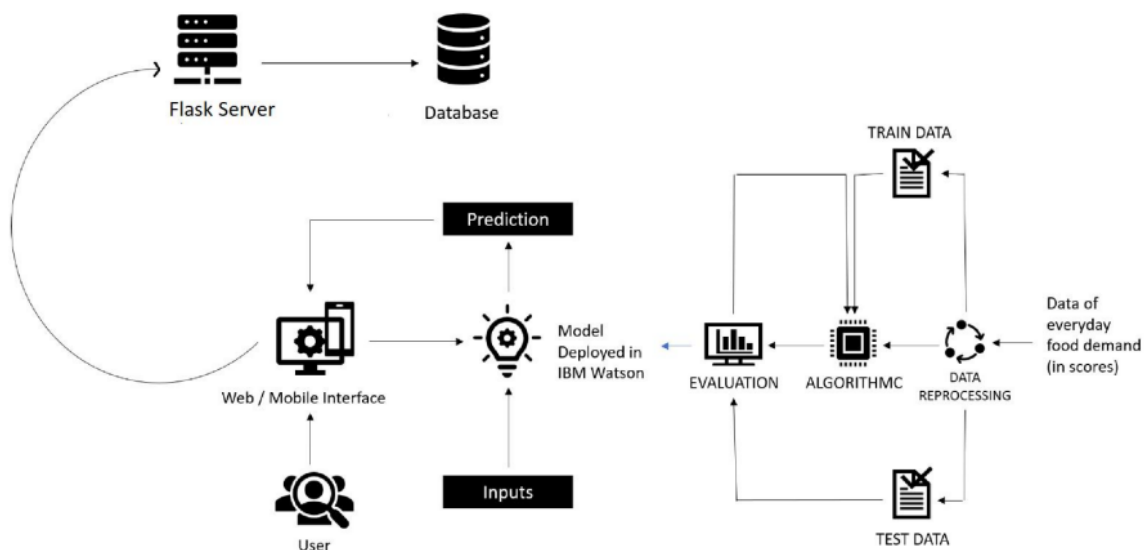


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	15 November 2022
Team ID	PNT2022TMID27576
Project Name	DemandEst - AI powered Food Demand Forecaster
Maximum marks	4 marks

### Technical Architecture:



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

<b>S.No</b>	<b>Component</b>	<b>Description</b>	<b>Technology</b>
1.	User Interface	User Interface is used to interact with the user and collect necessary details for user login and registration.	HTML, CSS, Javascript and Bootstrap
2.	Machine Learning Model	The Machine Learning model is trained using Multivariate linear regression algorithm along with Model Boosters to produce accurate predictions	Python, Numpy, Pandas, Sklearn Library
3.	Dataset	The Dataset is collected and stored as CSV file	MS Excel
4.	Backend	The APIs are used to serve the required content from the server. For prediction results, the corresponding API is triggered.	Python, Flask
5.	Open-Source Frameworks	The open-source frameworks used are listed	Bootstrap
6.	Third Party API	The Third party APIs Integrated are listed.	Google Fonts IBM API Client
7.	Cloud Deployment	The model is deployed in IBM Watson Studio	IBM Watson Studio

**Table-2 : Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>
1.	Scalable Architecture	The Architecture is customized according to user's needs
2.	Availability	The System is well tested so it is Highly available
3.	Performance	Appropriate number of features are extracted from the data which makes Feature engineering efficient