# Project Report

## 1. INTRODUCTION

### 1.1 Project Overview

SB Foods is a comprehensive full-stack MERN-based food ordering web platform that offers users a

seamless experience to browse, select, and order food online. It simplifies the interaction between

customers, restaurants, and administrators.

### 1.2 Purpose

To create a scalable, intuitive food ordering system that enhances user convenience, improves

restaurant visibility, and optimizes the order management process.

## 2. IDEATION PHASE

### 2.1 Problem Statement

People face difficulties ordering food during odd hours, busy routines, or emergencies. The current

platforms lack personalized recommendations and efficient dashboards for restaurants.

### 2.2 Empathy Map Canvas

Users like Lisa need late-night food with minimal effort. Empathy mapping revealed desires for

speed, clarity, comfort, and secure transactions.

### 2.3 Brainstorming

Multiple ideas were generated ranging from drone deliveries to meal planners. "SB Foods" was

chosen for its feasibility, impact, and scalability.

## 3. REQUIREMENT ANALYSIS

## 3.1 Customer Journey Map

The journey spans user registration, product selection, checkout, order tracking, and delivery.

Admins and restaurants have their own flows.

## 3.2 Solution Requirement

Functional Requirements: User Registration, Product Browsing, Cart, Order Placement, Admin Panel,

etc.

Non-functional Requirements: Usability, Security, Reliability, Performance, Availability, Scalability.

## 3.3 Data Flow Diagram

Graphically depicts how data flows between users, the server, database, and external APIs.

## 3.4 Technology Stack

Frontend: React.js

Backend: Node.js, Express.js

Database: MongoDB Atlas

Authentication: JWT, bcrypt

Cloud Hosting: Railway/Vercel

# 4. PROJECT DESIGN

## 4.1 Problem Solution Fit

SB Foods solves the need for late-night, easy-to-order food by providing a seamless, AI-backed

ordering system.

## 4.2 Proposed Solution

A web-based platform with user authentication, food browsing, cart management, payment

processing, and admin/restaurant dashboards.

## 4.3 Solution Architecture

Three-tier architecture: Client (React), Server (Node + Express), Database (MongoDB),
External APIs

for email, location, and payments.

# 5. PROJECT PLANNING & SCHEDULING

## 5.1 Project Planning

Two sprints were planned:

• Sprint 1 (8 Story Points): Data Collection, Preprocessing

• Sprint 2 (16 Story Points): Model Building, Deployment

Velocity: 12 story points per sprint.

Product Backlog & Burndown: Structured and updated throughout the development
process.

# 6. FUNCTIONAL AND PERFORMANCE TESTING

## 6.1 Performance Testing

User Acceptance Testing (UAT) covered all core functionalities, including registration, login,
cart

management, ordering, admin approval, and email notifications. All critical paths passed.

# 7. RESULTS

## 7.1 Output Screenshots

• Login/Registration

• Product Listings

• Cart Page

• Order Confirmation

• Admin Dashboard

• Restaurant Menu Management

# 8. ADVANTAGES & DISADVANTAGES

Advantages:

• Seamless UI/UX

• Scalable backend

• Role-based dashboards

• Secure checkout

Disadvantages:

• No native mobile app

• Dependency on internet access

# 9. CONCLUSION

SB Foods successfully addresses modern food delivery needs. It offers a complete digital platform,

combining convenience, speed, and security for users and vendors alike.

# 10. FUTURE SCOPE

• AI-based food recommendations

• Mobile App version

• Wallet integration

• Loyalty program for frequent users

# 11. APPENDIX

Source Code: Included inhttps://github.com/syamalakunapareddy1/OrderOnTheGo-Your-On-Demand-Food-Ordering-Solution GitHub Repository

Dataset: N/A (Dynamic Data Entry)

GitHub Link: https://github.com/syamalakunapareddy1/OrderOnTheGo-Your-On-Demand-Food-Ordering-Solution

Solution

Live Demo: Deployed on Railway / Vercel