Proposal: Model Development for Taxi Fare Prediction

Objective:

This project seeks to develop robust and accurate models to predict taxi trip fares using historical data. The model will help the New York City Taxi and Limousine Commission (TLC) to provide fare estimates for passengers and optimize the services.

Team Requirements

- **Data Analysts:** For cleaning and exploring the data.
- **Data Scientists:** For developing and fine-tuning regression models.
- **Visualization Experts:** For creating intuitive dashboards and reports.

Planning and Analyzing Stages

Milestone	Tasks	Outcome/Deliverables	Estimated Time
1 Planning	• Outline project workflow • Gather data • Identify software/hardware needs.	• Stakeholders updated • Global Documents	1 week
2 Analysis	• Clean, convert and format data. • Analyze data trends, distributions and correlations • Visualize data insights to guide model development	• Data ready for modeling • EDA findings • Modeling strategies	2-3 weeks
3 Construct	• Finalize modeling strategies • Build multiple models for evaluation • Test and evaluate models • Fine tune models for best outcome	• Prediction models • Performance metrics	3-4 weeks
4 Executing	• Finalize results • Share findings with stakeholders • Feedback and improvements	• Executive summary with visualizations to showcase key findings and performance • Recommendations	2-3 weeks

Expected Impact

This project will provide TLC with a reliable, data-driven tool to estimate taxi fares accurately, improving passenger transparency and operational efficiency. By transforming TLC's vast dataset into actionable insights, Automatidata will help TLC enhance customer trust and make informed strategic decisions.