Technology Stack (Architecture & Stack)

Date	23 October 2022
Team ID	PNT2022TMID14777
Project Name	Project - Analytics for hospitals health care data
Maximum Marks	4 Marks

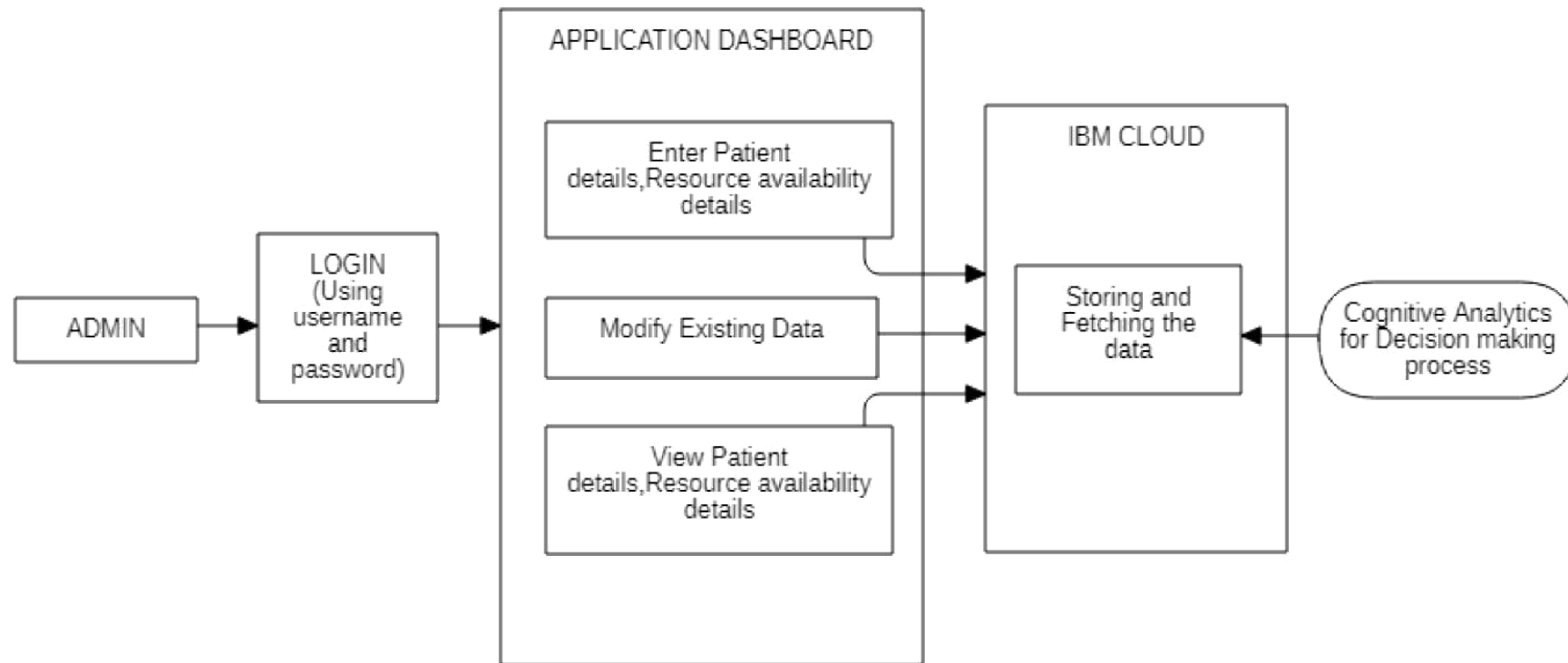**Name: S.Sadhasivam**
Roll no: 7179KCTKCTKCTKCTKCTKCTKCT19BCS063

Technical Architecture:

ADMIN → LOGIN (Using username and password) → APPLICATION DASHBOARD

APPLICATION DASHBOARD

Enter Patient details, Resource availability details

Modify Existing Data

View Patient details, Resource availability details

IBM CLOUD

Storing and Fetching the data

Cognitive Analytics for Decision making process

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with Web pages.	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,IBM cognos Analytics
5.	Database	All the data about patients such as disease, address and etc.	MySQL, NoSQL, etc.
6.	Cloud Database	IBM Watson cloud is used for storage, Cloud	IBM DB2, IBM Cloud.
7.	External API-1	Purpose of External API used in the application	Aadhar API, etc..
8.	Machine Learning Model	Purpose of Machine Learning Model	Regression Model, etc.
9.	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	List the open-source frameworks used	Python
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Encryption.
3.	Scalable Architecture	Justify the scalability of architecture	Can supports higher workloads
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Highly available
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache) etc.	It performs good uses various tools and ideas in a scientific manner to meet the desired outcomes