Project Design Phase-I
Solution Architecture

Date	23 October 2023
Team ID	Team-591309
Project Name	Voyage Vista : Illuminating Insights from Uber Expeditionary Analysis
Maximum Marks	4 Marks

Solution Architecture:

The solution architecture for Uber's expeditionary analysis involves real-time data collection from diverse sources, including mobile apps, websites, and external APIs, utilizing stream processing technologies for immediate data processing. The collected data is stored in both data warehouses for structured data and data lakes for unstructured and raw dataset. ETL processes are applied to clean and transform the data. The architecture ensures data security through encryption, enforces access control via role-based permissions, and complies with relevant data protection regulations. Cloud-based services are employed for scalability, and load balancing techniques are implemented to optimize system performance, enabling Uber to gain actionable insights for enhancing operational efficiency and user experience.

Solution Architecture Diagram