Project Design Phase-II Technology Stack

(Architecture & Stack)

Date	22 October 2022
Team ID	PNT2022TMID54403
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	4 Marks

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Importing data	Data Import lets you upload data from external sources and combine it with data you collect via Analytics	Python, numpy, pandas.
2.	Data Cleaning	Data cleaning is a process by which inaccurate, poorly formatted, or otherwise messy data is organized and corrected	Python, numpy, pandas
3.	Data Preprocessing	Data preprocessing, a component of data preparation, describes any type of processing performed on raw data to prepare it for another data processing procedure	Python, numpy, scipy, pandas
4.	Database	Data Type, Configurations etc.	MySQL, etc.
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Pak etc.

6.	Application Logic-1	Logic for a process in the application	Python
7.	Application Logic-2	Logic for a process in the application	IBM Cognos Analytics
8.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Collection of data	Data collection is the process of gathering, measuring, and analyzing accurate data from a variety of relevant sources to find answers to research problems, answer questions, evaluate outcomes, and forecast trends and probabilities	Python,numpy,pandas
2.	EDA Analysis	Exploratory Data Analysis (EDA) is an approach to analyze the data using visual techniques. It is usedto discover trends, patterns, or to check assumptions with the help of statistical summary and graphical representations	Python, EDA tools

3.	Scalable Architecture	Scalability of architecture (3 – tier, Microservices)	Technology used - IaaS, PaaS, SaaS (IBM Cloud).
4.	Availability	Availability of application	Technology used - The Availability of getting used to this software or product design is through by accessing IBM cognos Analytics and IBM cloud.