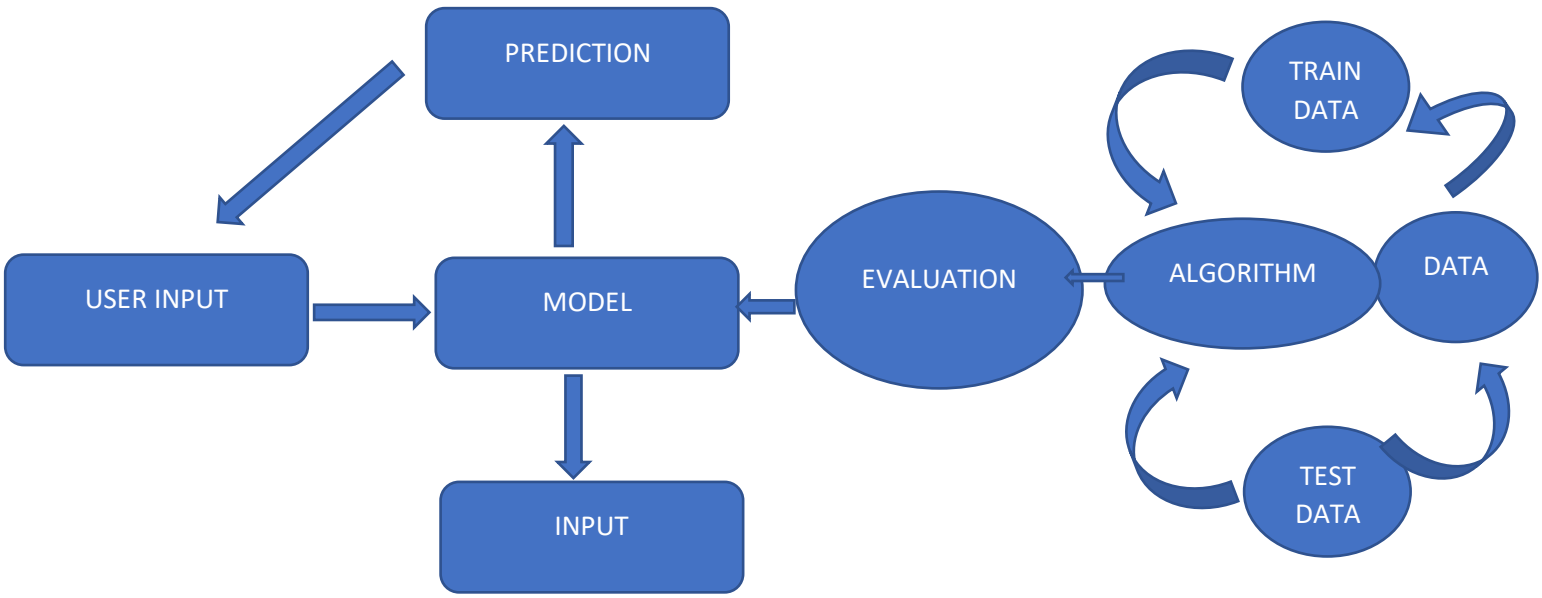
TECHNOLOGY STACK(ARCHITECTURE AND STACK)

DATE	24 OCT 2022
TEAM ID	PNT2022TMID32429
PROJECT NAME	Early Detection of Chronic Kidney Disease Using Machine Learning
TOTAL MARKS	4

TECHNICAL ARCHITECTURE



SNO	COMPONENTS DESCRIPTION	TECHNOLOGY
1	User Interface User interact with our application through web User Interface.	HTML, CSS and Python flask.
2	Application Logic-Test Vitals Form After Logged in , when the user click on the test vital form button ,he/she directed to the form page to enter the vitals for prediction.	Front end- HTML ,CSS MySQL,Pytjon flask Back end- Python
3	Database Data type - String ,Numeric.	MySQL.
4	Machine Learning Model Get the data from the user and predict the data with tested and trained dataset models	Data Recognition Model, etc.
5	Cloud Database Database Service on Cloud	IBM.

Description Technology

1. Open-Source Frameworks Python Script,java script ,python , HTML,CSS & MySQL.

2. Security Implementations -Make sure that data transfer is secured.

3. Scalable Architecture -with more prediction and one reliable solution

4. Availability -Real time applications

5. Performance- We can send huge amount of data and wireless connectivity.

Application characteristics

S.NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1	Open sources framework	Frameworks used	Jupyter
2	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256, Encryptions, IAM Controls, OWASP etc.
3	Scalable Architecture	Scalability of architecture	3-tier architecture
4	Availability	Availability of application	Use of cloud services which use load balances
5	Performance	Design consideration for the performance of the application	Number of requests per second is 5. Cache is used for fast access