor sell their goods. Through-out the E-commerce website customers can search for items online by its name and can add to the shopping cart. User can login using their information username or email and password. And new customers can sign up very easily. They should give the details of their user's name, email, Phone number and password. There are many features for users from this online platform. The system has been developed with PHP, HTML, CSS, Java-Scrip, Ajax etc. This will be great benefit to those users who feel comfortable shopping under a user-friendly manner. This E-commerce is complete solution for customers that will provide them with a safe, reliable, malleable and user-friendly environment. This document will discuss to create and implement an ecommerce website.

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Chapter 1: Introduction

1.1 “E-Grocery Management System”

The “E-Grocery” is an e-commerce website which purpose is to sell items through online. It is an interactive e-commerce solution providing customers to buy fresh grocery/organic items from online. The purpose of the website is to develop a web base site for people to buy organic/grocery items who are busy on work or don’t have time to go for grocery shopping.

1.2 Background of the problem:

For reference, the website we studied is <https://chaldal.com> . It is also an online platform which provides almost similar services as our project which sells grocery items. The difference between our website and chaldal.com is that we sell organic items/products which chaldal.com don’t. We studied how their website manages users, database etc. Based on the knowledge we gather from studying websites, we developed our own website.

1.3 Project Objective

E-Commerce platforms are a place where products are sold for business purposes and service are provided worldwide through electronic medium. Currently ecommerce websites are successfully running equally everywhere such as electronic market, internet marketing, mobile commerce etc. The ecommerce platform currently used for creating online store must be cost effective and they must help the business to prosper and can be updated over time. Now a days, ecommerce has become a part of our daily life. In today’s it is possible to buy anything through online.

1.4 The Purpose

The main purpose of an e-commerce site is to reduce cost, save time and at the same time user buy anything what they want. This way, a user can save shopping time and share this valuable time with his family members. Our project relies on a fully automated system and reduce customer time, cost and ensure customer satisfaction.

Chapter 2: Project Specification

2.1 User Classes and Characteristics

System will have two primary users. The two primary users who will play the most important role in this project are Admin, Customers. Here Customers will play the most important and the vital role in this project.

Firstly, the **Admin** will monitor control the whole system, other users- Customers. Secondly the **customers** who are generally common people and can buy the food & product using the system, as per their needs.

Other secondary users like different kinds of equipment seller, lender and other general unemployed people working as a delivery man can use the system for making the trading easy.

2.2 Operating Environment

System will be platform independent so, that it can be run on any operating system such as Windows, Mac, Linux and so on. It can be accessed through the URL link as a website and can be searched by any search engine like Yahoo, Google or any other using any browser such as Chrome, Firefox, Microsoft Edge or any other. Hardware such as computers desktops or laptops, android or IOS devices, keypad phones are needed to execute the program. Users can use the application both using online and offline services.

2.3 Design and Implementation Constraints

One of the ways to reach a desired goal is to plan, motivate and control design and execution properly. There are some steps in our project development. Which are given bellow:

- Launch.
- Planning and Creation.
- Execution and Build.

- Monitor and Control.

Chapter 3: System Specification

3.1 Requirement Analysis (Organizational benefit):

Requirement analysis is one of the most important aspects of a project development and it must be documented and testable. In order to run a project well, there must be some necessary requirements. A project maker must be determined to have minimum requirement for hardware and software.

3.2 System Features:

System should be able to execute some major feature like:

1. Customer can register and login to the system, Search or Filter Product.
2. Customer Can Add Product to Cart, Place Order, cancel Order.
3. Customer Can Select Quantity & see order history.
4. All users can see the number of posts.
5. Admin can upload sell posts & also can buy products.
6. Admin can see their Trading records and can add, edit, remove.
7. Admin can add, edit, remove their products.

3.3 Functional Requirements

Register or sign-up:

Functional Requirements for Registration or Sign-up:

1. The website allow users to Registration or sign-up with their Full Name, Phone number, Email address, Password, Confirm Password, and User Type.
2. If any of the information missing system won't take submit and it will notify the user to submit all the information.

Priority Level: High

Software Login

Functional Requirements for Login:

1. The software allow users to login with their given username and password
2. User name must be different.

Priority Level: High

Precondition: user must have valid user id and password

User Management

Functional Requirements for user management

Admin:

1. The system allow the admin user to add, delete, and edit the other user.
2. The system allow the admin see the number of posts and can approve or remove any customers post.
3. Admin can upload sell products.
4. Admin can see their Trading records.

Priority Level: High

Non-functional Requirements

Modifiability: This attribute is concerned with what can change and how easy it can be to change functionalities. The system shall have the ability to adapt to changes easily.

Performance: The system response time is measured to quantify performance.

Security: This is one of the most crucial attributes. All user information must remain secure and integrated.

Usability: The user must feel easy to use the software and the system must be quick to interact with the user.

3.4 User stories

Table 1: System Login

Use Case Name	Login to system	Use Case Type
Use Case ID	UC_1	Functional Requirement
Priority	High	
Primary Business Actor	User	
Other Interested Stakeholders	None	
Description	This use case describes how to register into the System. By giving some details like User name, password, email, mobile no, address user can check the validation and enter into the system.	
Precondition	The user must be valid.	
Trigger	The use case is initiated when a user tries to enter in the system.	
Typical Course of Events	Step 1: The user input username, password, email, mobile no and address Step 2: By click on login a validation process is run by the system Step 3: If the user name and password is matched the user saw home page to purchase their items.	
Conclusion	The use case concludes when the entry operator gets an order confirmation message from the system.	

Table 3.4.1 System Login

Chapter 4: System Design

4.1 Use Case Diagram

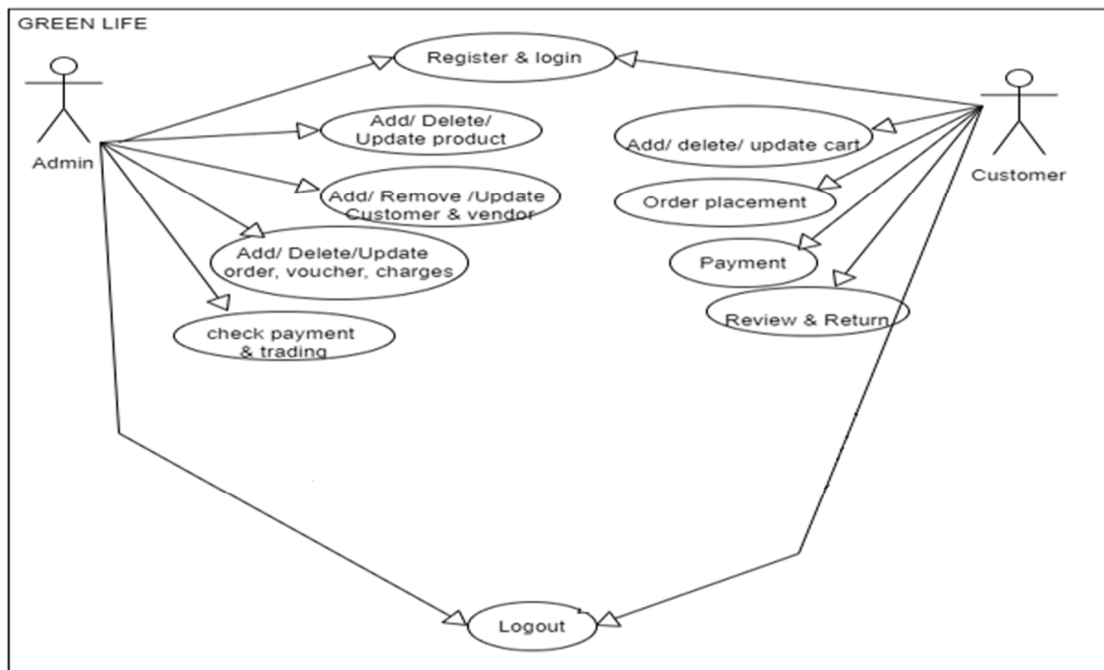


Fig. 4.1 Use Case Diagram

4.2 Class Diagram

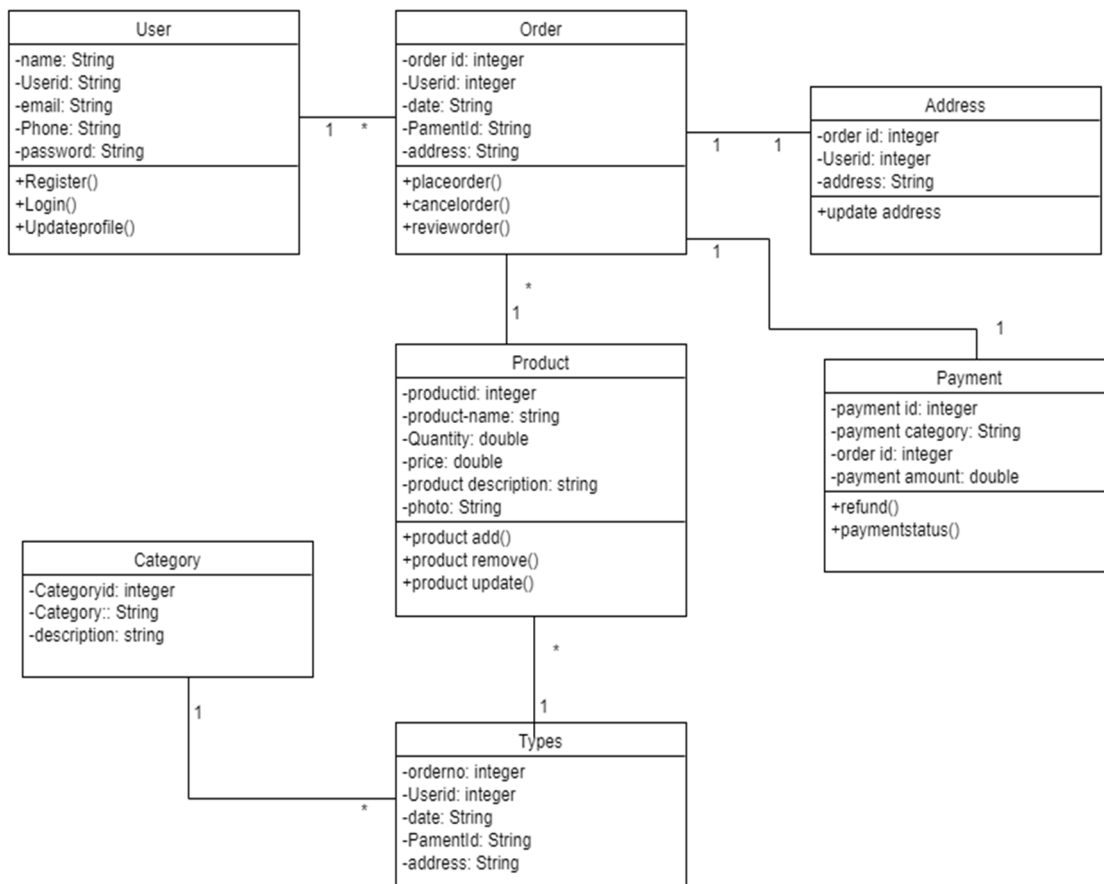


Fig. 4.2 Class Diagram

4.3 Activity Diagram

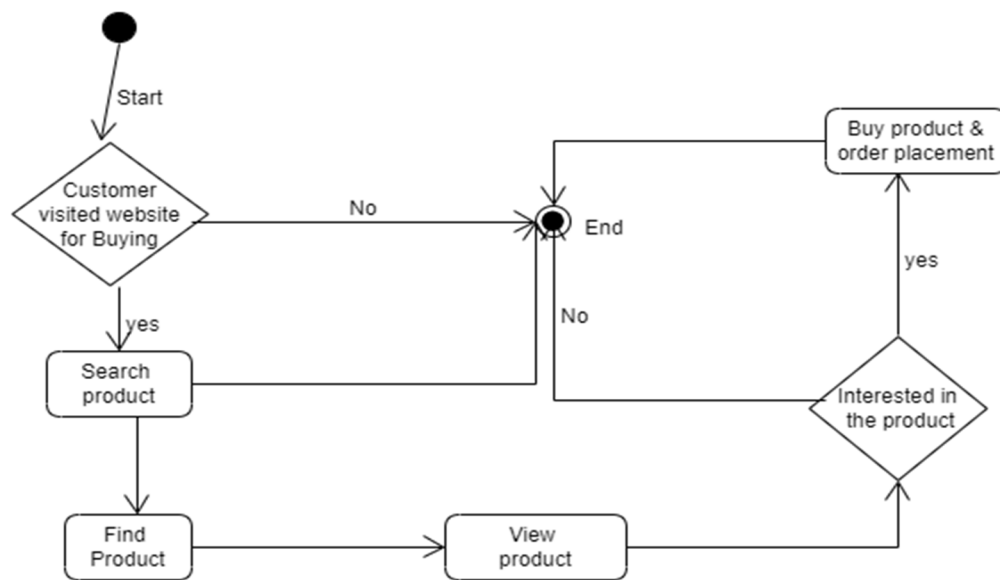


Fig. 4.3 Activity Diagram

4.4 ER Diagram

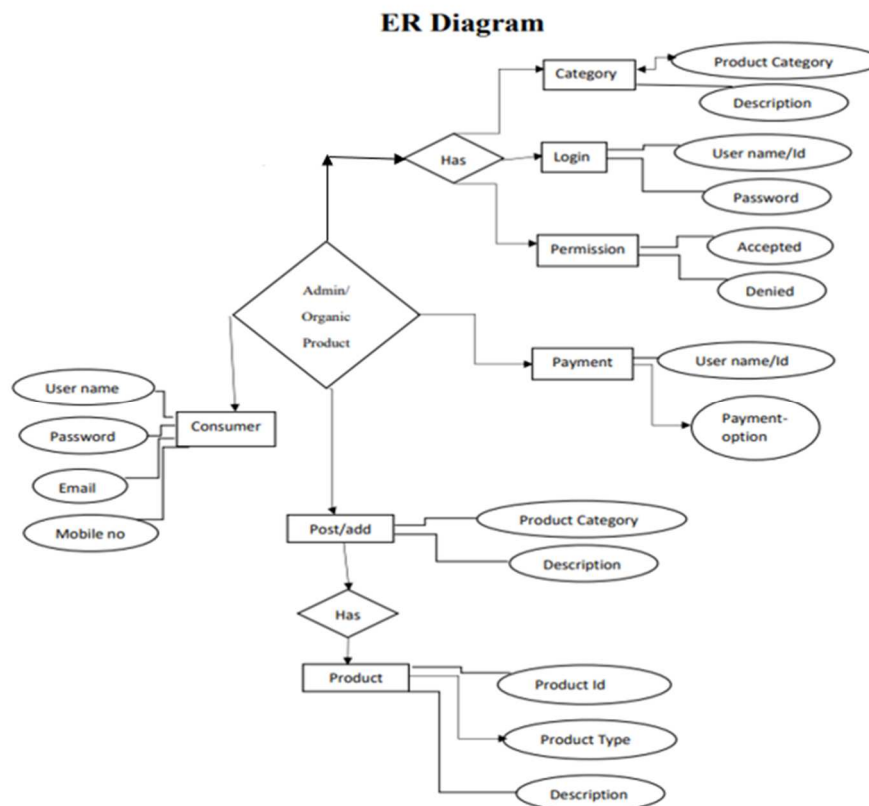


Fig. 4.4 E-R Diagram

4.5 Implementation:

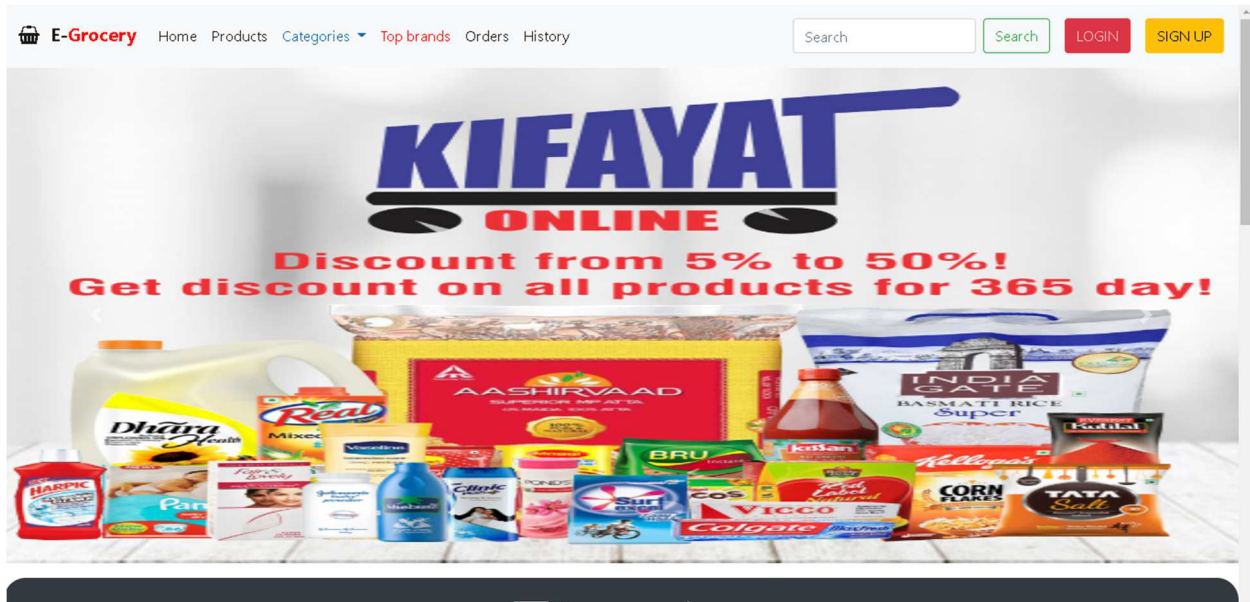


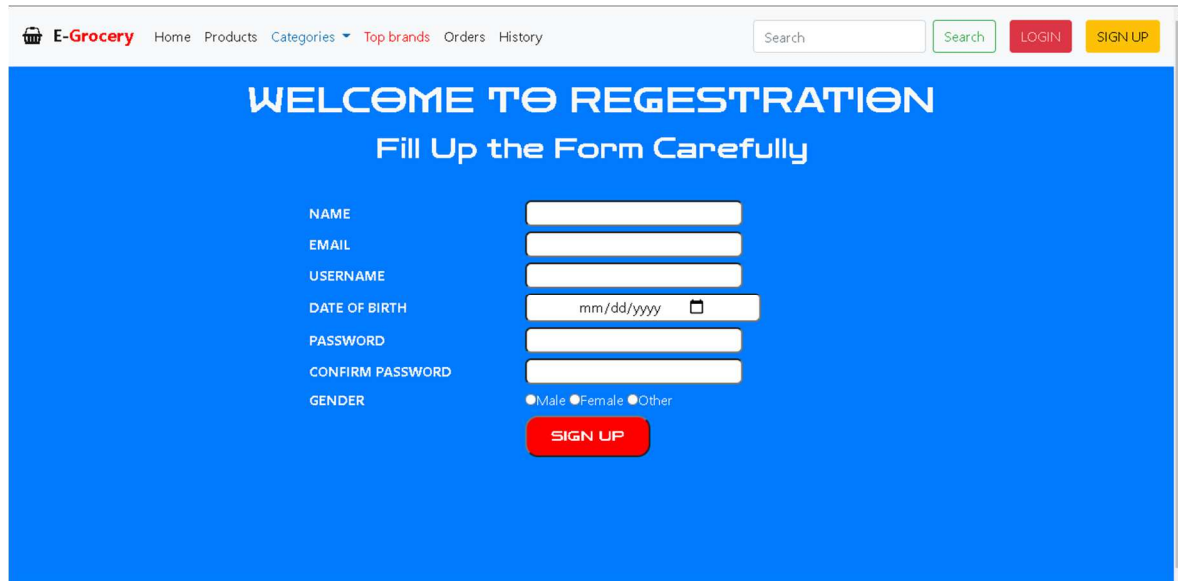
Fig. 4.5.1 Home page

This is the home page of E-Grocery

The screenshot shows the 'REGISTER AS A ADMIN' form on the E-Grocery website. The form is titled 'REGISTER AS A ADMIN' and 'Fill Up this Form'. It contains several input fields for user registration: 'NAME', 'EMAIL', 'USERNAME', 'DATE OF BIRTH' (with a date picker icon), 'PASSWORD', 'CONFIRM PASSWORD', and 'GENDER' (with radio buttons for 'Male', 'Female', and 'Other'). A red 'SIGN UP' button is located below the form fields. Below the button, there is a link that says 'Login as Admin'. The form is set against a brown background.

Fig. 4.5.2 Admin Registration Page

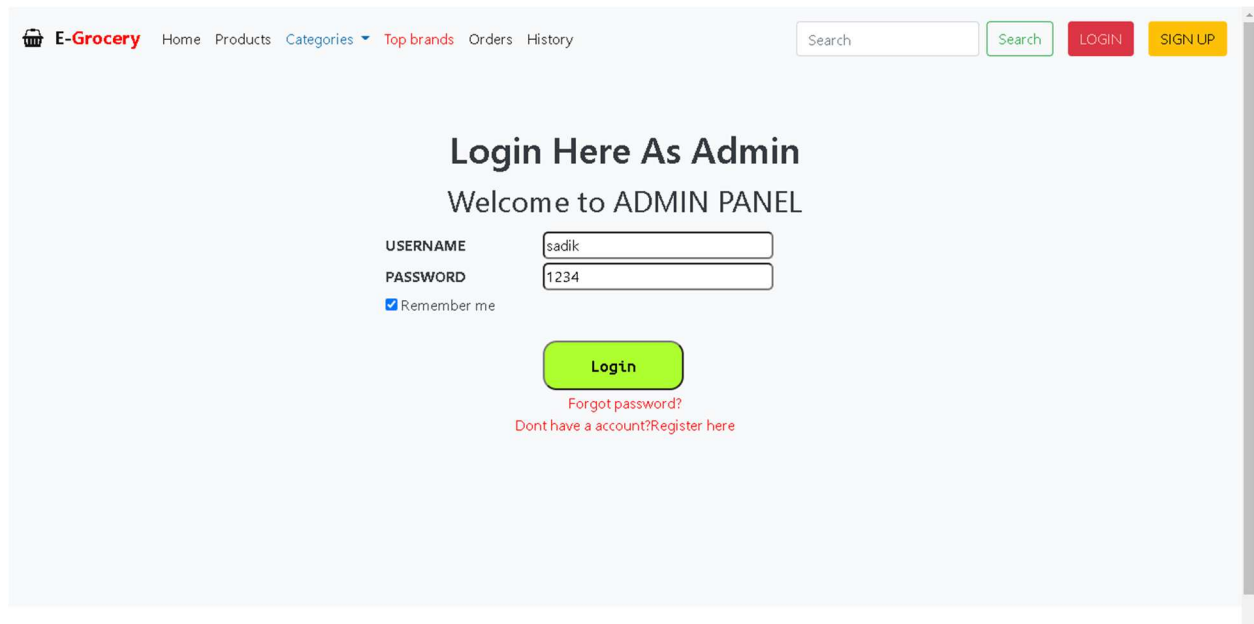
Registration page with Name, User name, Email, Password and Date of Birth. User can register as ADMIN account in this page.



The screenshot shows the Admin Registration page for 'E-Grocery'. The page has a blue background with white text. At the top, there is a navigation bar with links: Home, Products, Categories, Top brands, Orders, and History. A search bar is also present. Below the navigation bar, the main heading reads 'WELCOME TO REGISTRATION' followed by 'Fill Up the Form Carefully'. The registration form includes fields for NAME, EMAIL, USERNAME, DATE OF BIRTH (with a date picker), PASSWORD, and CONFIRM PASSWORD. A GENDER section has radio buttons for Male, Female, and Other. A red 'SIGN UP' button is at the bottom of the form.

Fig. 4.5.3 Customer Signup Page

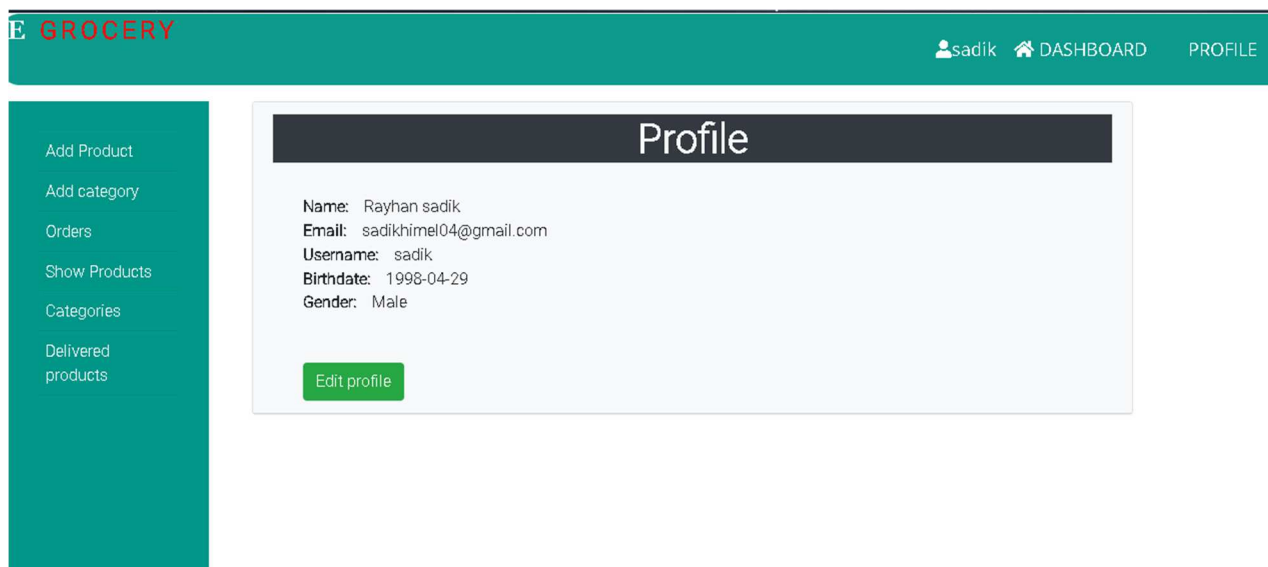
Customer Registration page with Name, User name, Email, Gender, Password and Date of Birth. User can register account in this page.



The image shows the Admin Panel Login Page of an E-Grocery application. At the top, there is a navigation bar with a shopping cart icon, the text "E-Grocery", and links for Home, Products, Categories (with a dropdown arrow), Top brands, Orders, and History. On the right side of the navigation bar, there is a search bar with a "Search" button, a "LOGIN" button, and a "SIGN UP" button. The main content area has a light blue background. It features a heading "Login Here As Admin" and a subheading "Welcome to ADMIN PANEL". Below these, there are two input fields: "USERNAME" with the value "sadiK" and "PASSWORD" with the value "1234". There is a checked checkbox labeled "Remember me". A green "Login" button is centered below the input fields. Below the button, there are two links: "Forgot password?" and "Dont have a account?Register here".

Fig. 4.5.4 Admin Panel Login Page

An admin can login by Username & password in this page.



The image shows the Dashboard Profile Page of an E-Grocery application. The top navigation bar is teal and contains the text "E GROCERY" on the left, and a user profile icon with the name "sadiK", a home icon with the text "DASHBOARD", and a "PROFILE" link on the right. On the left side of the dashboard, there is a teal sidebar with a list of links: "Add Product", "Add category", "Orders", "Show Products", "Categories", "Delivered products", and "Delivered products". The main content area has a light blue background. It features a heading "Profile" in a dark grey box. Below the heading, there is a form with the following fields: "Name: Rayhan sadiK", "Email: sadiKhimel04@gmail.com", "Username: sadiK", "Birthdate: 1998-04-29", and "Gender: Male". A green "Edit profile" button is located below the form.

Fig. 4.5.5 Dashboard

This is dashboard page of an admin profile.

E GROCERY

sadik

DASHBOARD

PROFILE

LOG OUT

Add Product

Add category

Orders

Show Products

Categories

Delivered products

Add product

fill this

NAME

DESCRIPTION

PRICE

CATEGORY ID

-Select category number-

IMAGE

Choose File

No file chosen

Add product

E GROCERY

sadik

DASHBOARD

PROFILE

LOG OUT

Add Product

Add category

Orders

Show Products

Categories

Delivered products

Add category

fill this

NAME

DESCRIPTION

IMAGE

Choose File

No file chosen

Add category

Fig. 4.5.6 Add Product & Category Page

Admin can add product & category.

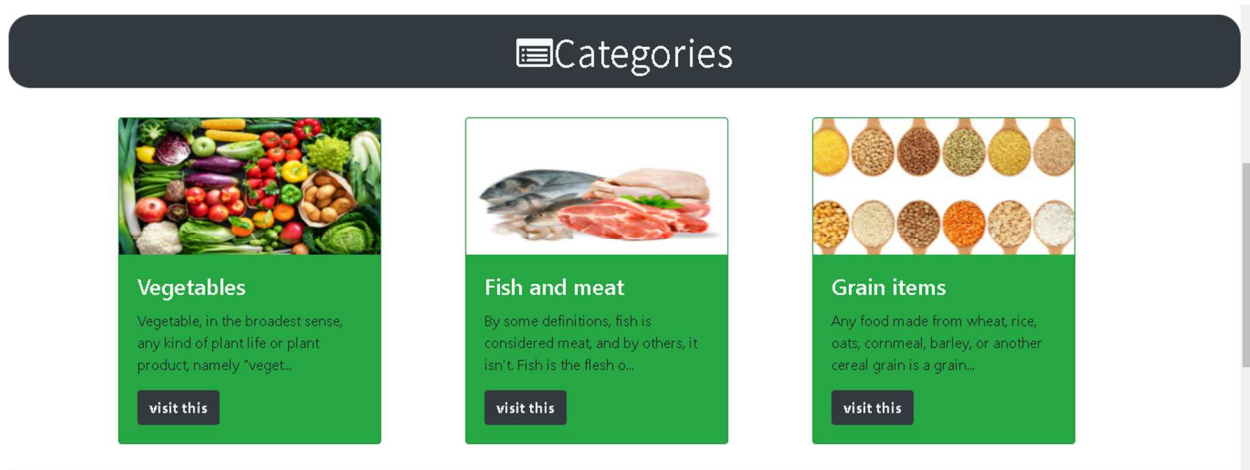


Fig. 4.5.7 Category Page

This is category page, Customer & Admin can visit the category page.

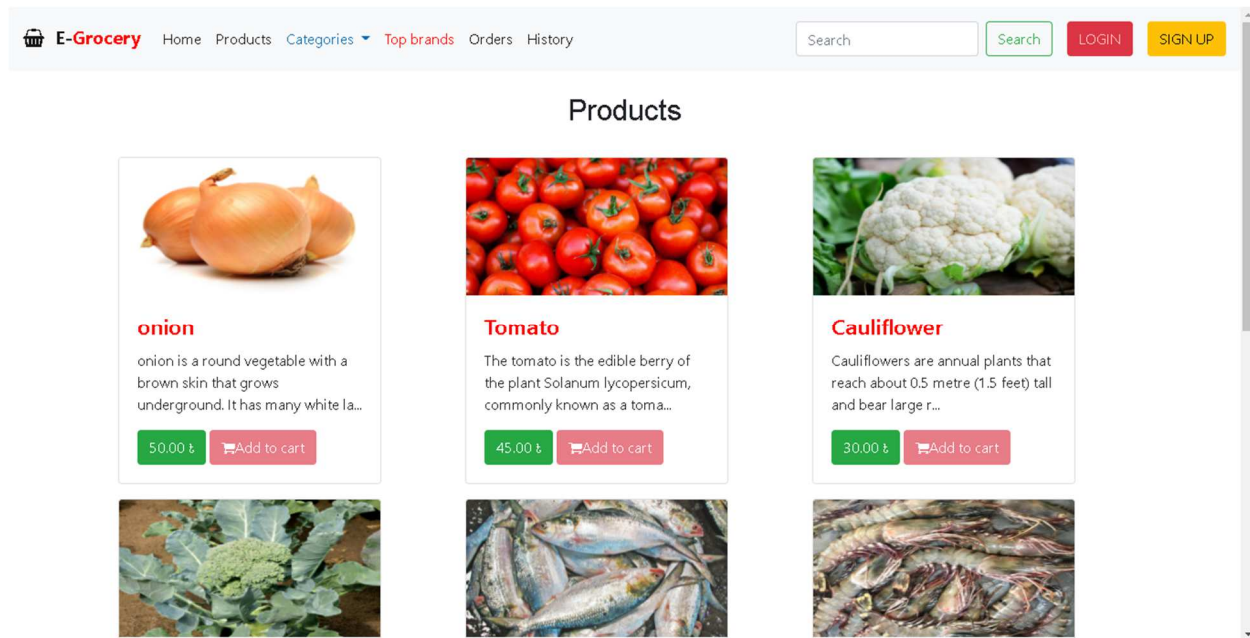


Fig. 4.5.8 Product Page

This is our product page, Admin & customer can visit all products & customer can order the listed products.

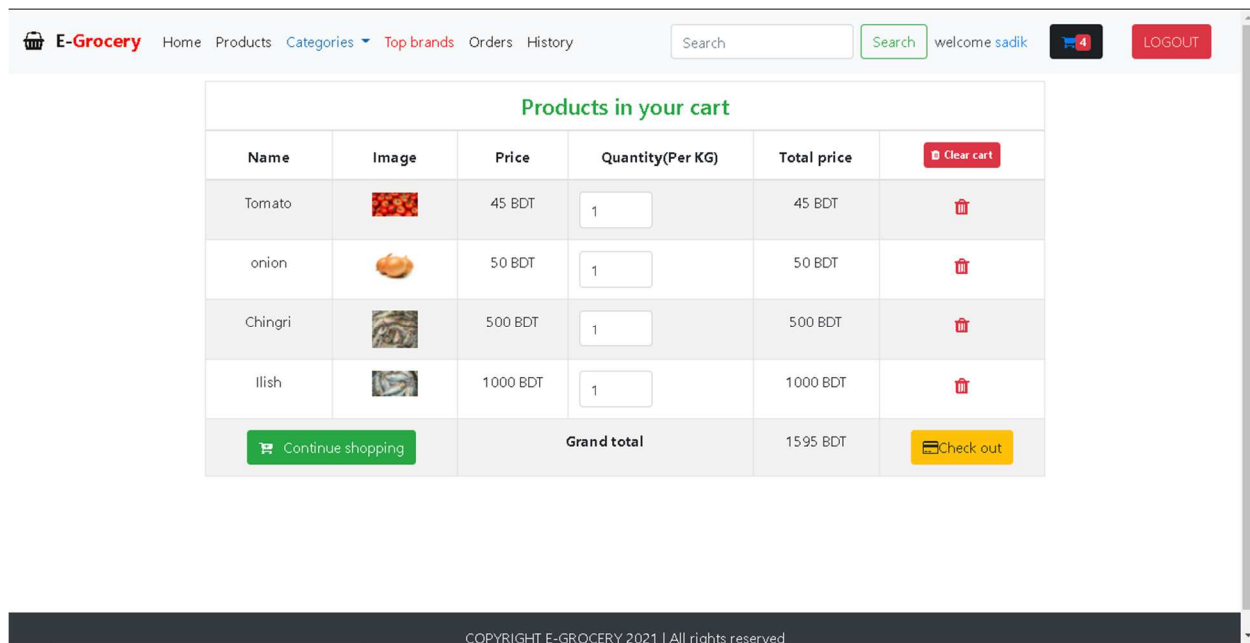


Fig. 4.5.9 Product Cart Page

This is Customer cart page; customer can add all selected products to the cart system & order all the cart item at a single time.

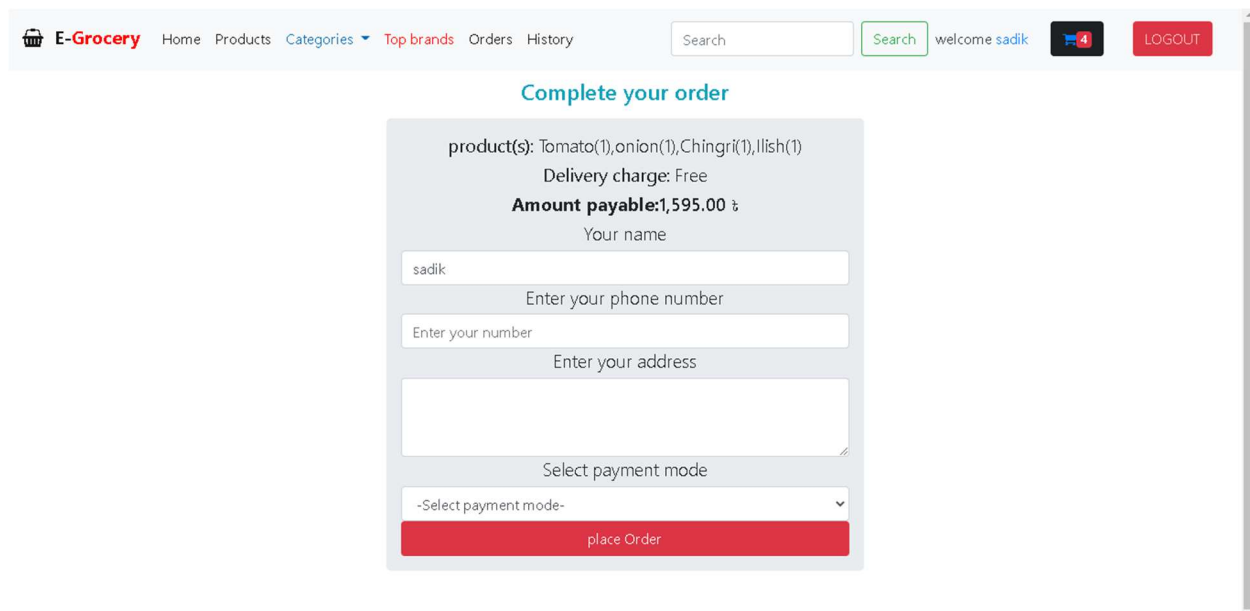


Fig. 4.5.10 Complete order Page

A customer can complete the order procedure by submitting name, email, address & selected payment method.

E-Grocery Home Products Categories Top brands Orders History Search welcome sadik LOGOUT

EDIT YOUR PROFILE

Fill this box

NAME: sadik

EMAIL: sadikhimel04@gmail.com

USERNAME: sadik

DATE OF BIRTH: 04/29/1998

PASSWORD: 1234

GENDER: ☒ Male ☐ Female ☐ Other

EDIT PROFILE

Fig. 4.5.11 Edit profile Page

Customer can edit the profile information.

E-Grocery Home Products Categories Top brands Orders History Search welcome sadik LOGOUT

History

Name: sadik
Phone: 01799207278
Address: dhaka,mirpur
Payment mode: cod
Products and amount: Cauliflower(3),Tomato(1)
Payment: 135
Date and Time: 2021-09-22 14:42:57
Product id: 24
Status: Delivered

Name: sadik
Phone: 01799207278
Address: dhaka
Payment mode: cod
Products and amount: Cauliflower(2)
Payment: 60
Date and Time: 2021-09-24 02:42:26
Product id: 29
Status: Delivered

Fig. 4.5.12 History Page

This is the customer history page.

E GROCERY

sadik

DASHBOARD

PROFILE

LOG OUT

Add Product

Add category

Orders

Show Products

Categories

Delivered products

Orders

Name	Id	phone	Address	Payment mode	Products	Amount paid	Delete	Deliver	Status
sadik	31	01799207278	dhaka	cod	Tomato(1),onion(1),Chingri(1),Ilish(1)	1595	Delete	Deliver	Pending

Fig. 4.5.13 Order status Page

E GROCERY

sadik

DASHBOARD

PROFILE

LOG OUT

Add Product

Add category

Orders

Show Products

Categories

Delivered products

Products







Name	Description	price	category id	image	Delete
onion	onion is a round vegetable with a brown skin that grows und	50	1		Delete
Tomato	The tomato is the edible berry of the plant Solanum lyopers	45	1		Delete
Cauliflower	Cauliflowers are annual plants that reach about 0.5 metre (1	30	1		Delete
Broccoli	Broccoli, Brassica oleracea, is an herbaceous annual or bien	55	1		Delete
Ilish	The ilish (Tenulosa ilisha) (Bengali: ইলিশ, romaniz	1000	2		Delete
Chingri	Prawn (chingri) crustaceans related to crabs and lobsters, o	500	2		Delete

Fig. 4.5.14 Products Page

Admin can see all products amount & also can delete product item.

Name	phone	Address	Payment mode	Products	Amount paid	Product id	Time	Status
sadik	01799207278	dhaka,mirpur	ood	Cauliflower(3),Tomato(1)	135	24	2021-09-22 14:42:57	Delivered
sadik	01799207278	dhaka	ood	Cauliflower(2)	60	29	2021-09-24 02:42:26	Delivered
sadik	01799207278	dhaka	ood	Ilish(2)	2000	30	2021-09-25 20:41:17	Delivered

Fig. 4.5.15 Delivery information Page

Chapter 5: Software Project Management Plan

5.1 Project Scheduling

The scheduling shall be implemented through activity network diagram.

Activity	Duration
Requirements Elicitation	2 weeks
Specification	2 weeks
Estimation	1 weeks
Schedule plan	1 weeks
Design	2 weeks
System Development	4 weeks
Test	2 weeks
Deployment & final release	1 weeks

Table 3.5.1 Project Scheduling

5.2 Project Budgeting

Tentative/Approximate budgeting of the project is shown below:

Service name	Cost (Tk)	Quantity/Unit/day	Amount
Internal Resources/ staff costs			20,000
Information System department (IS)			10,000
Legal assistance & advices			5000
User & database licenses			20,000
Computers & other devices (Phones)			100000
Dedicated Domain address			2000
Implementation, system installation,			50,000
Project manager			30,000
Project leader			30,000
Programmers	20,000	4 persons	80,000
Testers	15,000	4 persons	60,000
Office rent	12,500	4 months	50,000
furniture	30,000		30,000
Training staff	10,000		10,000
			Total = 487000

Table 3.5.1 Project Budgeting

5.3 Risk Assessment

Description	Probability	Impact
Software team doesn't have good experience in programming language	40%	Medium
Technology will not meet expectation	20%	low
Staff turnover will be high	70%	Critical
Customer will change Requirement	80%	Critical
Project will outrun the allocated Budget	30%	Medium

Table 3.5.1 Risk Assessment

Chapter 6: Conclusion

6.1 Goal

The main purpose of this project is to create a good relationship between the customers and vendors. And at the same time makes online marketing easier and save the valuable time. Also we have tried to satisfy all types of users. We are trying to complete the design and development of this E-commerce site in a very short time and transform it into a complete website in a few months.

6.2 Limitations of this Project

- Offline payment system (cash on delivery).
- No online payment system.
- No customer support system.

6.3 Future Work

- Customer support system will be added.
- Online payment system will be added.
- User feedback for finding authentic products and trusted vendors.

References

- [1] <https://www.w3schools.com>
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