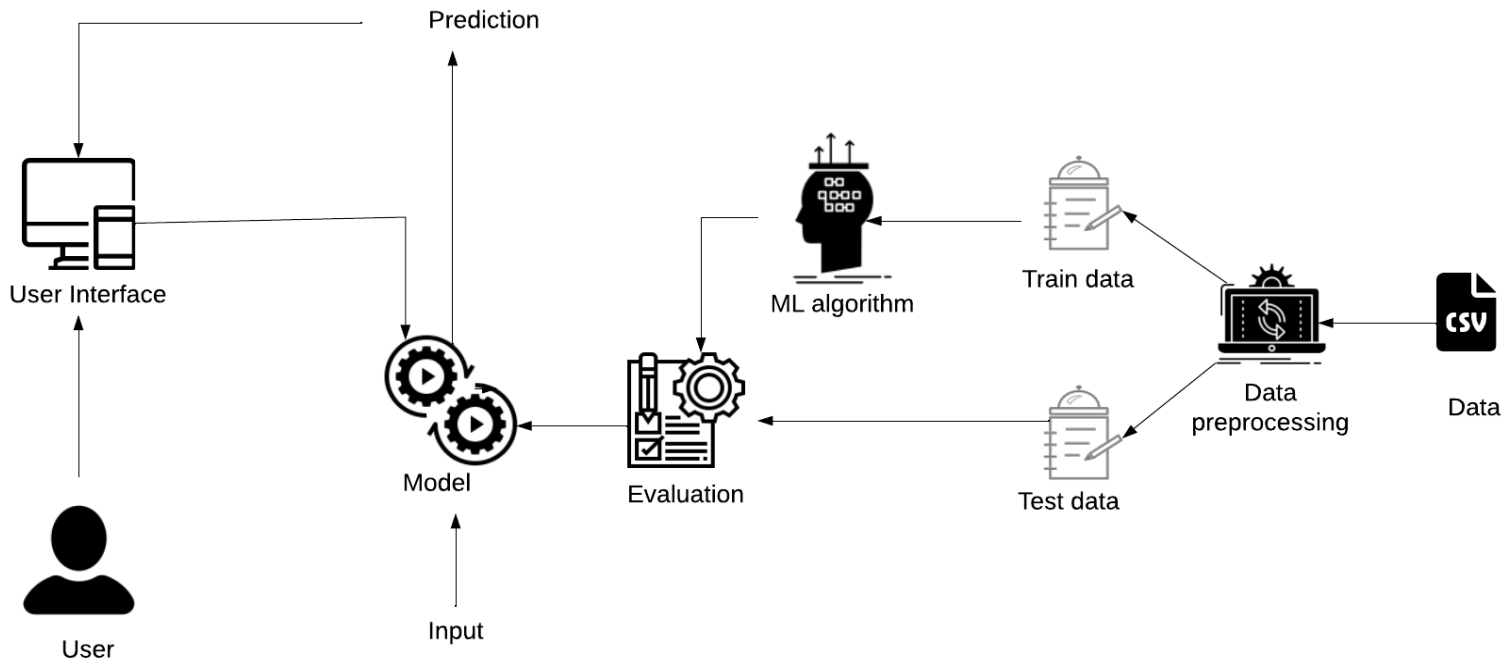
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID12535
Project Name	Project - Early Detection of Chronic Kidney Disease Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:



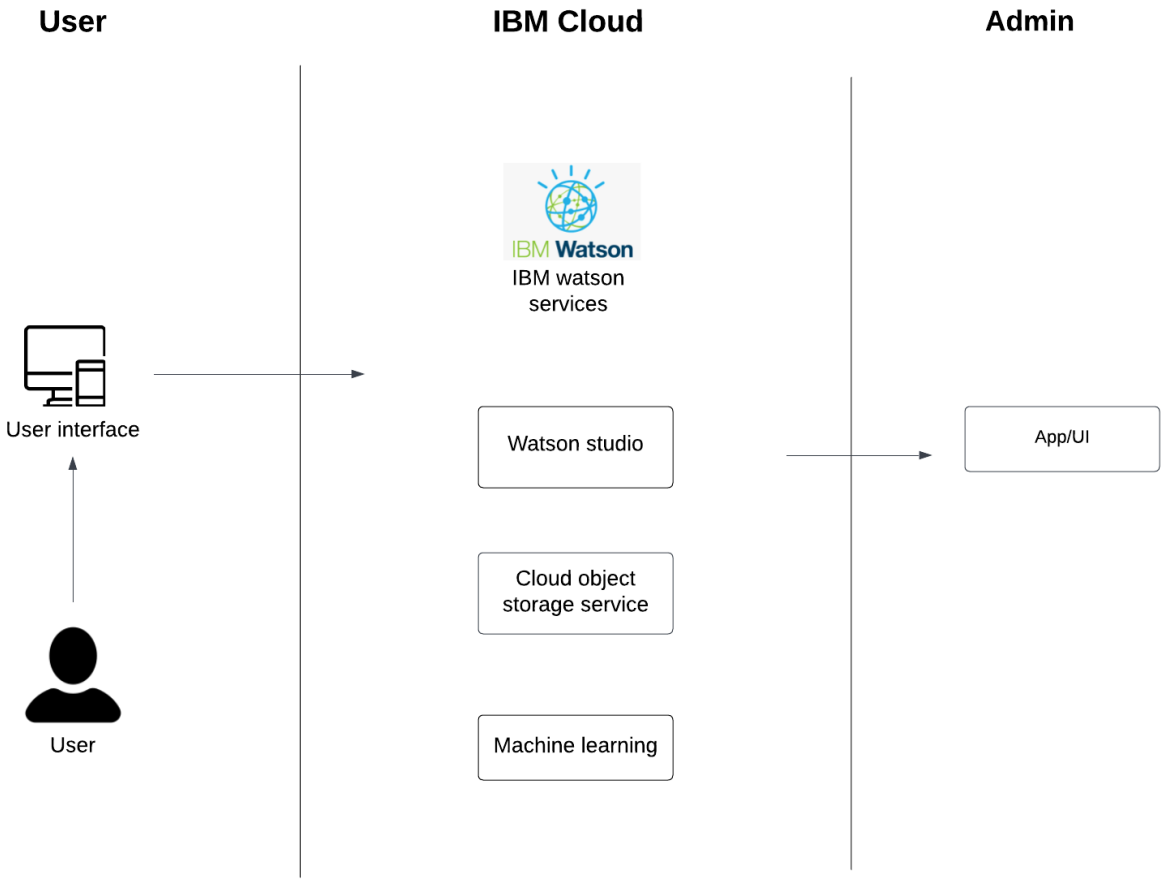


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript.

2	Data preprocessing	Cleaning the dataset (Handling the missing values etc)	Java / Python
3	Splitting the dataset	Splitting the dataset into train and test data	Java / Python
4	Test the model	Testing the model using test data	Java / Python
5	Evaluation	Evaluating the built model (accuracy, confusion matrix)	Java / Python
6	Machine Learning Model	The ML model which takes the input parameter given by the user and predict the result	IBM watson Machine learning service
7	Infrastructure (Server / Cloud)	Application Deployment on Cloud	IBM watson services (Cloud object storage service, watson studio, machine learning)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Flask mico web framework used for developing web application
2	Scalable Architecture	The website should be able to handle influx or reduced traffic at any given point	
2	Availability	The application can be accessed by users with an internet connection from anywhere at any time (hostin it in cloud)	IBM cloud

3	Performance	Multiple users should be able to access the application at the same time	