**Project Design Phase-II**

**Technology Stack (Architecture & Stack)**

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| --- | --- |
| Date | 03 October 2022 |
| Team ID | PNT2022TMID12586 |
| Project Name | Project - Nutrition Assistant Application |
| Maximum Marks | 4 Marks |

**Technical Architecture: Nutrition Assistant Application**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

USER

FRONT END

BACK END

DATABASE

JAVA

ANDRIOD STUDIO

HTML

JAVA SCRIPT

SQLITE

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

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Component** | **Description** | **Technology** |
|  | User Interface | How user interacts with application e.g.  Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript |
|  | Application Logic-1 | Logic for a process in the application | Java / Python |
| 3. | Database | Data Type, Configurations etc. | MySQL |
| 4. | Cloud Database | Database Service on Cloud | IBM DB2 |
| 5. | File Storage | File storage requirements | IBM Block Storage |
| 6. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud  Local Server Configuration:  Cloud Server Configuration : | Local, Cloud Foundry |

**Table-2: Application Characteristics:**

| **S.No** | **Characteristics** | **Description** | **Technology** |
| --- | --- | --- | --- |
|  | Open-Source Frameworks | List the open-source frameworks used | Android Studio 4.1 |
|  | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | NIL |
|  | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | 3-tier |
|  | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Local Server |
|  | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN’s) etc. | 10 request per second |

**References:**

[**https://c4model.com/**](https://c4model.com/)

[**https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/**](https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/)

[**https://www.ibm.com/cloud/architecture**](https://www.ibm.com/cloud/architecture)

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[**https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d**](https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d)