DP-1 PROJECT PROPOSAL
GrocerEase

Team Information (Team:13)

Prepared by:

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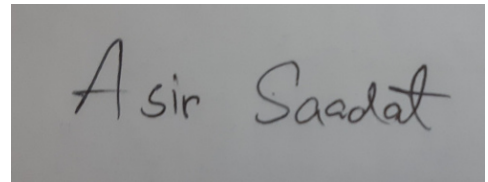**Date of Submission:** 25 September, 2023

SIGNED BY SUPERVISORS:

Tanjila Alam Sathi, Lecturer, CSE, IUT

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PROBLEM STATEMENT:

Traditional grocery shopping can be time-consuming and inconvenient for many consumers. In today's fast-paced world, people are looking for convenient and efficient ways to purchase groceries and household items. Shoppers often struggle with crowded stores, long checkout lines, and a lack of personalized recommendations. There is a demand for a modern, user-friendly solution that simplifies grocery shopping and enhances the overall shopping experience.

TARGETED PROBLEMS:

- Cart management in physical stores can be inconvenient, making it challenging to add, remove, or edit items easily.

- Customers lack personalized product recommendations, missing out on tailored suggestions.

- Reordering frequently purchased items is inefficient, as there is no automated system for generating shopping lists

- Subscription services for essential items like vegetables, rice and eggs are often unavailable to customers.

- Traditional stores do not always provide product reviews and ratings, hampering informed decision-making.

POTENTIAL SOLUTION:

Our proposed solution is "GrocerEase", a user- centric grocery shopping web based platform. GrocerEase will address the problems consumers face by providing an intuitive and efficient way to purchase groceries and household items. This platform will offer a range of features designed to make grocery shopping easy and convenient.

KEY FEATURES:

- **User Registration:**

    Email Verification
    User Type: Customer, Seller

- **Product Upload:**
    Products uploaded by seller

- **Product Listings:**

    Product and related information display

- **Search and Filter:**

    Product Searching
    Filtering Results

- **Shopping Cart:**

    Adding items to cart

- **Personalized Shopping Lists:**

    Automatic generated grocery list

KEY FEATURES:

- **Subscription Service:**

  Subscribe to sellers for daily supplies

- **Payment Gateway:**

  Payment by card, digital wallet, cash on delivery

- **Delivery:**

  Automated order delivery

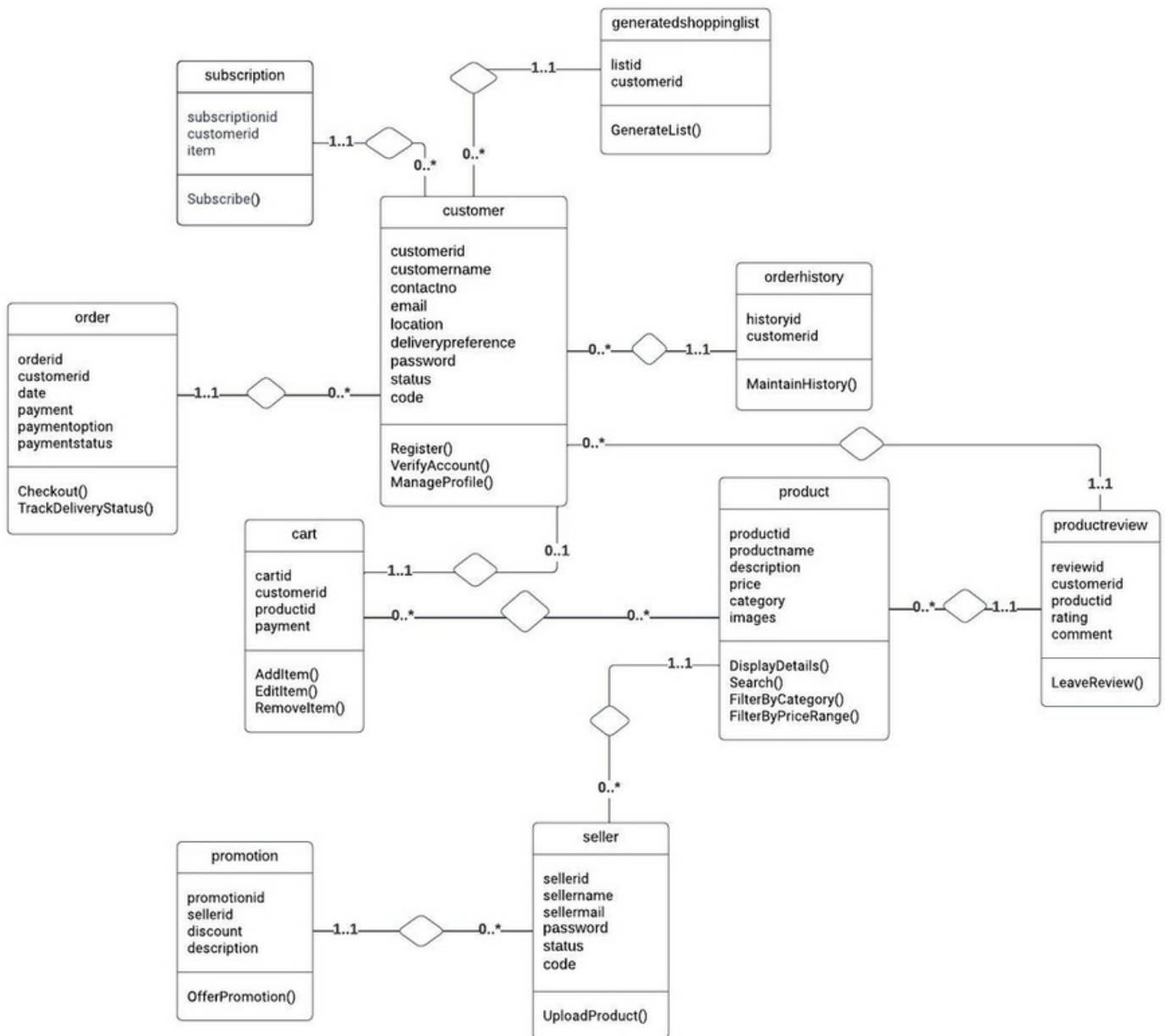- **Order History:**

  Maintains record of orders

- **Ratings and Reviews:**

  Products can be rated and reviewed

- **Promotions and Discounts:**

  Special offers by sellers

UML DIAGRAM:

APPLICATION:

- **User Registration:**

  Customers and Sellers can register by providing their name, email, contact number, location, delivery preference (optional) and password. Later, the authentication process will be carried out via email though a verification link.

- **Product Listing:**

  Products will be displayed in cards where other information like image, price and category will also be shown.

- **Search and Filter:**

  Customers can search for grocery items. They can also filter search results based on various categories and price range.

- **Shopping Cart:**

  Customers can add items to their cart. They can also remove or edit items if necessary.

APPLICATION:

- **Product Uploading:**

   Sellers can upload their items by providing item's name, description, category, images and price. Uploaded items will be displayed on both sellers' profile and to customer's homepage.

- **Subscription Services:**

   Customers can subscribe to sellers for regular deliveries of essential items like vegetables, rice and eggs etc. Subscribed items will be delivered to them on daily/weekly/monthly basis.

- **Payment Gateway:**

   Customers can pay through various payment options, including credit/debit cards, digital wallets, and cash on delivery.

- **Order History:**

   Customers can maintain records of their past orders.

APPLICATION:

- **Delivery:**

  Customers can choose delivery dates and time slots convenient for them. They can track order delivery and monitor the status of their deliveries.

- **Rating and Review:**

  Customers can rate grocery items. They can also write reviews of their purchased items. They can view reviews from individual item's page.

- **Promotions and Discounts:**

  Sellers can offer discounts, promotions, and loyalty programs to attract and retain customers.

TOOLS AND TECHNOLOGY:

- **Front-end:** HTML5, CSS3, JavaScript, React.js, TailwindCSS

- **Back-end:** Django (Python framework)

- **Database:** MySQL

- **Version control:** Git

APPLICATION DOMAIN:

- **Application Domain:** Online Grocery and Essentials Delivery
- **Platform:** Web Application
- **Category:** E-commerce
- **Target Audience:** Diverse consumers seeking convenient online grocery shopping, from busy professionals to families in need of fresh produce and daily essentials delivered to their doorstep.

TIMELINE

17.09.23 - 23.09.23
Idea Generation — 1

24.09.23 - 01.10.23 — 2
Planning & Requirement Analysis

12.10.23 - 19.10.23
User Registration & Authentication — 3

20.10.23 - 26.10.23 — 4
Product Upload & Listing

27.10.23 - 03.11.23
Searching & Filtering — 5

04.11.23 - 10.11.23 — 6
Shopping Cart

11.11.23 - 18.11.23
Payment & Shopping Cart (Cont.) — 7

19.11.23 - 25.11.23 — 8
Payment (Cont.)

26.11.23 - 02.12.23
Order & Delivery — 9

03.12.12-10.12.12 — 10
Order & Delivery (Cont.)

11.12.23-18.12.23
Subscription Service & Rate & Review — 11

19.12.23 - 23.12.23 — 12
Personalized Grocery List

24.12.23 - 31.12.23
Testing & Deployment — 13