

## **Step 1: Project Initialization & Team Alignment**

### **1. Initial Meeting and Role Distribution (1 hour)**

- Conduct a kickoff meeting to understand project goals and allocate tasks among team members.
- Ensure clarity on the assignment requirements and timeline.

## **Step 2: Context Understanding & Dataset Familiarization**

### **1. Contextual Research (1 hour)**

- Briefly research how universities use Twitter in their communication strategies.
- Gather insights on the significance of social media for university outreach.

### **2. Dataset Loading and Preliminary Exploration (2 hours)**

- Load the "Tweets\_all.rda" dataset in RStudio.
- Conduct an initial exploration to understand the dataset's structure, including variables and their types (numeric, text, categorical).

## **Step 3: Data Preprocessing**

### **1. Text Data Cleaning (2 hours)**

- Clean the tweet texts, handling emojis, URLs, and mentions.
- Normalize text data by tokenization and removing stop words.

### **2. Handling Missing Values and Duplicates (1 hour)**

- Identify and address missing values and duplicate records.

## **Step 4: Exploratory Data Analysis (EDA)**

### **1. Tweet Frequency and Engagement Analysis (2 hours)**

- Analyze the frequency of tweets over time and their engagement metrics (likes, retweets).
- Identify any visible patterns or strategies used by universities.

### **2. Content Analysis (3 hours)**

- Perform basic text mining to categorize tweets and uncover common themes.
- Use sentiment analysis to gauge the emotional tone of the tweets.

## **Step 5: Comparative Analysis & Insight Generation**

### **1. Comparative Content and Style Analysis (3 hours)**

- Compare tweets between universities to identify differences in content, style, and engagement.
- Utilize visualizations to highlight findings.

### **2. Insight Synthesis and Recommendations (2 hours)**

- Synthesize insights from analyses to draft actionable recommendations for improving communication strategies.

## **Step 6: Presentation Preparation**

### **1. Development of Presentation Materials (2 hours)**

- Create a presentation that succinctly summarizes the project's context, findings, analyses, and recommendations.
- Design clear and informative visualizations to support the narrative.

### **2. Presentation Review and Dry Run (1 hour)**

- Conduct a comprehensive review of the presentation content and flow.
- Perform a dry run to ensure smooth delivery and timing.

**Total Estimated Time: 19-20 hours**

**Important:**

- Coaching: 23th of April & 14th of May!