Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	19 February 2026
Team ID	LTVIP2026TMIDS87679
Project Name	Steamy Pot – Smart Food Delivery Platform
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
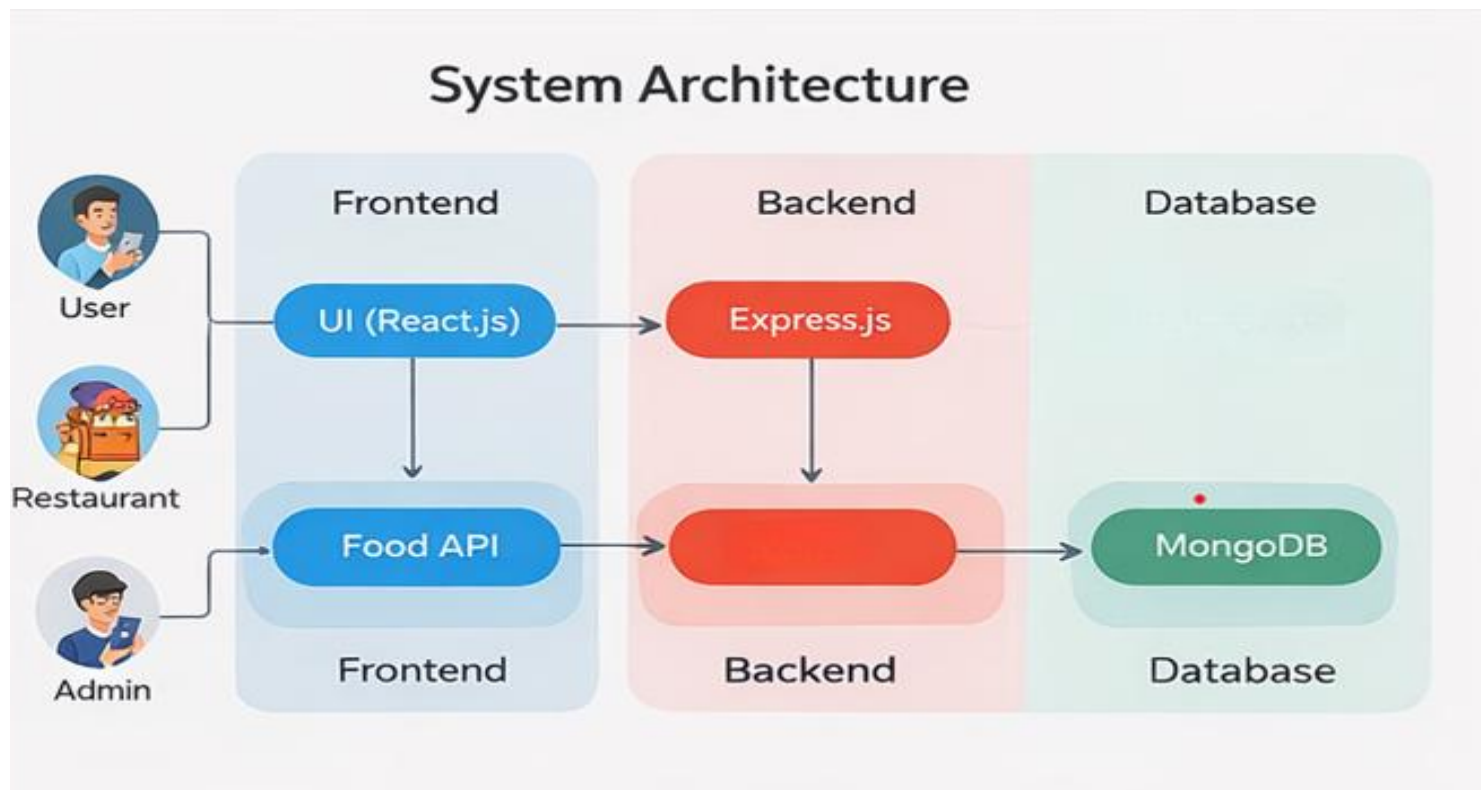
Table-1: Components & Technologies:

S. No	Component	Description	Technology
1	User Interface	Web-based dashboards for Users, Restaurants, Drivers and Admin	React.js, HTML5, CSS3, JavaScript
2	Application Logic-1	Authentication & Authorization Logic	Node.js, Express.js, JWT, bcrypt
3	Application Logic-2	Order Processing & Lifecycle Management	Node.js, Express.js
4	Application Logic-3	Driver Assignment & Social Recommendation Logic	JavaScript Algorithms (Node.js Backend)
5	Database	Stores Users, Orders, Restaurants, Drivers, Carts	MongoDB (NoSQL) with Mongoose ODM
6	Cloud Database	Cloud-hosted database service	MongoDB Atlas
7	File Storage	Stores food images and profile images	Cloud Storage / Local File System
8	External API-1	Email verification and notification service	Nodemailer / SMTP Service
9	External API-2	OAuth Authentication	Google OAuth, LinkedIn OAuth
10	Machine Learning Model	Social-aware recommendation logic (future enhancement)	Custom JS-based Recommendation Algorithm
11	Infrastructure (Server/Cloud)	Application deployment and hosting	Node.js Server, AWS / Render / Vercel

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1	Open-Source Frameworks	MERN stack-based open-source development	MongoDB, Express.js, React.js, Node.js
2	Security Implementations	JWT authentication, role-based access control, password hashing, HTTPS	JWT, bcrypt, HTTPS, OWASP practices
3	Scalable Architecture	3-tier architecture with horizontal scaling support	MERN Stack, REST APIs
4	Availability	High uptime through cloud deployment and monitoring	AWS / Render / Cloud Hosting
5	Performance	Optimized API responses, indexed MongoDB queries, efficient driver matching	MongoDB Indexing, Async JavaScript