

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

Date	03October 2022
Team ID	PNT2022TMID39690
Project Name	Project – Early Detection Of Chronic Kidney Disease Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

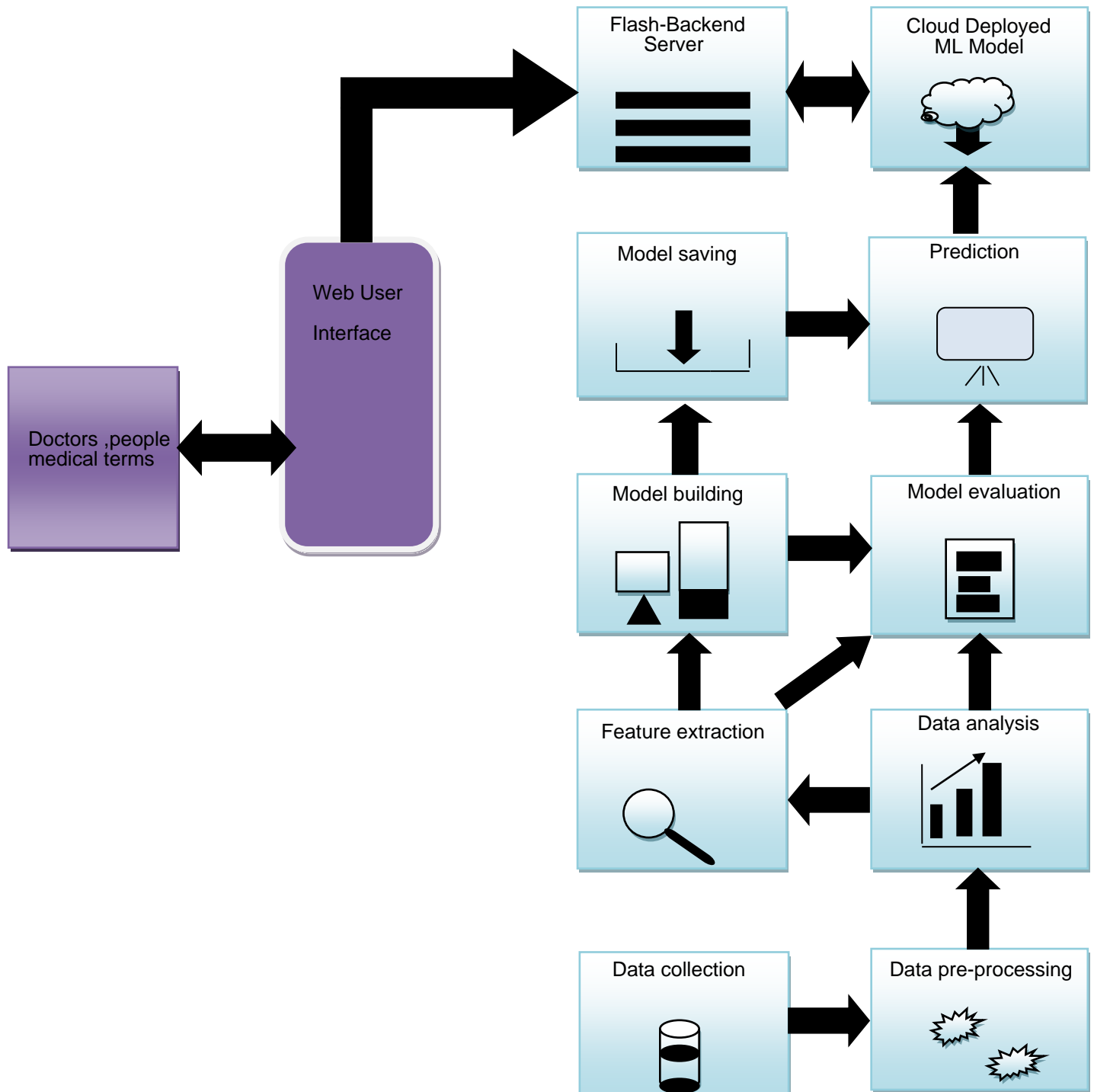


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App,etc.	HTML.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson Cloud services
4.	Data	Data with Data types	CSV File
5.	Cloud Database	Data base service on cloud	IBM DB2,IBM Cloudant Etc
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local File system
7.	Machine learning model	Purpose of Machine Learning Model	Supervised learning model
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local and Cloud .

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Frameworks used	Jupyter
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	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