Project Design Phase-II

Requirement Analysis

Date	02 November 2023
Team ID	NM2023TMID05823
Project Name	How to add google analytics to our website

Functional Requirements:

- **User Authentication and Authorization:** The system must provide authentication mechanisms to ensure that only authorized users have access to the data and features of Google Analytics.
- **Data Collection and Tracking:** The system should allow users to implement tracking codes on their websites to collect data on user interactions and behavior.
- **Data Processing and Aggregation:** The collected data must be processed and aggregated to generate meaningful reports and insights.
- **Report Generation and Visualization**: The system must be able to generate various types of reports (e.g., traffic sources, user demographics, behavior flow) and provide visualization tools for easy interpretation.
- **Customization and Segmentation:** Users should be able to customize reports and segment data based on

specific criteria (e.g., time period, user demographics, traffic sources).

- **Real-time Monitoring:** The system should provide the ability to monitor website traffic in real-time, allowing users to see immediate effects of changes or campaigns.
- **Alerts and Notifications:** Users may want to set up alerts for specific events or thresholds, such as sudden traffic spikes or drops.
- **Integrations:** Google Analytics should integrate with other platforms and tools for seamless data sharing and analysis (e.g., Google Ads, Google Tag Manager).

Operational Requirements:

- **Platform Compatibility:** Google Analytics should be accessible and functional on various devices and operating systems (e.g., desktop, mobile, different browsers).
- **Availability and Reliability:** The service should have a high level of uptime and be reliable, ensuring minimal downtime for users.
- **Data Backup and Recovery:** The system should implement robust backup and recovery procedures to protect against data loss.
- **Scalability:** Google Analytics should be able to handle increasing amounts of data as the user base and website traffic grow.
- **Security and Privacy Compliance:** The system must adhere to industry-standard security practices and

comply with relevant privacy regulations (e.g., GDPR, CCPA)

Technical Requirements:

- **Data Storage and Processing:** The system should have a robust infrastructure for storing and processing large volumes of data efficiently.
- **Data Transfer and Network Security:** Secure protocols should be used for data transfer to protect against interception or tampering.
- **Compatibility with Web Technologies:** The tracking code and reporting interfaces should be compatible with modern web technologies (e.g., HTML, JavaScript).
- **Performance Optimization:** The system should be optimized for fast loading times and responsive user interfaces.
- **APIs and Integration Points:** Google Analytics should provide APIs for developers to integrate with other applications and services.
- **Compliance with Web Standards:** The system should adhere to web standards to ensure compatibility and accessibility.

This is a high-level overview and a detailed requirements analysis would involve further refinement and specification of each of these points. It's also important to involve stakeholders, including end users, to ensure that their specific needs and preferences are addressed.