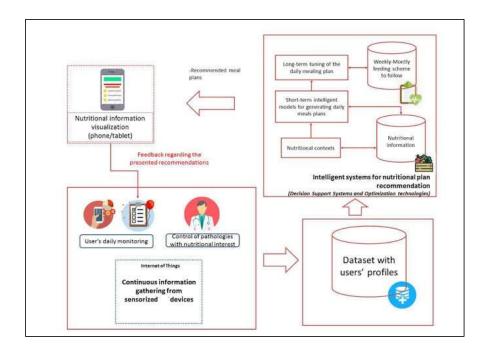
## Project Design Phase-II Technology Stack (Architecture & Stack)

| Date          | 08 October 2022                 |
|---------------|---------------------------------|
| Team ID       | PNT2022TMID36412                |
| Project Name  | Nutrition Assistant Application |
| Maximum Marks | 4 Marks                         |

## **Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2



## Guidelines:

- 1. Include all the processes (As an application logic / Technology Block)
- 2. Provide infrastructural demarcation (Local / Cloud)
- 3. Indicate external interfaces (third party API's etc.)
- 4. Indicate Data Storage components / services
- 5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

| S.No | Component                       | Description  | Technology  |
|------|---------------------------------|--|---|
| 1.   | User Interface                  | How user interacts with application e.g.<br>Web UI, Mobile App, Chatbot etc.                                 | HTML, CSS, JavaScript / Angular Js / React Js etc.                |
| 2.   | Application Logic-1             | Logic for a process in the application   | Java / 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, NoSQL, etc.  |
| 6.   | Cloud Database                  | Database Service on Cloud  | IBM DB2, IBM Cloudant etc.  |
| 7.   | File Storage                    | File storage requirements  | IBM Block Storage or Other Storage<br>Service or Local Filesystem |
| 8.   | External API-1                  | Purpose of External API used in the application  | IBM Weather API, etc.   |
| 9.   | External API-2                  | Purpose of External API used in the application  | Aadhar API, etc.  |
| 10.  | Machine Learning Model          | Purpose of Machine Learning Model  | Object Recognition Model, etc.                                    |
| 11.  | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud<br>Local Server Configuration:<br>Cloud Server Configuration: | Local, Cloud Foundry, Kubernetes, etc.                            |

**Table-2: Application Characteristics:** 

| S.No | Characteristics          | Description   | Technology   |
|------|--------------------------|---|--|
| 1.   | Open-Source Frameworks   | List the open-source frameworks used  | Technology of Opensource framework                     |
| 2.   | Security Implementations | List all the security / access controls implemented, use of firewalls etc.  | e.g. SHA-256, Encryptions, IAM<br>Controls, OWASP etc. |
| 3.   | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)  | Technology used  |
| 4.   | Availability             | Justify the availability of application (e.g. use of load balancers, distributed servers etc.)                            | Technology used  |
| 5.   | Performance              | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Technology used  |