Sprint 1 Proposal – Team "Thunders"

Project: DineEase – Restaurant Online Ordering System

1. Team Structure and Roles

Name	Role	Key Responsibilities
Sanjana Kukal	Project Manager & DevOps Engineer	Oversees sprint planning, manages CI/CD pipelines with Docker and GitHub Actions, and ensures timely delivery of milestones. Coordinates communication and manages the overall project roadmap.
Shaik Haseena Begum	Frontend Developer	Develops responsive and accessible user interfaces using React.js and Tailwind CSS. Integrates REST APIs, handles state management, and ensures a seamless customer experience across devices.
Hemanth Naga Kiran Kantu	Backend Developer (Node.js & Express.js)	Designs and develops RESTful APIs, manages authentication and payment integrations, and connects the backend with the MySQL database. Ensures performance, scalability, and data security.
Achyuth Konda	UI/UX Designer	Creates user-centric designs and interactive wireframes using Figma. Focuses on intuitive navigation, clear menu layouts, and optimal ordering flow for both customers and restaurant staff.
Anusha Erumalla	Database Administrator (MySQL)	Designs normalized database schemas, ensures efficient query performance, manages backups, and maintains data integrity for restaurants, users, and order transactions.

2. Introduction / Project Overview

DineEase is a digital restaurant management and ordering system that transforms traditional dining into a seamless online experience. It enables customers to browse menus, place orders, reserve tables, and make payments online. Meanwhile, restaurant owners can manage orders, update menus, and analyze performance in real time. The system aims to reduce manual errors, minimize wait times, and increase operational efficiency through automation and data-driven insights.

3. Application Idea and Purpose

The **goal** of DineEase is to create a fast, convenient, and user-friendly digital platform connecting restaurants and customers efficiently.

Core Functionalities:

- **Menu Management:** Add, update, or delete food items dynamically.
- **Order Placement:** Customers can customize meals and place dine-in, takeaway, or delivery orders.
- **Table Reservations:** View and book tables with live availability updates.
- **Real-Time Tracking:** Track preparation and delivery progress.
- **Secure Payments:** Integrated gateway for online transactions.
- **Admin Dashboard:** Manage sales reports, inventory, and customer data.

Technology Stack:

- **Frontend:** React.js + Tailwind CSS
- **Backend:** Node.js + Express.js
- **Database:** MySQL
- **Deployment:** Docker + GitHub Actions
- **Version Control:** GitHub

4. Problem Statement / “How Might We” Questions

Restaurants and customers often face inefficiencies in communication and order processing. Manual methods lead to delays and errors.
DineEase addresses these challenges through automation and user-centric design.

How might we:

1. Improve restaurant efficiency with digital order and menu management?
2. Offer customers a convenient, contactless ordering experience?
3. Reduce waiting time and human error during busy hours?
4. Provide insights to restaurants for better business decisions?

5. Code of Conduct

Team **Thunders** is committed to maintaining professionalism, accountability, and collaboration throughout the project lifecycle.

Our conduct ensures productivity, respect, and a positive team culture during all development sprints.

Team Principles:

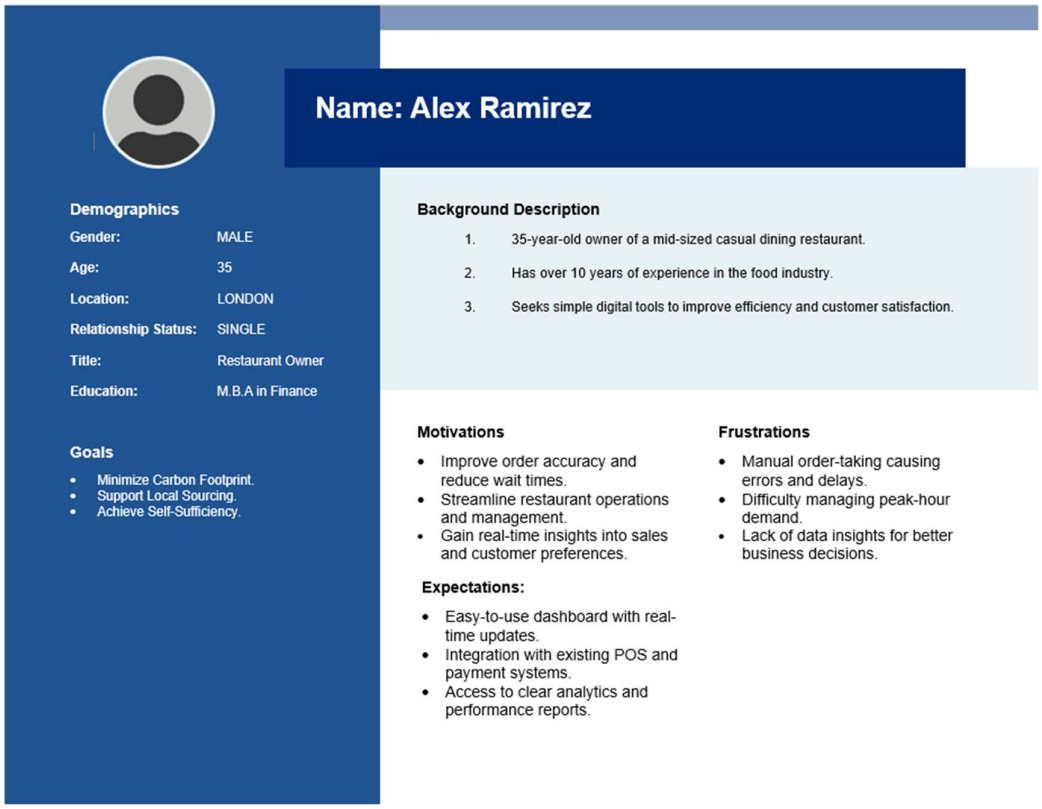
- **Professionalism:** Maintain punctuality, deliver assigned tasks on time, and communicate clearly.
- **Collaboration:** Support each other through active communication and knowledge sharing.
- **Transparency:** Regularly update progress on Trello and GitHub; raise blockers early.
- **Respect:** Value every team member's input and foster an inclusive, supportive environment.
- **Accountability:** Take ownership of individual and shared responsibilities.
- **Conflict Resolution:** Address disagreements constructively within the team; escalate only when necessary.
- **Version Control Discipline:** Follow Git branching strategy with meaningful commits and pull requests.
- **Ethical Practice:** Handle user data securely, maintain privacy, and follow fair coding standards.
- **Attendance & Participation:** Attend sprint meetings, reviews, and retrospectives unless excused in advance.
- **Continuous Improvement:** Learn from feedback and strive for quality in every sprint deliverable.

Trello Link:
https://trello.com/invite/b/uPgiOywm/ATTIfb65b93601fb4382e9e6ede0b11c2f6bC3AA8D4D/dineease-restaurant-online-ordering-system

GitHub Repository URL: https://github.com/hemanthkantu/DineEASE/tree/main

These platforms are used to manage development tasks, track progress, and ensure consistent version control.

6. Personas



Name: Alex Ramirez

Demographics

Gender:	MALE
Age:	35
Location:	LONDON
Relationship Status:	SINGLE
Title:	Restaurant Owner
Education:	M.B.A in Finance

Goals

- Minimize Carbon Footprint.
- Support Local Sourcing.
- Achieve Self-Sufficiency.

Background Description

1. 35-year-old owner of a mid-sized casual dining restaurant.
2. Has over 10 years of experience in the food industry.
3. Seeks simple digital tools to improve efficiency and customer satisfaction.

Motivations

- Improve order accuracy and reduce wait times.
- Streamline restaurant operations and management.
- Gain real-time insights into sales and customer preferences.

Frustrations

- Manual order-taking causing errors and delays.
- Difficulty managing peak-hour demand.
- Lack of data insights for better business decisions.

Expectations:

- Easy-to-use dashboard with real-time updates.
- Integration with existing POS and payment systems.
- Access to clear analytics and performance reports.

Name: Ellori Johnson

Demographics

Gender:	FEMALE
Age:	28
Location:	LONDON
Relationship Status:	SINGLE
Title:	Software Engineer
Education:	B.Sc. in Computer Science

Goals

- Find nearby restaurants quickly.
- Order food online without long wait times.

Background Description

1. Busy young professional who enjoys dining out but prefers convenience.
2. Frequently orders takeaway or delivery after work.
3. Values efficiency, transparency, and easy digital interactions.

Motivations

- Save time and avoid queues.
- Enjoy a seamless digital dining experience.
- Receive discounts, loyalty points, or offers.

Frustrations

- Apps with too many steps or unclear layouts.
- Long delivery times or inaccurate estimates.
- Inconsistent menu information or unavailable items.
- Limited payment or customization options.

Expectations:

- Simple, intuitive app design.
- Secure online payments.
- Real-time updates on order and table availability.
- Option to save favorite dishes and previous orders.