

Technology Stack (Architecture and Stack)

Date	15 October 2022
Team ID	PNT2022TMID53082
Project Name	Flight Delay Prediction
Maximum Marks	4 Marks

Technical architecture

The deliverable includes architecture diagram and information as per table 1 and 2

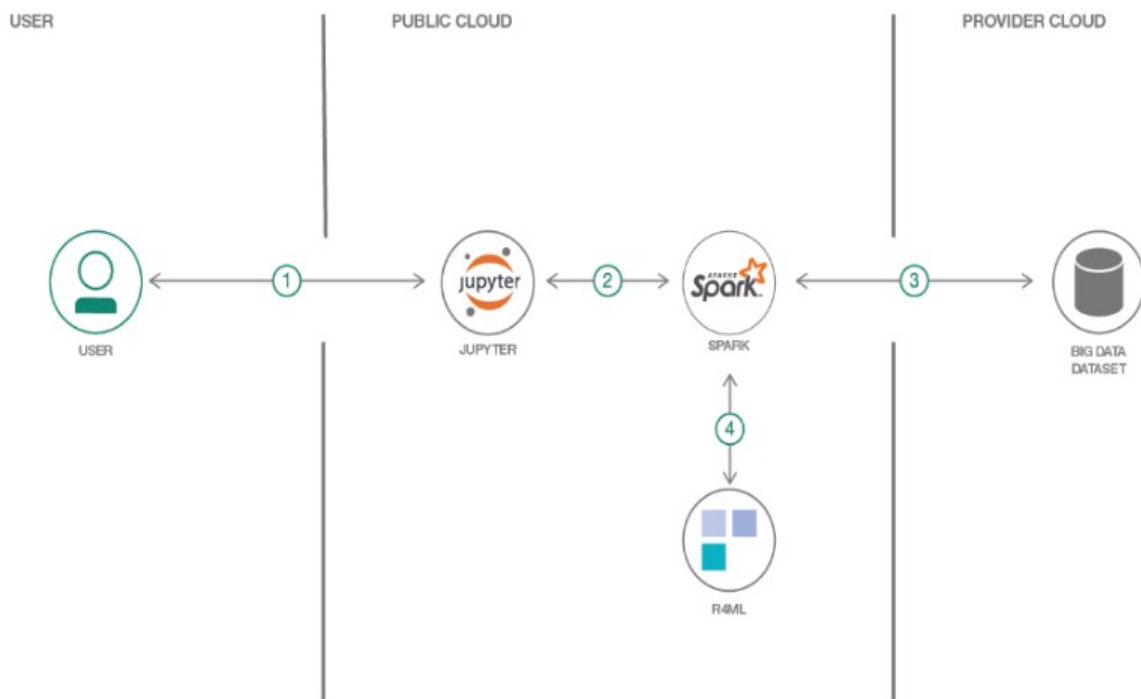


Table 1: Components and Technologies

SNo	Component	Description	Technology
1	User interface	How user interacts with application	HTML, CSS, JS, Flask
2	Application Logic - 1	Logic for process in	Python

		application	
3	Application Logic - 2	Logic for process in application	IBM Watson STT service
4	Data processing	To clean data	Pandas, numpy, matplotlib etc
5	Database	Store data	MySQL
6	File storage	Storing files	IBM Block storage
7	External API-1	External API used in the system	IBM Weather API
8	External API-2	External API used in system	Email API
9	Machine Learning model	Purpose of ML model	Evaluation and prediction models
10	Infrastructure (Server/Cloud)	Application deployment	IBM Cloud

Table 2: Application Characteristics

S No	Characteristics	Description	Technology
1	Open Source Frameworks	Open source frameworks used	Python-Flask
2	Security Implementations	Security/access controls implemented, firewalls used	Encryptions, SHA2
3	Scalable Architecture	Scalability of architecture	Python
4	Avalability	Availability of the application	IBM Cloud
5	Performance	Consideration for the performance of the application	Python, Flask