**Requirement Analysis**

1. Analyze demographic information: Gender Distribution, age distribution and nationality.

2. Analyze registration age distribution.

3. Geospatial analysis: Addresses plotted on the map, distribution across cities, states and countries.

4. Analyze and identify areas with the highest frequency of users(Top Ten).

5. Identify popular titles, first name and last name.

**Document Scope:**

1. Develop a dashboard that visualizes key metrics and trends related to personal details, registration, pictures, login activity, addresses, location timezones, and encrypted details.

2. Visualizations for each table in the provided database schema:

* Personal Details: Gender distribution, age demographics, nationality breakdown.
* Registration: Trends over time, registration age distribution.
* Picture: Profile picture usage and quality assessment.
* Address: Geospatial distribution of users, postcode analysis.
* Location Timezone: Distribution of users across timezones, timezone offset analysis.
* Encrypted Detail: Encryption method analysis, data integrity assessment.

**Business Need:**

1. User Engagement and Retention:Understanding user demographics, registration trends, and login behavior can help identify patterns associated with user engagement and retention.

2. Customer Segmentation and Targeting: a)Analyzing personal details such as gender, nationality, and geographical distribution can facilitate customer segmentation for targeted marketing campaigns.

b)Geospatial analysis of addresses and timezone data can help identify regions with high user concentration, allowing for localized marketing strategies.