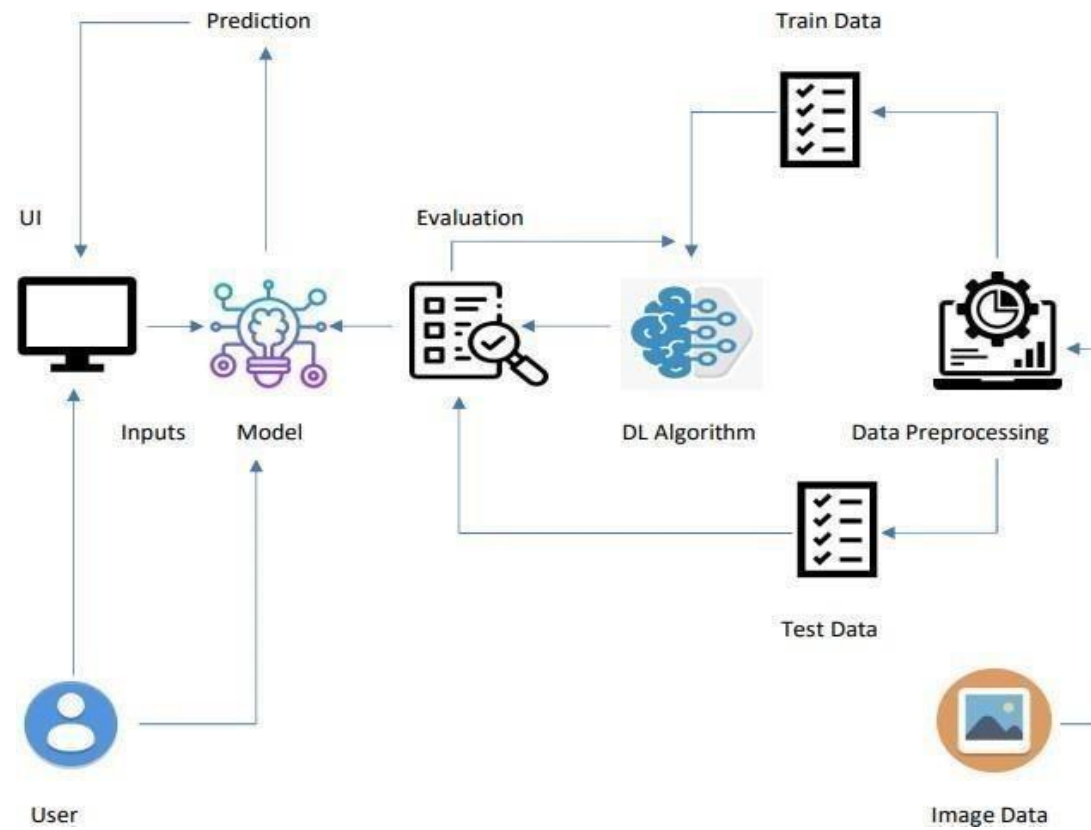


## ***Project Design Phase – II***

***Technology Stack (Architecture & Stack)***

|                      |  |
|----------------------|--|
| <b>Date</b>          | <b>03 October 2022</b>   |
| <b>Team ID</b>       | <b>PNT2022TMID45658</b>  |
| <b>Project Name</b>  | <b>AI-Powered Nutrition Analyzer For<br/>Fitness Enthusiasts</b> |
| <b>Maximum Marks</b> | <b>4 Marks</b>   |

## Technical Architecture:



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

| S.No | Component                       | Description   | Technology   |
|------|---------------------------------|---|--|
| 1.   | User Interface                  | How user interacts with application e.g. 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 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:**

| <b>S.No</b> | <b>Characteristics</b>   | <b>Description</b>  | <b>Technology</b>                                   |
|-------------|--------------------------|---|---|
| 1.          | Open-Source Frameworks   | List the open -source Frameworks used   | Technology of Open Source framework                 |
| 2.          | Security Implementations | List all the security / access controls implemented, use of firewalls etc.  | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3.          | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)  | Technology used                                     |
| 4.          | Availability             | Justify the availability of applications (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                                    |