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

Date	27 October 2023
Team ID	Team-591270
Project Name Competitive Analysis of Leading Travel Aggregators	Competitive Analysis of Leading Travel Aggregators
Maximum Marks	4 Marks

Table-1 : Components & Technologies:

S.No	Components	Description	Technology
1	Load Balancer	Distributes traffic across multiple servers to improve performance and reliability.	 HAProxy  NGINX
2	Web Servers	Host the travel aggregator's website and APIs.	 Apache HTTP Server  IIS

			 Apache Tomcat  Oracle iPlanet Web Server
3	Application Servers	Run the travel aggregator's business logic, such as searching for travel products and services, booking trips, and processing payments.	 IBM WebSphere Application Server  Apache Geronimo  Microsoft IIS
4	Database	Stores the travel aggregator's data, such as travel product and service listings, user accounts, and booking information	 MongoDB 

			MySQL  PostgreSQL..
5	Cache	Stores frequently accessed data to improve performance.	 Squid traffic server™ Apache Traffic Server
6	Messaging Queue	Decouples different components of the system and allows them to communicate asynchronously.	 Mulesoft ANypoint  RabbitMQ
7	Payment Gateway	Processes payments for travel bookings.	PayPal PayPal stripe Stripe Razorpay Razorpay

8	Search Engine	Searches for travel products and services from multiple providers.	Bing  Yahoo Google
9	Recommender Engine	Recommends travel products and services to users based on their interests and past bookings.	Apache PredictionIO
10	Content Management System (CMS)	Manages the travel aggregator's website content, such as blog posts, destination guides, and travel deals.	WordPress Drupal Wix

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Security technologies:	Web servers can use security technologies, such as TLS/SSL encryption and firewalls, to protect user data and prevent unauthorized access to the server.	TLS/SSL, SHA-256,
2	Logging and monitoring technologies:	Web servers can use logging and monitoring technologies to track traffic, identify performance bottlenecks, and detect security threats.	Apache HTTP Server, IIS, Apache Tomcat
3	Application performance management (APM) technologies:	APM technologies can be used to monitor the performance of web servers and applications in real-time.	Elastic
4	Containerization technologies:	Containerization technologies, such as Docker and Kubernetes, can be used to package and deploy web servers and applications in a portable and scalable way.	Docker Kubernetes
5	Open-Source Frameworks	Open-source frameworks are used	NGINX
6	Availability	Load Balancer: Distributes traffic across multiple servers to improve performance and reliability. Web Servers: Host the travel aggregator's website and APIs.	HAProxy, NGINX, Apache HTTP Server, IIS, Apache Tomcat, Oracle iPlanet Web Server
7	Performance	Cache: Stores frequently accessed data to improve performance.	Squid, Apache Traffic Server

References:

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https://en.wikipedia.org/wiki/Firewall

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