Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	13 May 2023
Team ID	NM2023TMID0966
Project Name	PERINATAL HEALTH RISK PREDICTORS USING MACHINE LEARNING

Technical Architecture:

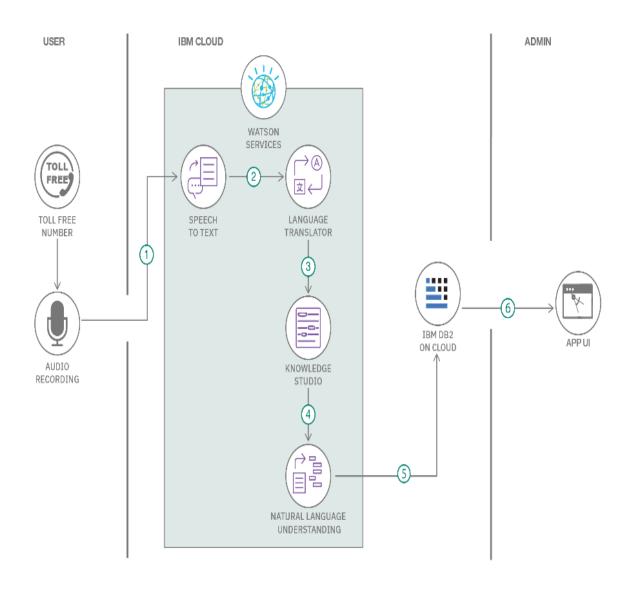PERINATAL HEALTH RISK PREDICTORS USING MACHINE LEARNING

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	In this project user interacts with application.	HTML, CSS
2.	Application Logic-1	Logic for a process in the application 1	Python
3.	Application Logic-2	Logic for a process in the application 2	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application 3	IBM Watson Assistant
5.	Database	The Database here we used	Mongo DB
6.	Cloud Database	The Database Service on Cloud we used	IBM Cloud
7.	File Storage	File storage requirements	IBM Block Storage
8.	Machine Learning Model	Machine Learning Model fir the best result in this project	ANN (Artificial neural network)
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration Cloud Server Configuration	Local, Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Flask, Sklearn, expressjs
2.	Security Implementations	Protection of data and prevention of unauthorized access	OAuth, SSL TLS
3.	Scalable Architecture	Ability to handle increasing traffic and data volume	IBM Cloud, IBM Cloud CDN, Mongo DB
4.	Availability	Ability to respond quickly and efficiently to user requests	Timeline of project,size and complexity of project
5.	Performance	Ease of maintaining and updating the system	Optimizes algorithm and DB queries