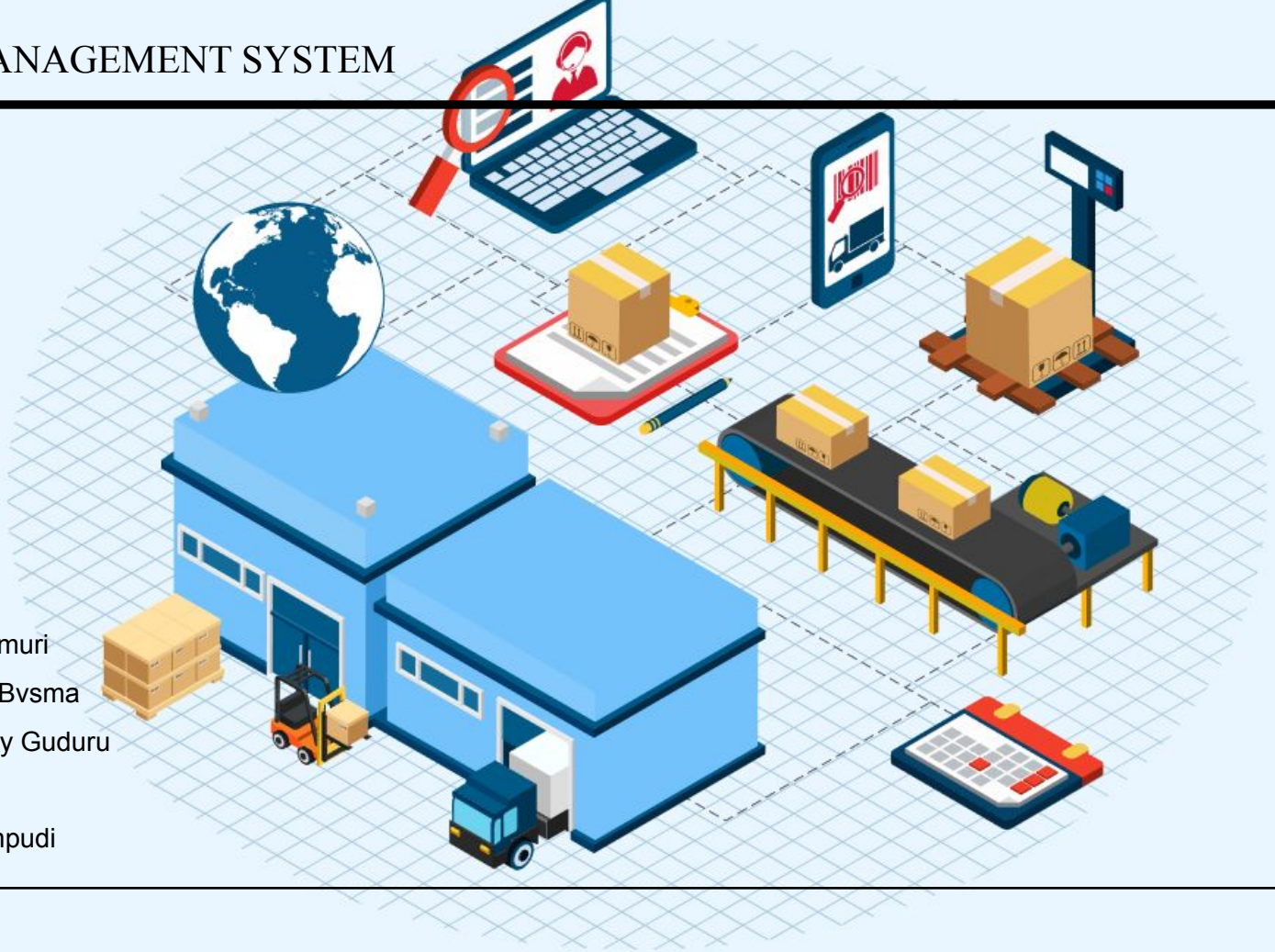
PRODUCT MANAGEMENT SYSTEM



Group 11

1. Sriyuktha Sakhamuri
2. Thanmai Reddy Bvsma
3. Dinesh Chowdary Guduru
4. Adithya Bikki
5. Manvitha Ayinampudi

ROLES AND RESPONSIBILITIES :

ADITHYA AND DINESH : AUTHENTICATION AND DATABASE

DEVELOPER MANVITHA AND DINESH : LOGIN AND FRONT END

THANMAI AND SRIYUKTHA : SUPPLIER PORTAL AND TRACKING

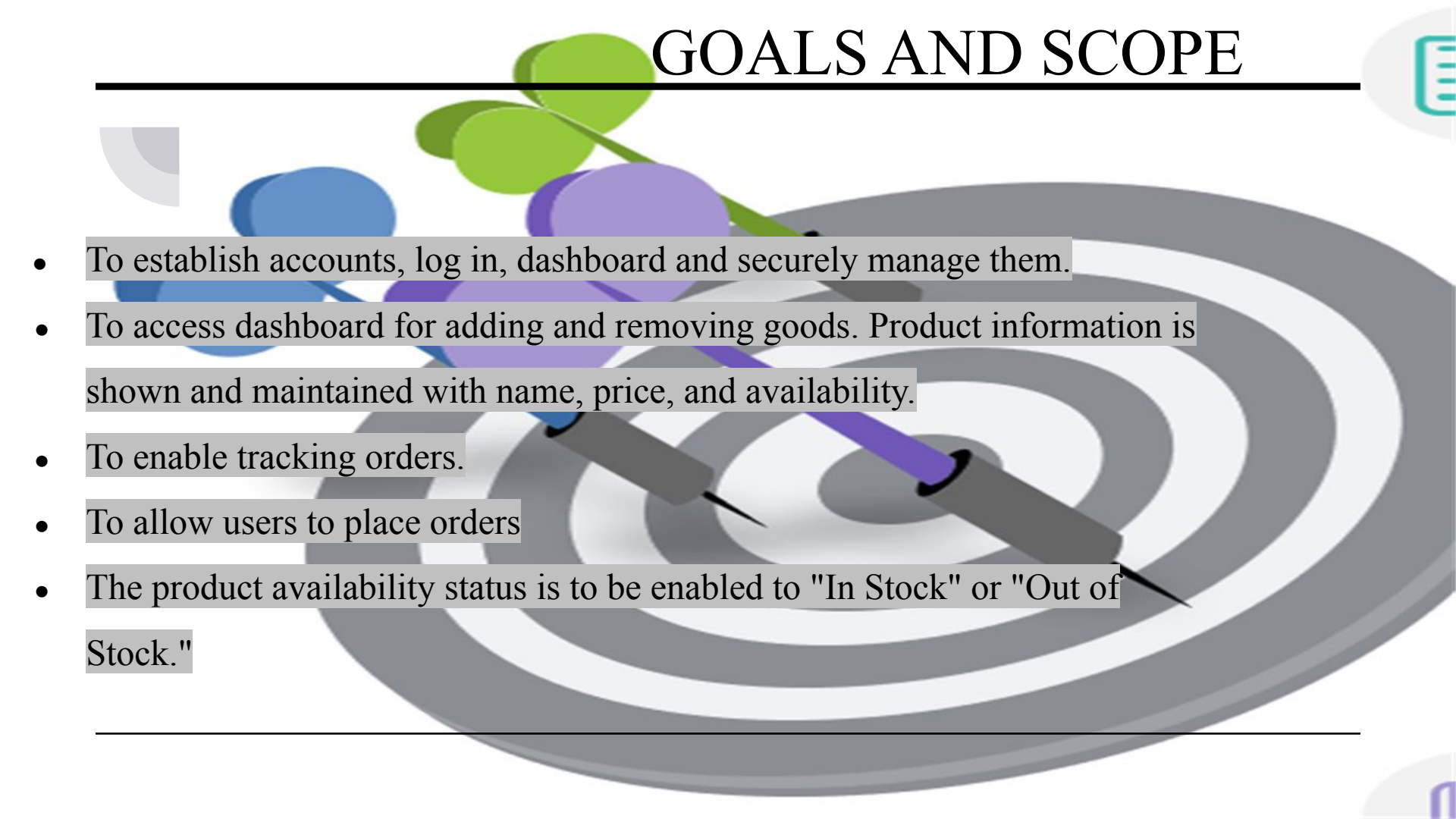
MANVITHA AND SRIYUKTHA : INTERFACE AND UI

ADITHYA AND THANMAI : INTEGRATION AND TESTING

SYSTEM DESCRIPTIONS,GOALS AND SCOPE

This Product Management system is a software for controlling, governing and monitoring day to day statistics of an item or product present in bulk i.e. at storage plants. It provides an insight so that the companies make their arrangements accordingly for the product manufacturing. Using this software ,it allows us to have a complete grip on the product from its arrival to departure.

GOALS AND SCOPE

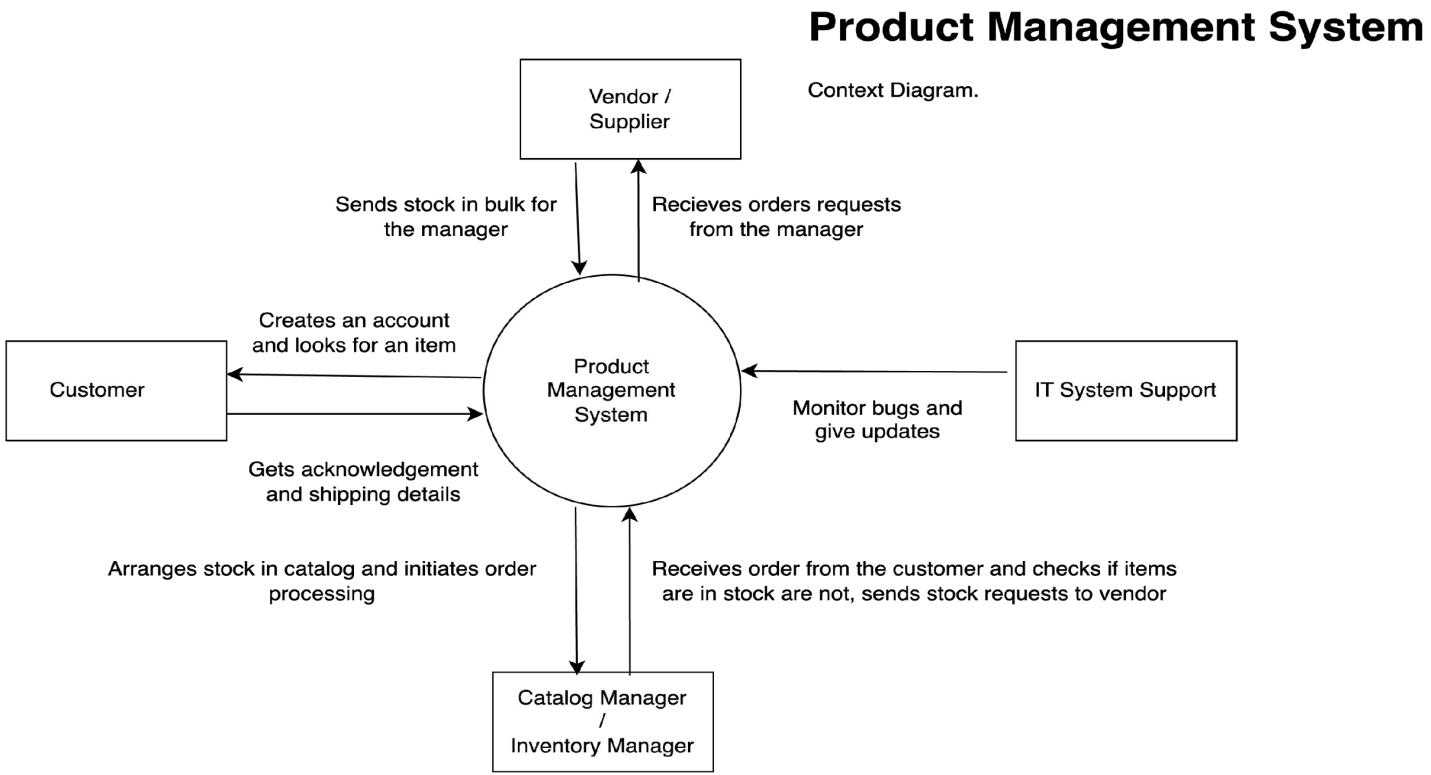


- To establish accounts, log in, dashboard and securely manage them.
- To access dashboard for adding and removing goods. Product information is shown and maintained with name, price, and availability.
- To enable tracking orders.
- To allow users to place orders
- The product availability status is to be enabled to "In Stock" or "Out of Stock."

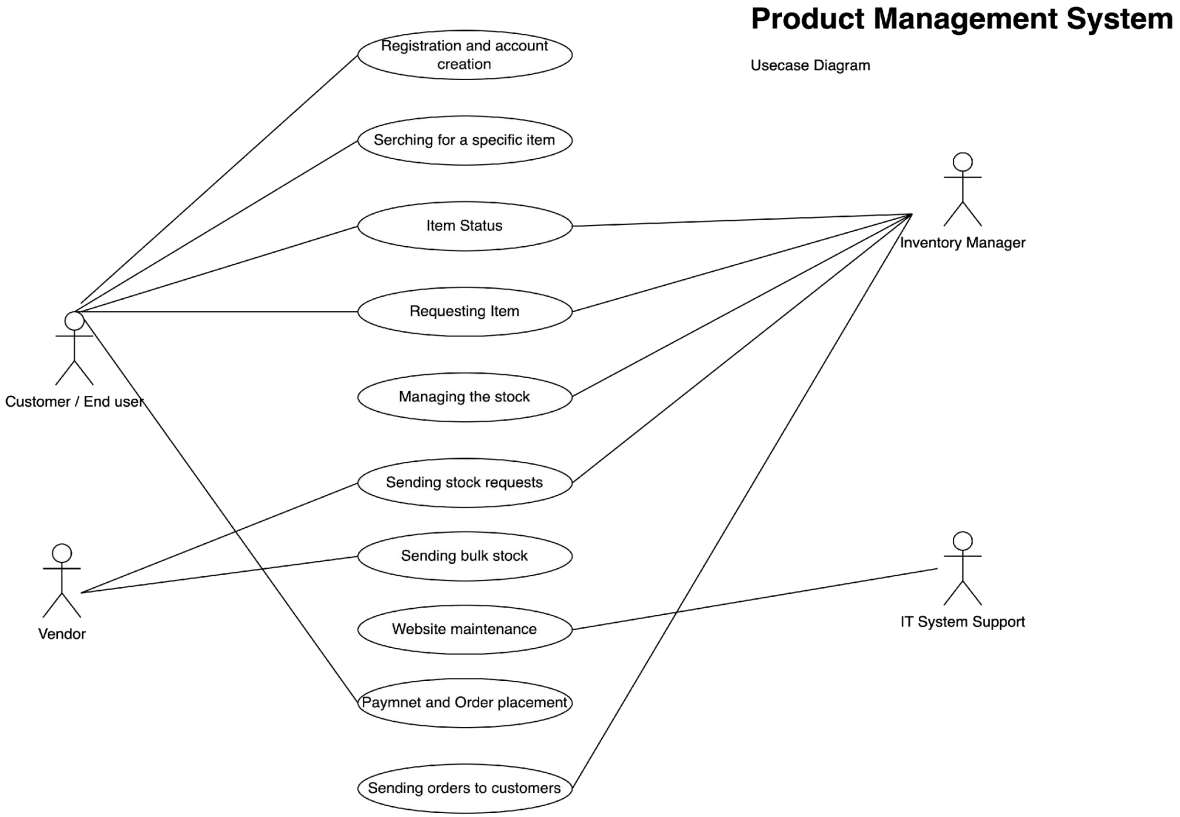
MAIN USER STORIES

1. As a Customer, I would want to search and order products, so that I can get the items I want online effortlessly.
2. As a Manager, I would want to manage and take over the control of products and their details, so that prominent data on products is displayed for the buyers.
3. As a vendor, I want to be able to manage all purchases, so that I can provide all the needed products to the end users as per their needs.
4. As a customer, I would like to keep track of my orders, so that I am always updated about my delivery status.
5. As a manager, I want to be able to create and access product status reports, so that I can oversee inventory levels.
6. As a Developer, I want to enhance mobile usage and ensure usability testing, so that users can access from mobile devices smoothly.
7. As a manager, I want to be able to update products' stock status details, so that the inventory is kept up-to-date.
8. As a vendor, I would like to be able to view purchase orders and history, so that I can easily understand and process them.
9. As a manager, I would like to be able to receive alerts automatically if products get out of stock so that I can prevent late delivery of products

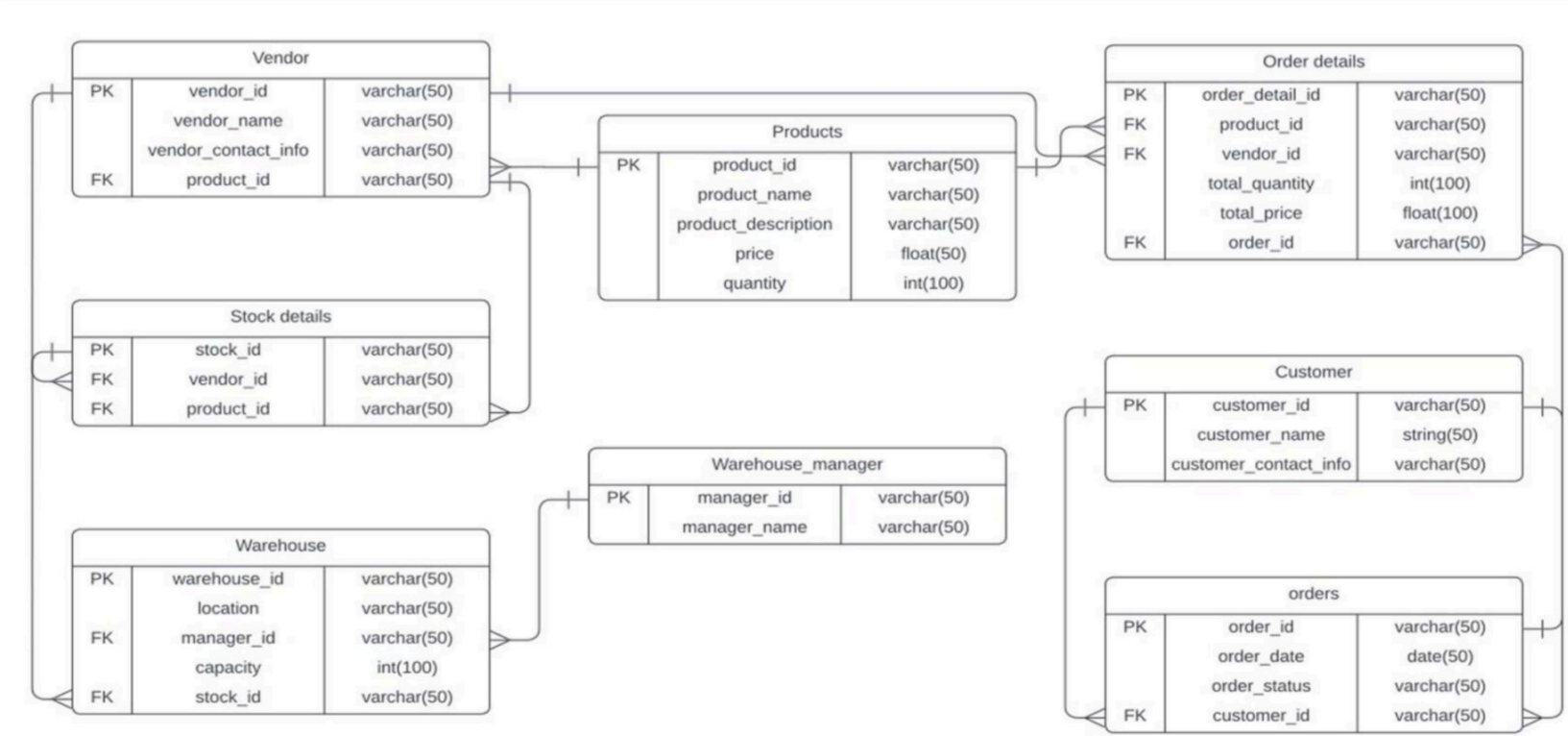
CONTEXT DIAGRAM



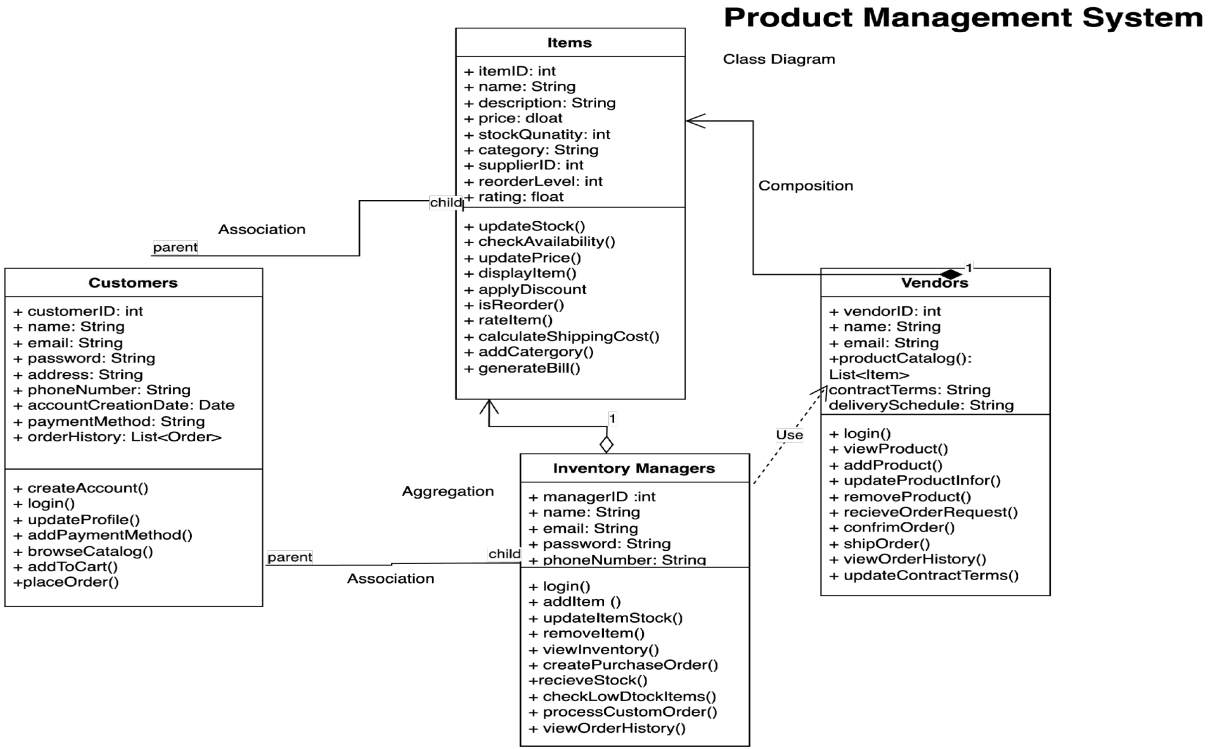
USECASE DIAGRAM



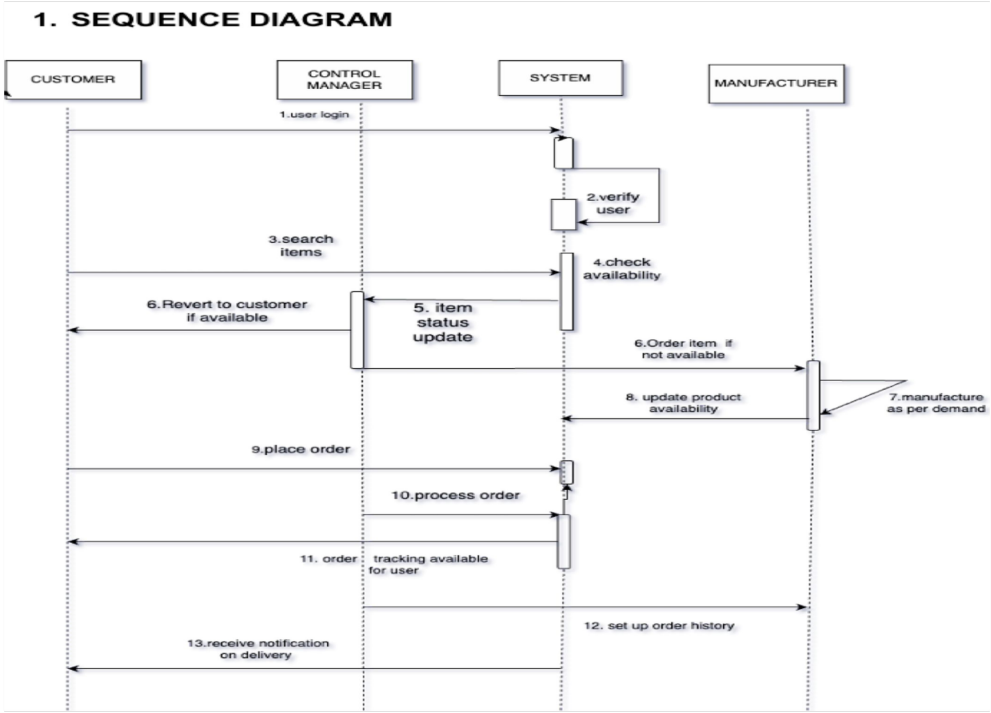
DATABASE DIAGRAM (ER DIAGRAM)



CLASS DIAGRAM



SEQUENCE DIAGRAM



OTHER UML DIAGRAMS

- MVC Architecture
- Activity Diagram
- Package Diagram

STATE OF DEVELOPMENT USING PRODUCT BACKLOG

Sprints Completed

- **Sprint 1** : Established core user and inventory management features
  - Implemented **User Account Creation, Deletion, and Profile Editing**
  - Set up foundational **Authentication, Database Schema, and Admin Interface**
- **Sprint 2** : Expanded catalog and supplier functionalities
  - In Progress **Product Catalog Management** with options to view, search, and filter products
  - Integrated **Supplier Portal** for streamlined supplier interactions and updates
  - *Developed* **Inventory Level Alerts** for low stock notifications
- **Sprint 3** : Enhanced product engagement and tracking
  - Completed **Order Placement, Product Checkout, and Stock Adjustment Features**
  - **Tracking System** for user reference has been established.

LESSONS LEARNED

- **Effective Task Prioritization** : We learned the importance of prioritizing essential features, ensuring that high-impact tasks are addressed early to keep development aligned with key goals.
- **Dependency Management** : Managing dependencies between features proved crucial to avoid delays. This practice allowed us to sequence tasks effectively, reducing bottlenecks.
- **Thorough Testing and Validation** : We recognized the need for rigorous testing to confirm that all features work as intended, enhancing stability and functionality.
- **Communication and Collaboration** : Consistent communication and collaboration among team members were vital for resolving issues quickly and maintaining a cohesive workflow.
- **Adaptability to Changing Requirements** : Being flexible and willing to adjust priorities helped us respond to evolving project needs effectively.
- **Continuous Improvement Through Retrospectives** : Sprint retrospectives highlighted areas for improvement, fostering a culture of continuous learning and development.

Video Link

Part 1 -
https://drive.google.com/file/d/1Qf38ddNGIZcVR8xf5mSZE6rPfTaZ5sKk/view?usp=drivesd k

Part 2 -
https://drive.google.com/file/d/1H2djNwYj1vqxMyOI4ZvXtdUhruT6ibzu/view?usp=sharing

Demo Video Link

Part3 -https://drive.google.com/file/d/1rY0b01zZpvuodgdhRZgLu-68VoA_51le/view?usp=sharing

GITHUB LINK

```
project-repository/
├── backend/              # Backend code (Express.js and MongoDB)
│   ├── controllers/      # API request controllers
│   ├── models/           # Database models
│   ├── routes/           # API routes
│   ├── config/           # Database configuration
│   └── server.js         # Server entry point
└── frontend/             # Frontend code (React)
    ├── src/
    │   ├── components/   # Reusable components
    │   ├── pages/        # Application pages
    │   └── App.js        # Frontend entry point
```

Basic Project Structure

Our Product Management system is Here

Usage for

1. **Create an Account**: Register and log in to access features.
2. **Manage Products**: Add, edit, and delete products.
3. **Supplier Portal**: View and manage inventory linked to suppliers.
4. **Order Tracking**: track orders with real-time status.

THANK YOU FOR YOUR KIND ATTENTION

Q&A

THANK YOU