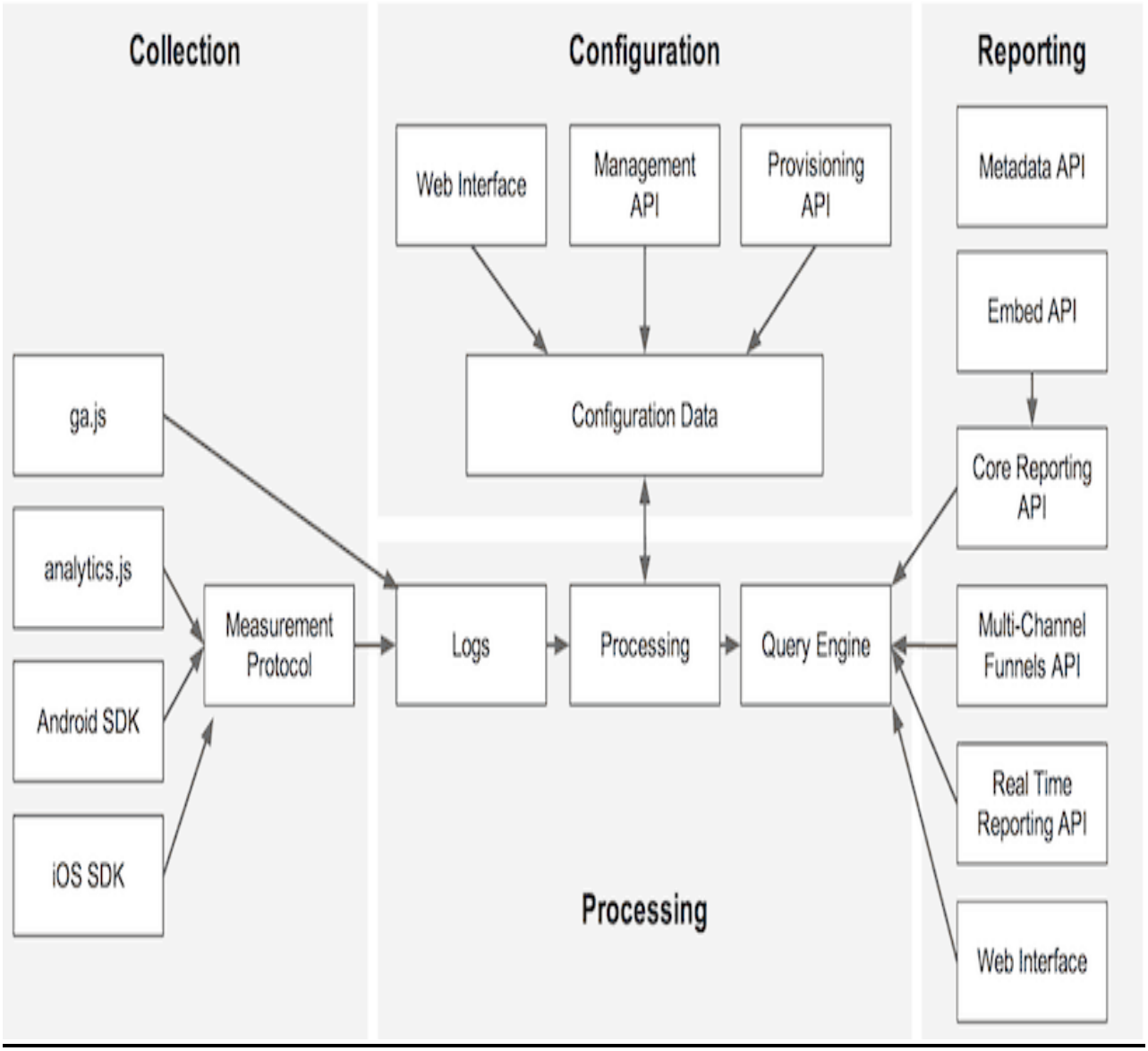
Project Design Phase-I

PROJECT – HOW TO ADD GOOGLE ANALYTICS TO A WEBSITE

TECHNICAL ARCHITECTURE

The technical architecture of Google Analytics integrated into a website is a structured framework that encompasses the entire process of data collection, transmission, processing, analysis, and reporting. At its core, the website's frontend hosts webpages where the Google Analytics tracking code is embedded, allowing The technical architecture of Google Analytics integrated into a website is a structured framework that encompasses the entire process of data collection, transmission, processing, analysis, and reporting. At its core, the website's frontend hosts webpages where the Google Analytics tracking code is embedded, allowing it to capture data on user interactions. This code, written in JavaScript, records a wide range of user actions, such as page views, clicks, and event triggers. The data collected is then securely transferred to Google Analytics servers over HTTPS, where it undergoes real-time processing and analysis. The servers employ machine learning algorithms to extract valuable insights about user behavior, traffic sources, and conversion rates. Website owners and administrators access the Google Analytics User Interface to configure tracking settings, create custom reports, and access a plethora of predefined reports and dashboards. Additionally, data is stored for historical analysis, and APIs are available for advanced users to extract and manipulate data for custom needs. This architecture is adaptable to various website sizes and complexities and empowers website owners with the tools to optimize their digital strategies based on real user data. For websites with associated mobile apps, the integration extends to mobile app tracking, providing a unified view of user engagement across multiple platforms.


Collection
Configuration
Reporting
Web Interface
Management API
Provisioning API
Metadata API
Embed API
ga.js
Configuration Data
Core Reporting API
analytics.js
Measurement Protocol
Logs
Processing
Query Engine
Multi-Channel Funnels API
Android SDK
Real Time Reporting API
iOS SDK
Processing
Web Interface