

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

Date	21 October 2022
Team ID	PNT2022TMID34422
Project Name	Visualizing and Predicting HeartDisease Using Interactive Dashboard
Maximum Marks	4 Marks

Technical Architecture:

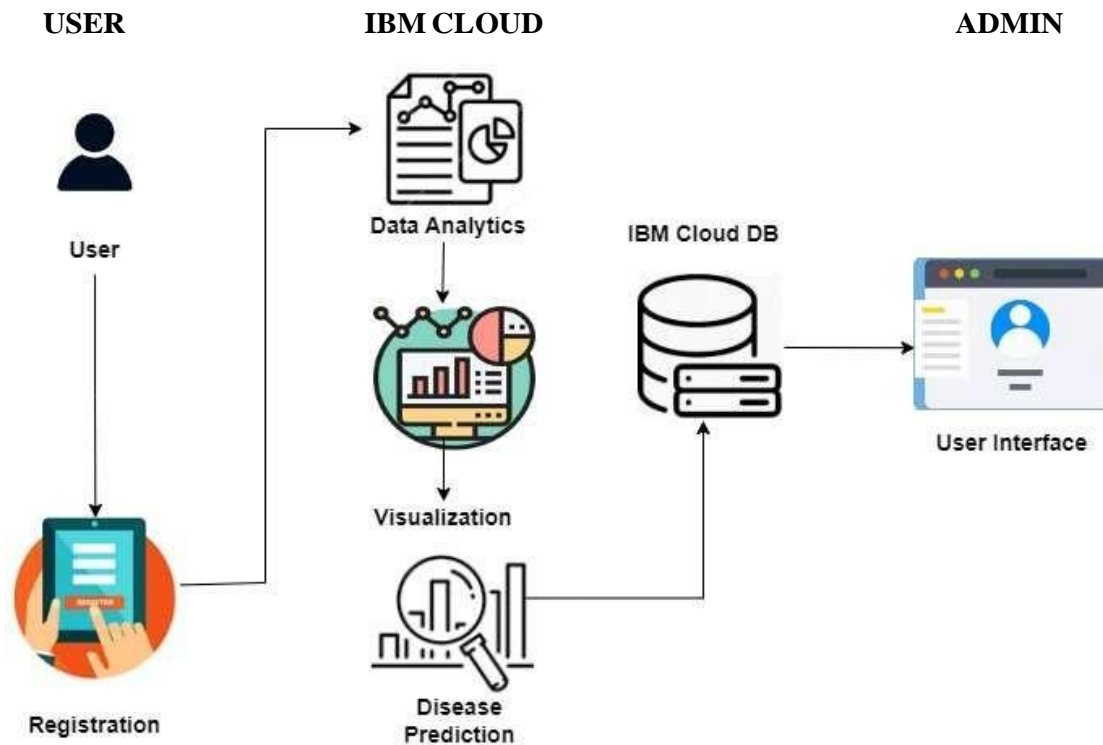


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Importing data	You can transfer data from outside sources and integrate it with data you acquire using Analytics using Data Import.	Python, IBM Cognos.
2.	Data Cleaning	Data cleaning is the process of organising and fixing erroneous, improperly structured, or otherwise disorganised data.	Python, IBM Cognos.
3.	Data Preprocessing	Any type of processing done on raw data to get it ready for another data processing operation is referred to as data preprocessing, a part of data preparation.	Python, IBM Cognos.
4.	Training data	The portion of the original data used to train the machine learning model is known as training data.	IBM Cognos.
5.	Testing data	Test data is data which has been specifically identified for use in tests, typically of a computer program.	Python, IBM Cognos, IBM Cloud.
6.	Machine learning model	A machine learning model is a file that has been trained to recognize certain types of patterns. You train a model over a set of data, providing it an algorithm that it can use to reason over and learn from those data	Python, IBM Cloud.
7.	Improve model performance	Accuracy is one metric for evaluating classification models. Informally, accuracy is the fraction of predictions our model got right.	Python, IBM Cloud.

8.	Checking accuracy	A data accuracy check, sometimes called a data sanity check, is a set of quality validations that takeplace before using data.	IBM Cognos or IBM Cloud, Python
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Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	The passwords need to be encrypted in order to ensure user privacy and security.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
2.	Availability	The system will be available for 24*7 in a day to allow easier access at any time.	
3.	Performance	The system will be fast and efficient in predicting the results.	