

# **Data Analysis Report**

## **Overview**

In this data analysis report, we present captured data from our Open-Source Intelligent Application. The app retrieves data from sources like Instagram, Twitter, Reddit, and City of Residence and performs analysis deriving meaningful insights.

## **Data Sources:**

1. Instagram: Collects user profile, follower count, likes count, participation, metrics.
2. Twitter: Retrieves word counts, engagement.
3. City or Residence: Extracts information on weather of city of users
4. Reddit: Gathers user profiles, post details, comment metrics.

## **Analysis Approach:**

1. Data Retrieval: Data is captured from each source using API requests and stored in structured format.
2. Data Processing: Captured data is cleaned to extract relevant information, calculate metrics, and perform analysis.
3. Visualization: Charts, Graphs, word clouds and tables created with the help of Python tools.
4. Insights: Based on analyzed data, trends and insights are identified.

## **Findings:**

1. Instagram Analysis: User engagement patterns and sources; likes count, follow count of the users.
2. Twitter Analysis: Most frequent words used by users in the form of word count.
3. Weather report: User's city's temperature and windspeeds recorded over 1 month.