












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  <small>What is Internet Information Services (IIS)?</small> 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  <small>What is Internet Information Services (IIS)?</small> Microsoft IIS
4	Database	Stores the travel aggregator's data, such as travel product and service listings, user accounts, and booking information	 mongo DB MongoDB 

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


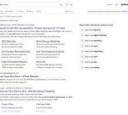





8	Search Engine	Searches for travel products and services from multiple providers.	 Bing  Yahoo  Google
9	Recommender Engine	Recommends travel products and services to users based on their interests and past bookings.	 <u>Apache PredictionIO</u>
10	Content Management System (CMS)	Manages the travel aggregator's 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:

<https://www.accenture.com/nl-en/blogs/insights/cloud-manufacturing-aws-accenture>

https://www.w3schools.com/w3js/w3js_servers.asp

<https://httpd.apache.org/>

<https://www.nginx.com/>

<https://www.iis.net/>

https://en.wikipedia.org/wiki/Wikipedia:Database_download

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

https://en.wikipedia.org/wiki/Load_balancing_%28computing%29

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

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

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

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

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

https://en.wikipedia.org/wiki/Containerization_%28computing%29

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