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

Date	24 October 2022
Team ID	PNT2022TMID03964
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 table1 & table 2
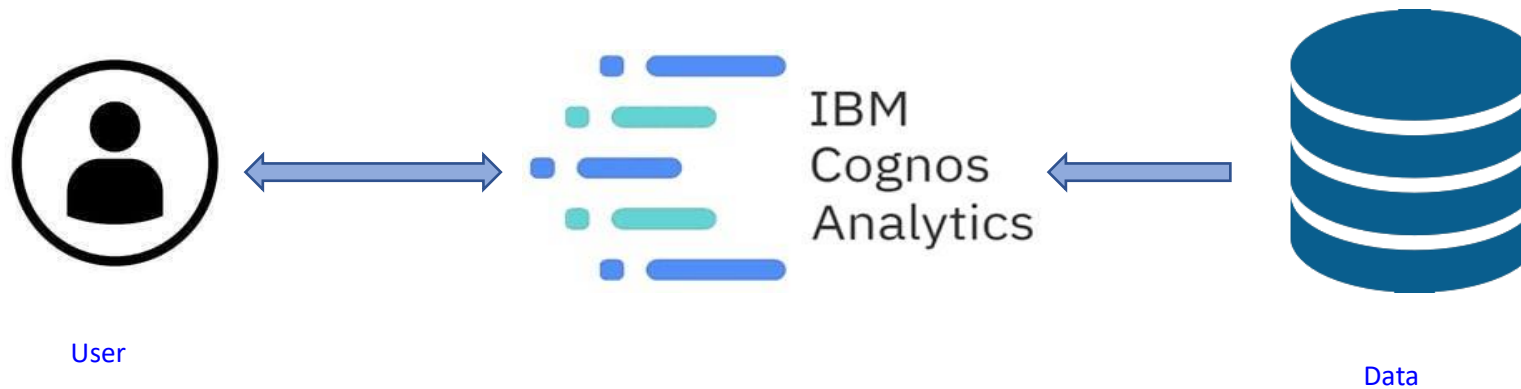

User

Data

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 / Angular JS / React JS etc.
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, IBM Cognos Analytics
4.	Application Logic-3	Logic for a process in the application	IBM Cognos Analytics
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, Cloudant DB ,OLAP
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Watson API
9.	Machine Learning Model	Purpose of Machine Learning Model	Regression Model, Classification Model, Clustering Model, Object Recognition Model, etc.,
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Power BI is truly an interactive tool that gets connected with online platforms to fetch the data for you. With the connectors and pre-installed dashboards, Power BI can analyse the data and present visually creative reports by connecting with Google Analytics, Salesforce, and other important software.	Microsoft Power BI, IBM Cognos

2.	Security Implementations	Authenticated users Hosted on Cloud-based servers, it offers strong, multilayer security to all data exchanged, also remains protected from Cyber attacks	IBM Cloud
3.	Scalable Architecture	Support feature increase in throughput and able to handle data of any patient at any given point of time without affecting the stability.	Cognos BI
4.	Availability	Ensure that data is available to the end users, Reliable access to data.	AWS, Cloud platforms, Microsoft Power BI
5.	Performance	The process of quickly examining extremely large data sets to find insights. This is done by using the parallel processing of high performance computing to run powerful analytic software.	IBM Cognos Analytics