**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| --- | --- |
| Date | 26.06.2025 |
| Team ID | SWUID20240036329 |
| Project Name | Ora social media |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The ORA platform follows a **3-tier architecture**:

* **Presentation Layer**: React.js + Tailwind CSS frontend
* **Application Layer**: Node.js + Express.js API
* **Data Layer**: MongoDB Atlas for structured data + Cloudinary for image storage

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

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Component | Description | Technology |
| 1 | User Interface | Web UI for post creation, profile, feed | React.js, Tailwind CSS |
| 2 | Application Logic-1 | Auth, Post Upload, Like/Save, Comment | Node.js, Express.js |
| 3 | Application Logic-2 | Profile management, delete/edit, JWT auth | Node.js, Express.js |
| 4 | Database | Store users, posts, comments, likes | MongoDB Atlas |
| 5 | Media Storage | Store and fetch images securely | Cloudinary |

**Table-2: Application Characteristics:**

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| --- | --- | --- | --- |
| S.No | Characteristics | Description | Technology |
| 1 | Open-Source Frameworks | Based on MERN stack | React.js, Node.js, Tailwind |
| 2 | Scalable Architecture | REST APIs + hosted on Render/Netlify | Microservices-friendly |
| 3 | Secure Authentication | Token-based JWT Auth | JWT, bcrypt, HTTPS |

**References:**

* [**React.js Official Documentation**](https://react.dev)
* [**Node.js Best Practices**](https://github.com/goldbergyoni/nodebestpractices)
* [**Express.js Documentation**](https://expressjs.com)
* [**MongoDB Documentation**](https://www.mongodb.com/docs/)
* [**Cloudinary Media Management**](https://cloudinary.com/documentation)
* [**JWT Auth Guide**](https://jwt.io/introduction)
* [**Tailwind CSS Documentation**](https://tailwindcss.com/docs/installation)