**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| Date | 26-05-2025 |
| Team ID | LTVIP2025TMID55576 |
| Project Name | *OrderOnTheGo* |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The *OrderOnTheGo* platform is built using the **MERN stack** and follows a structured **3-tier architecture**:

* **Presentation Layer**: Developed with React.js to support dynamic rendering, routing, and role-based dashboards (User, Restaurant, Admin).
* **Business Logic Layer**: Uses Node.js with Express.js to handle API requests, authentication, cart management, and order processing.
* **Data Layer**: MongoDB stores all data related to users, products, restaurants, orders, and admin functions.

**Table-1 : Components & Technologies:**

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| --- | --- | --- | --- |
| **S. No.** | **Component** | **Description** | **Technology** |
| 1 | User Interface | React-based web UI for users, restaurants, and admins | React.js, JavaScript,CSS |
| 2 | Application Logic - 1 | Cart handling, order placement, login, and routing | Node.js, Express.js |
| 3 | Application Logic - 2 | Admin panel, restaurant dashboard, product management | React.js (components), Node.js (backend) |
| 4 | Database | Stores users, restaurants, orders, products, cart data | MongoDB |

**Table-2: Application Characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Characteristics** | **Description** | **Technology** |
| 1 | Open-Source Frameworks | Frontend and backend technologies | React.js, Node.js, Express.js |
| 2 | Scalable Architecture | Modular 3-tier design with token-based access control | RESTful APIs, JWT, MongoDB |

**References:**

[React.js Documentation](https://react.dev/)

[Node js Best Practice](https://nodejs.org/en/learn/getting-started/introduction-to-nodejs)

[JSON Web Server Reference](https://www.npmjs.com/package/json-server)

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>

[MongoDB docs](https://www.mongodb.com/docs/)