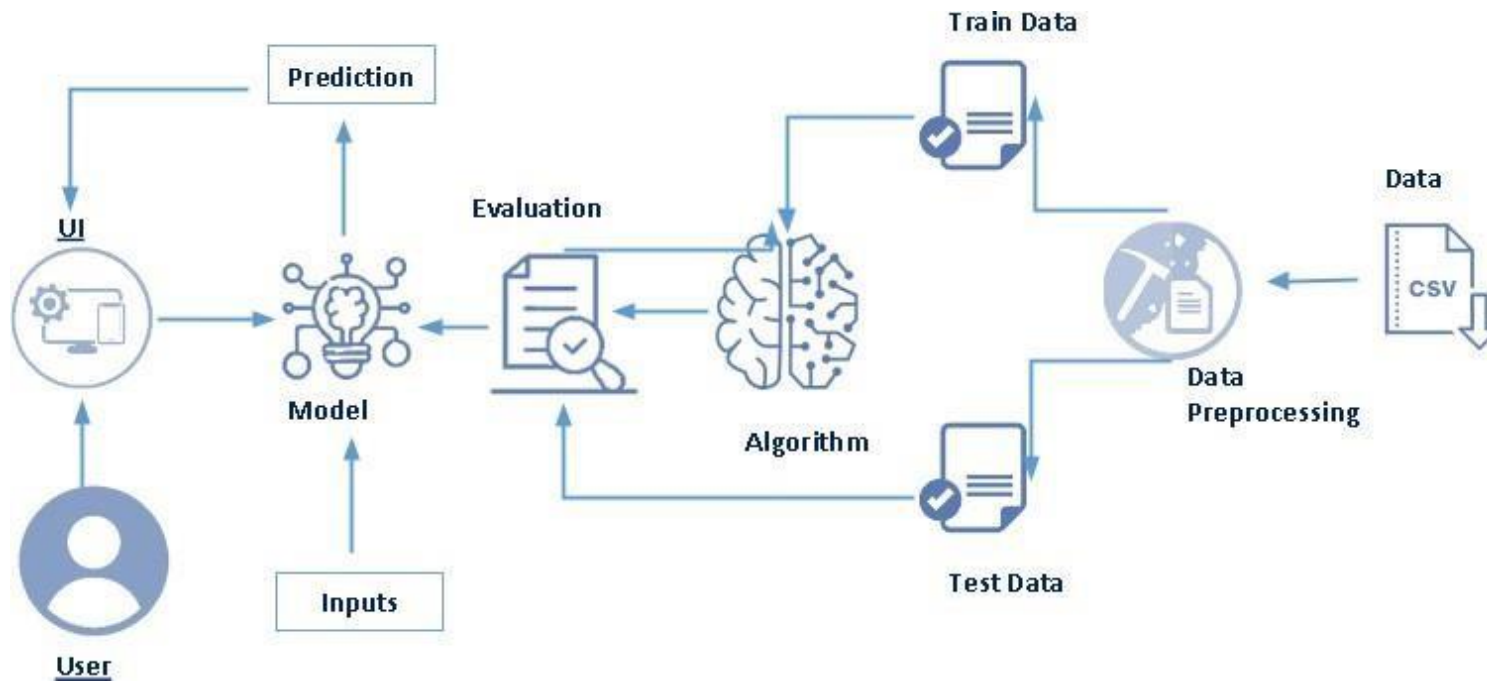


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

|               |   |
|---------------|---|
| Date          | 16 October 2022                             |
| Team ID       | PNT2022TMID45092                            |
| Project Name  | DEMANDEST-AI POWERED FOOD DEMAND FORECASTER |
| Maximum Marks | 4 Marks                                     |

**Technical Architecture:**



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

| S.No | Component                       | Description   | Technology   |
|------|---------------------------------|---|--|
| 1.   | User Interface                  | User access to the application through mobile application   | HTML   |
| 2.   | Application Logic-1             | Creating an application interface   | Python   |
| 3.   | Application Logic-2             | Creating an AI assistant that gives food service to the user  | IBM Watson Assistance  |
| 4.   | Application Logic-3             | Files are stored in the local storage and stored in the cloud   | IBM Watson Assistant   |
| 5.   | File Storage                    | File storage requirements   | IBM Block Storage or Other Storage Service or Local Filesystem |
| 6.   | External API-1                  | Purpose of External API used in the application   | IBM Location REST API, etc.                                    |
| 7.   | Deep Learning Model             | Creating an algorithm to calculate case information provides by the fulfillment center                  | Object Recognition Model, etc.                                 |
| 8.   | Infrastructure (Server / Cloud) | IBM Cloud App Configuration is a centralized feature-management and configuration service on IBM Cloud. | Local, Cloud Foundry, Kubernetes, etc.                         |

**Table-2: Application Characteristics:**

| S.No | Characteristics          | Description  | Technology |
|------|--------------------------|--|------------|
| 1.   | Open-Source Frameworks   | This application has no open-source frameworks.  | Python     |
| 2.   | Security Implementations | Block chain technology is utilised to implement security since its private structure safeguards all data..   | Blockchain |
| 3.   | Scalable Architecture    | Users can acquire food services online, as well as information about the most popular products. In this strategy, customers profit from evaluating their industry data, which gives predictions on day-to- | IBM cloud  |

| S.No | Characteristics | Description  | Technology           |
|------|-----------------|--|----------------------|
|      |                 | day analysis of food sold and reduces food waste by projecting sales movements.                        |                      |
| 4.   | Availability    | Data is updated here, and demand is forecasted based on the data.                                      | IBM Watson Assistant |
| 5.   | Performance     | The geo-fencing algorithm is updated everyday and displays the contaminated zones' day-to-day updates. | Geo Fence            |