Project Design Phase-II
Technology Stack (Architecture & Stack)
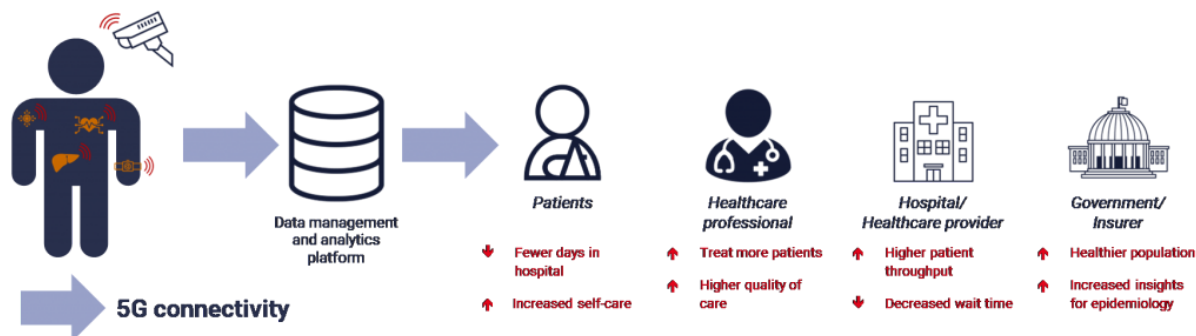
Date	03 October 2022
Team ID	PNT2022TMID14072
Project Name	Project -Analytics for Hospitals Health-Care Data
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Collecting data processing

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	Logging in as a patient / user in the application	Python
3.	Application Logic-2	Logging in as an admin in the application	IBM Watson Assistant
4.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	Identity verification	Aadhar API, voter ID etc.
8.	Machine Learning Model	Analysis of unstructured / structured data	Object Recognition Model, regression Model etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration:updating /removing present data Cloud Server Configuration : storing the previous data for future reference	AI,public Cloud data storage,Automation, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python's focus on simplicity and readability, it boasts a gradual and relatively low learning curve	Python Machine learning
2.	Security Implementations	Install anti-virus and malware protection,Make sure Wi-Fi is secure.	Encryptions,Data backup and resilience.

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	It can be useful for doctors to analyse patient both online/offline	Machine Learning
4.	Availability	Automation of appointment booking, Feedback collection, Optimization of internal processes like medical coding and data assessment as well as data entry .	NLP(Nature Language Processing)
5.	Performance	Larger datasets combined with greater computing power makes it easier for laboratories to update test results and security of data backups.	Machine Learning and Artificial Intelligent

References:

https://stlpartners.com/wp-content/uploads/2020/07/5G-healthcare-use-cases-diagram-remote-patient-monitoring-1024x309.png

https://www.google.com/url?sa=i&url=https%3A%2F%2Fhevodata.com%2Flearn%2Fhealth-data-analytics%2F&psig=AOvVaw0s2Q3ax09rMVCpxq_dTEMp&ust=1666764165425000&source=images&cd=vfe&ved=0CA0QjRxqFwoTCLiascza-voCFQAAAAAdAAAAABAV