

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

Date	20 OCT 2023
Team ID	NM2023TMID07286
Project Name	Competitive Analysis of Leading Travel Aggregators

Technical Architecture:

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

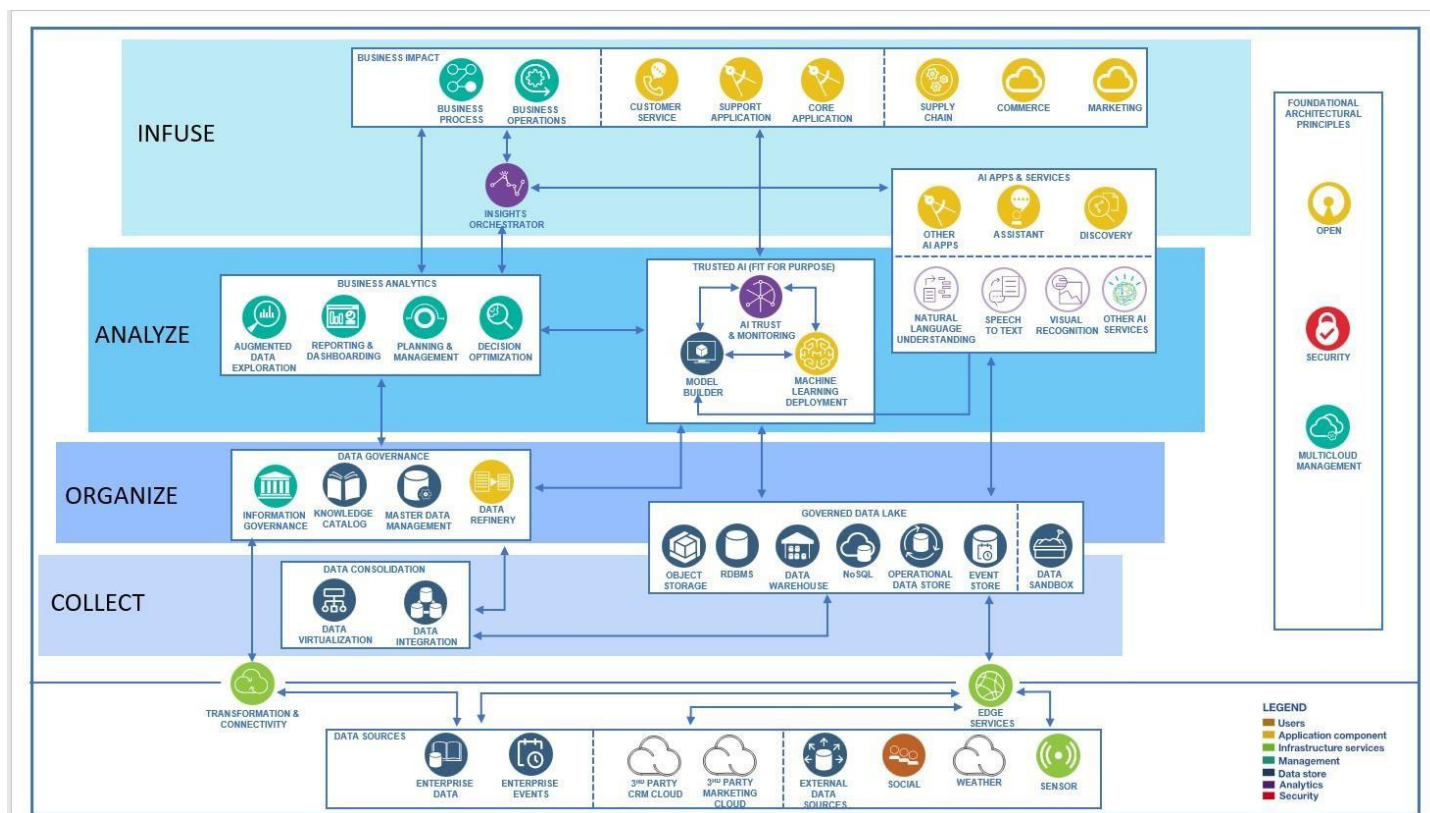


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data Source	The origin of the data, which may come from multiple sources.	Database, Web API's, CSV, Excel
2.	Data Storage	Where the Data is Retrieved for Analysis and Retrieval.	Relational database, NoSQL database, Cloud storage
3.	Data Processing	The software that transforms and aggregates rawdata into usable information	ETL tools, Python, R, SQL
4.	Data Analysis	The process of examining data sets to draw conclusions about the information they contain	Business intelligence tools, data visualization tools, statistical analysis software
5.	Data Reporting	The process of sharing insights and findings fromthe data analysis	Dashboards, Reports, Presentations, Email Alerts

6.	Data Security	The measures taken to protect sensitive data from unauthorized access or theft	Encryption, Access control, Firewall, Security Audit
7.	Infrastructure	The hardware and software that supports the data analytics system	Servers, Cloud computing, Virtualization, Containerization

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Purpose	The primary reason for developing the application	Business requirements, Use cases
2.	Functionality	The features and capabilities of the application	Programming languages, Frameworks, Libraries
3.	User Interface	The visual and interactive design of the application	UI/UX Design Tools, HTML/CSS, JavaScript, Front-end Frameworks
4.	Platform	The operating system or hardware environment the application is designed for	Windows, Linux, iOS, Android, Web
5.	Scalability	The ability of the application to handle increasing amounts of users or data	Cloud Computing, Load Balancers, Horizontal Scaling
6.	Performance	The speed and efficiency of the application	Caching, Database Optimization, API Optimization

S.No	Characteristics	Description	Technology
7.	Security	The measures taken to protect sensitive data and prevent unauthorized access	Encryption, Access Control, Penetration Testing
8.	Integration	The ability of the application to integrate with other systems or applications	APIs, Middleware, Service-Oriented Architecture
9.	Maintenance	The ease of maintaining and updating the application over time	Version Control, Automated Testing, DevOps Tools
10.	Cost	The total cost of developing, deploying, and maintaining the application	Open Source Tools, Cloud Services, Infrastructure-as-Code