Technology Stack:

Project Planning Phase-I Technology Stack

Date	27 October 2023
Team ID	Team-592212
Project Name	Project - AI-Driven Optimization Of 5G Resource Allocation For Network Efficiency
Maximum Marks	4 Marks

Technical Architecture: The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

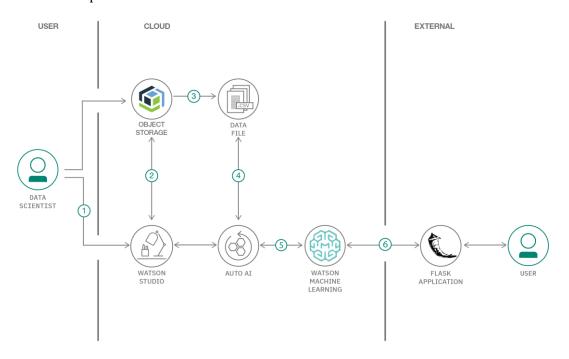


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web App UI	,
2.	Application Logic-	Develop ML model	IBM Watson STT service
3.	Application Logic- 2	Facilitate development	Python
4.	Application Logic-	Build conversational interface	IBM Watson Assistant

5.	Database	.csv file	MySQL.
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	
8.	External API-1	Clean, prepare and analyze raw data	IBM Auto Ai.
9.	External API-2	Deploy and Manage ML Model	Watson Machine Learning
10.	Machine Learning Model	5G Resource allocation	Random Forest Regression Model, etc.
11.	Infrastructure (Server / Cloud)	Cloud Server Configuration: compute - 16GB, storage - 70GB, bandwidth - 100Mbps rate-limited.	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python based web framework	Flask
2.	Security Implementations	,	,
3.	Scalable Architecture		Cloud Extender

S.No	Characteristics	Description	Technology
4.	Availability		Flask web application
5.	Performance	F	APM(Application Performance Management)