

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID27835
Project Name	Airlines Data Analytics for Aviation Industry
Maximum Marks	4 Marks

Technical Architecture:

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

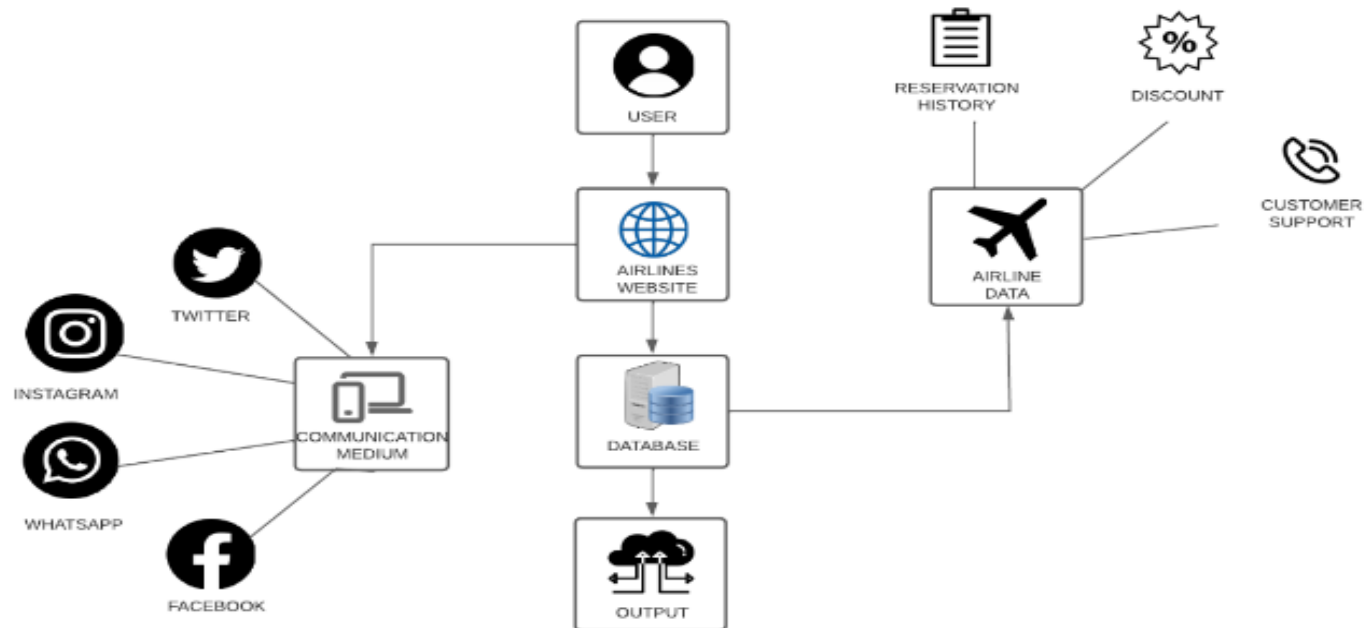


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interact with application using web based user interface	HTML, CSS, JavaScript
2.	Application Logic-1	Work with complex process in the application	IBM Watson STT service , Python
3.	Application Logic-2	Build the conversational interface process in the application	IBM Watson Assistant
4.	Database	Data Type, Configurations etc.	MySQL
5.	Cloud Database	Database Service on Cloud	IBM Cloud
6.	File Storage	File storage requirements	IBM Block Storage or Local Filesystem
7.	External API-1	To get the weather details for flight scheduling	IBM Weather API
8.	Data visualization	The data is visualized into different forms	IBM Cognos Analytics

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	open-source frameworks used	IBM cognos Analyais, Python
2.	Security Implementations	Request authentication using Encryptions	Encryptions
3.	Scalable Architecture	scalability consists of 3 – tiers	Web server – HTML, CSS, Javascript Application Server – Python Database server – IBM Cloud
4.	Availability	The application is available for cloud users	IBM Cloud
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Dashboard, Reports, Stories