

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	5 th November 2022
Team ID	PNT2022TMID04327
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2 s

Technology Architecture for Heart Diseases prediction

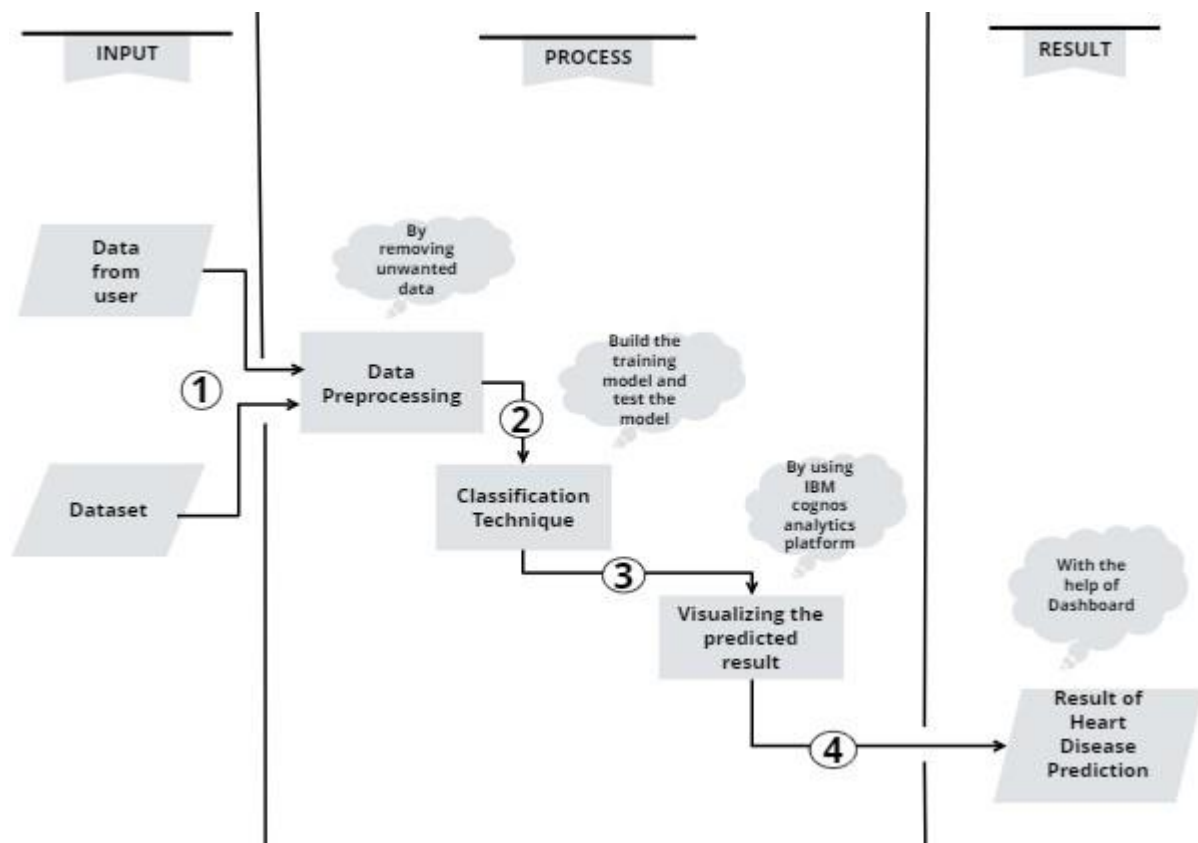


Table-1: Component & Technologies:

S.No	Component	Description	Technologies
1	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, React JS
2	Application Logic	Logic for a process in the application	Python
3	Database	Data Type, Configurations etc.	MySQL
4	Cloud Database	Database Service on Cloud	IBM DB2
5	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6	Machine Learning Model	To train and test the model for prediction	k-means, Decision Tree, Naïve Bayes
7	Infrastructure (server/cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration	Local, Cloud Foundry

Table-2: Application Characteristics:

S. No	Characteristics	Descriptions	Technology
1	Open-Source Framework	List the open-source frameworks used	IBM Cognos Analytics
2	Security Implementation	List all the security / access controls implemented, use of firewalls etc.	Security provided by cloud
3	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro- services)	IBM Cognos Analytics
4	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	IBM Cloud Service
5	Performance	Design consideration for the performance of the application	Reliable Data Classification Models