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

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| **DATE** | **17/10/2022** |
| **Team Leader** | Deepak Kumar Bhagat |
| **PROJECT TITLE** | **AI POWERED NUTRITION ANALYST FOR FITNESS ENTHUSIASTS** |
| **MAXIMUM MARKS** | **FOUR MARKS** |

**TECHNICAL ARCHITECTURE:** The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2.

**PROJECT DESIGN PHASE II:**

**Technology Stack (Architecture & Stack)**



**IMAGE RECOGNITION DL ALGORITHMS PREDICTION ANALYSIS**

**DIETARY PLAN CALCULATE USER CALCULATE ACTIVITY STATUS CALORIES AND NUTRITION**



**FINAL ANALYSIS**

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

|  |  |  |  |
| --- | --- | --- | --- |
| **S.N**  **o** | **Component** | **Description** | **Technology** |
| 1. | User Interface | How user interacts with application e.g.  Web UI, Mobile App, Chatbot etc. | HTML, CSS, |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT  service |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL |
|  | Cloud Database | Database Service on Cloud | IBM Cloudant |
| 6. | File Storage | File storage requirements | IBM Block Storag or  Local Filesystem |
| 7. | External API-1 | Purpose of External API used in the  application | IBM Weather API, etc. |
| 8. | External API-2 | Purpose of External API used in the  application | Aadhar API, etc. |
| 9. | Machine Learning Model | Purpose of Machine Learning Model | Object Recognition  Model, etc. |
| 10 | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud  Local Server Configuration: Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes, etc. |

**Table-2: Application Characteristics:**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.N**  **o** | **Characteristics** | **Description** | **Technology** |
| 1. | Open-Source Frameworks | List the open-source frameworks used | Google Colab |
| 2. | Security Implementations | List all the security / access controls  implemented, use of firewalls etc. | Encryptions, IAM  Controls |
| 3. | Scalable Architecture | Justify the scalability of architecture  (3 – tier, Micro-services) | HTML ,python |
| 4. | Availability | Justify the availability of applications (e.g. use of load balancers,  distributed servers etc.) | HTTP |