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

Date	15 October 2022
Team ID	PPNT2022TMID40507
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

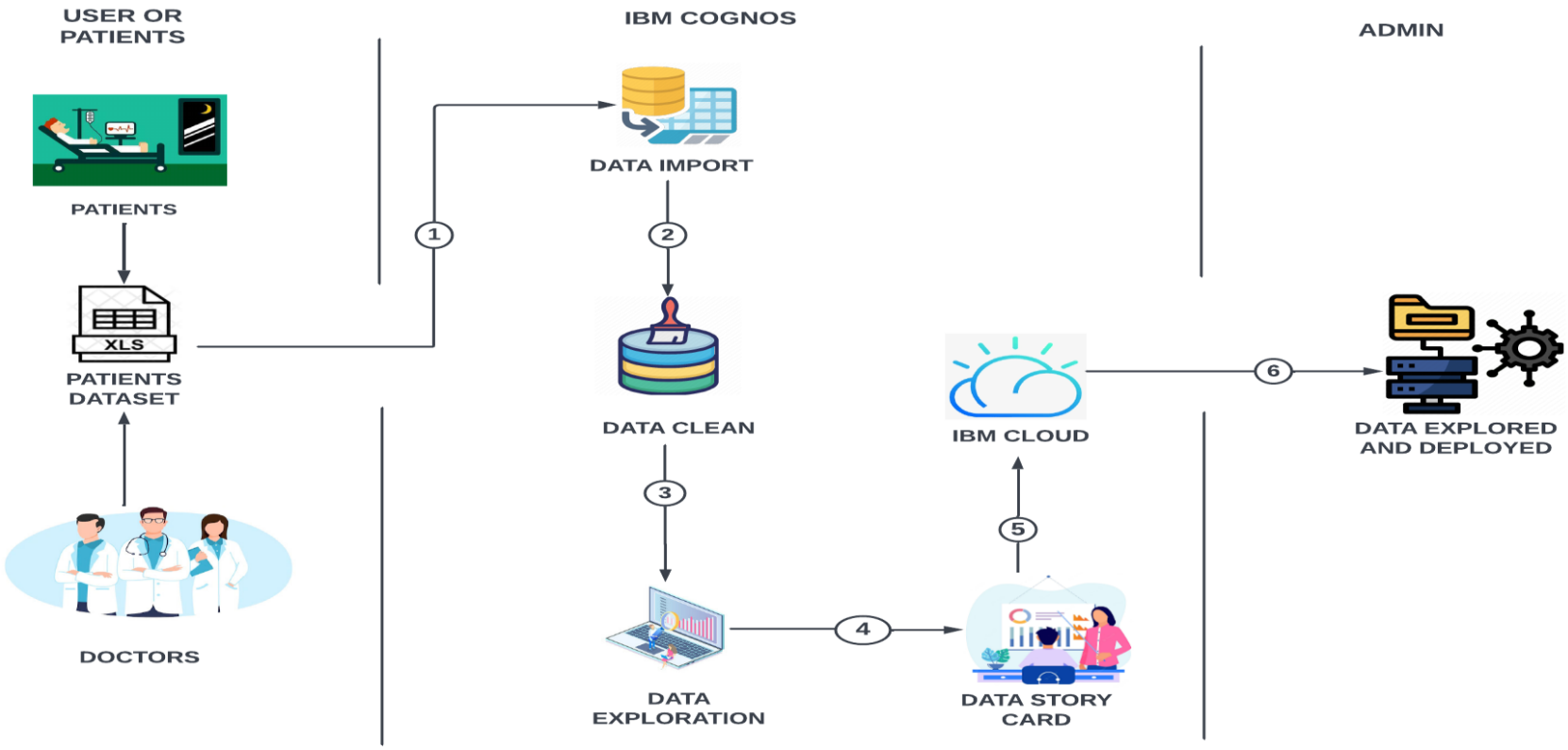

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	IBM Cognos / Python .
2.	Data Set	The data set prepared for hospitals health care	Python .
3.	IBM Cognos	Data analytics platform	IBM Watson service
4.	Data Import	Data set is imported in IBM cognos	IBM Watson Assistant
5.	Data Cleaning	Data is cleaned by using some mathematical techniques such as mean,mode etc.to clean the null and missing data.	IBM Assistant
6.	Data Exploration	Cleaned data can be explored.	IBM Cognos
7.	Story Card	Data is explored and story card was prepared for visual representation	IBM Cognos
8.	IBM Cloud	Storage of data	IBM DB2
9.	Data Explored and Deployed	Purpose of External API to explored and deployed	Data deployed to user by UI
10.	Admin	Purpose of Data set model	Recognition of data set model etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source	Open source model is used for the data set	Python
2.	Security Implementations	Security for our data set	SHA 256, SHA 1
3.	Scalable Architecture	health care service utilizes the relational patient data and big data analytics to tailor the medication recommendations	Python

S.No	Characteristics	Description	Technology
4.	Availability	The availability of technology used in data analytics	Python-Anaconda distribution and jupyter notebook is available and open source application
5.	Performance	The performance of the application and its efficiency	Python and other languages is that Python is usually interpreted. Interpreted languages tend to perform worse than compiled languages, each command takes up a greater number of machine instructions .