**Waze project proposal**

## **Overview**

Waze leadership has asked the data team to build a machine learning model to predict user churn. The model is based on data collected from users of the Waze app.

| **Milestones** | **Tasks** | **Deliverables/Reports** |
| --- | --- | --- |
| **1** | **Establish structure for project workflow (PACE)Plan** | * Global-level project document |
| **1a** | **Write a project proposal**  **Plan** | * Global-level project document |
| **2a** | **Compile summary information about the data**  **Analyze** | * Data files ready for EDA |
| **2b** | **Select software/languages**  **Analyze** | * Analyze pros and cons of each language, identify what best suits needs of this project |
| **3** | **Data exploration and cleaning**  **Plan and Analyze** | * EDA report * Address missing/null values and incomplete data |
| **3a** | **Visualization building**  **Analyze and Construct** | * Necessary plots in whichever language is picked, possible dashboard |
| **4** | **Compute descriptive statistics**  **Analyze** | * Analysis of testing results between two important variables |
| **4a** | **Conduct hypothesis testing**  **Analyze and Construct** | * Test various trends in order to provide further insight * Prove or disprove hypothesis with a degree of certainty |
| **5** | **Build a regression model**  **Analyze and Construct** | * Create prediction model(s) |
| **5a** | **Evaluate the model**  **Execute** | * Determine the success of the model |
| **6** | **Build a machine learning model**  **Construct** | * Final model |
| **6a** | **Communicate final insights with stakeholdersExecute** | * Report to all stakeholders |

**Note**: The estimated times for the milestones in the example equate to the length of the courses where you will learn the necessary skills. The project timeline would most likely have tighter deadlines in a professional context involving actual clients and data scientists. For example:

Milestone 1: 1-2 days

Milestone 2: 2-3 weeks

Milestone 3: 1 week

Milestone 4: 1 week

Milestone 5: 1-2 weeks