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

Date	26 February 2026
Team ID	LTVIP2026TMIDS80402
Project Name	Order on you go
Maximum Marks	4 Marks

Technical Architecture:

SBFoods Project Architecture

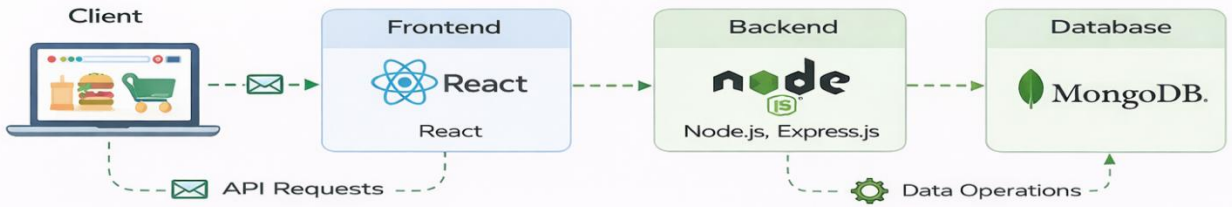

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1	User Interface	Web application for users & admin (product browsing, cart, dashboard)	React.js, HTML5, CSS3, JavaScript
2	Application Logic-1	Authentication & Authorization (Login, Register, JWT validation)	Node.js, Express.js, JWT, bcrypt
3	Application Logic-2	Product Catalog Management (Add, Edit, Delete products)	Express.js, REST APIs
4	Application Logic-3	Cart & Order Processing Logic	Node.js, Express.js
5	Database	Stores Users, Products, Cart, Orders	MongoDB, Mongoose
6	Cloud Database	Cloud database hosting	MongoDB Atlas
7	File Storage	Product image storage	Cloudinary
8	External API-1	Payment Gateway Integration (Future Enhancement)	Stripe API / Razorpay API
9	External API-2	Email Notification Service (Optional)	Nodemailer
10	Machine Learning (Future)	Product Recommendation System	Recommendation Algorithm
11	Infrastructure	Application Deployment	Localhost (Development), Render / Vercel / AWS (Production)

Table-2: Application Characteristics:

S. No	Characteristic	Description	Technology
1	Open-Source Frameworks	MERN Stack implementation	React.js, Node.js, Express.js
2	Security Implementation	Password hashing, JWT authentication, role-based access	bcrypt, JWT, CORS

S. No	Characteristic	Description	Technology
3	Scalable Architecture	3-Tier Architecture (Frontend–Backend–Database)	REST Architecture, MongoDB
4	Availability	Cloud-based hosting with high uptime	MongoDB Atlas, Cloud Hosting
5	Performance	Fast API response and optimized database queries	Express Middleware, Indexed MongoDB