Course 1: Foundations of Data Science

# [Title of Project] Proposal

## Overview:

The New York City Taxi and Limousine Commission (TLC) has partnered with Automatidata to develop a predictive model that estimates taxi fares before a ride begins. The project will utilize historical trip data to build a regression model using variables such as trip distance, pickup time, and location. The goal is to increase fare transparency for riders and support strategic planning for TLC operations. This proposal outlines the major project tasks, deliverables, and milestones using the PACE (Plan, Analyze, Construct, Execute) strategy to ensure efficient collaboration and clear communication between technical and non-technical stakeholders.

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| Milestone | Tasks | Deliverables/Reports | Relevant Stakeholder (Optional Activity) |
|---|---|---|---|
| **1** | Establish structure for project workflow (PACE)<br><br>Plan | • Global-level project document | Data Analysis Manager |
| **1a** | Compute descriptive statistics<br><br>Plan | | |
| **2** | Begin exploring the data<br><br>Analyze | Data files ready for EDA | Data Analyst |
| **2a** | Data exploration and cleaning<br><br>Analyze | Cleaned and structured dataset | Data Science Team |

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| **3** | Conduct hypothesis testing<br><br>Analyze **and** Analyze | EDA report | Data Scientists |
| **3a** | Visualization building<br><br>Analyze **and** Construct | Tableau dashboard/visualizations | Marketing and Product Team |
| **4** | Build a regression model<br><br>Construct | Analysis of testing results between two important variables | Data Analysts, Data Professionals. |
| **4a** | Evaluate the model<br><br>Analyze **and** Construct | | |
| **5** | Build a machine learning model<br><br>Analyze **and** Construct | | |
| **5a** | Evaluate the model<br><br>Construct | Determine the success of the model | Data Scientists |
| **6** | Compile summary information about the data | Final model | |

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| | Execute | | |
| **6a** | Communicate final insights with stakeholders<br><br>Execute | Report to all stakeholders | |