Project Design Phase Technology Stack (Architecture & Stack)

Date	21 October 2023
Team ID	Team-591256
Project Name	Project – Voyage Vista
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

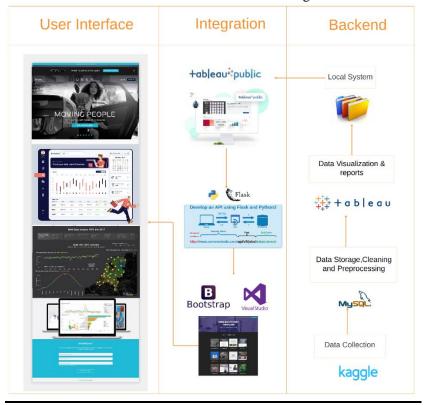


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application e.g. Web UI	HTML, Python in Visual Studio Code.
2.	Database	Data Type, Configurations, etc.	MySQL
3.	Client Application	Connect to data sources, process and analyze it.	Tableau Desktop (make visualizations)
4.	File Storage	File storage requirements for storing datasets and other required files	Local Filesystem
5.	Framework-1	Used to Create a web Application, Integrating Frontend and Back End	Python Flask
6.	Framework-2	Used to Create a web Application, Integrating Frontend and Back End	Bootstrap
7.	Hosting Tool	Provides resources necessary to make the website accessible over the Internet (in our case for making visualizations made in Tableau desktop available for access to our website).	Tableau Public (publishing the visualizations made in Tableau desktop)
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python Flask- a micro web framework for building web applications with minimal code. Bootstrap- a front-end framework for creating responsive and visually appealing web interfaces with pre-designed components and styles.
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	-
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Tableau- a data visualization platform used for creating interactive and shareable data visualizations and dashboards to gain

			insights from data.
4.	Availability	Justify the availability of application (e.g. use of	-
		load balancers, distributed servers etc.)	
5.	Performance	Design consideration for the performance of the	-
		application (number of requests per sec, use of	
		Cache, use of CDN's) etc	