

Applied ML Final Project

Initial Feasibility Report Presentation

Overview

In this project, you are tasked with conducting a preliminary feasibility study on a dataset that you choose to work with. This study will form the foundation of your final project in our Applied AI class. Your analysis will be presented in a structured Google Slides presentation, addressing key areas essential for evaluating the potential and viability of your proposed AI project. Below are the specific sections and guidelines you must follow. You can be creative and invent project/group names, stakeholders, etc.

Presentation Structure

Business Problem Statement & Potential ROI

- **Objective:** Define the business or societal problem your project aims to solve.
- **Details to Include:**
 - A clear statement of the problem.
 - The significance of solving this problem.
 - An estimate of the Return on Investment (ROI) or the value proposition (quantitative or qualitative) your project offers to stakeholders. (You can be creative here)

Responsible AI / Ethical Considerations

- **Objective:** Identify any ethical concerns and how your project will address Responsible AI principles.
- **Details to Include:**
 - Potential biases in the data.
 - Privacy concerns and data security.
 - Mitigation strategies for identified ethical issues.

Project Goals

- **Objective:** Outline the specific objectives your project aims to achieve.
- **Details to Include:**
 - List of goals
 - How these goals address the business problem.

Data Context

- **Objective:** Provide an overview of the dataset including its source, size, and characteristics.
- **Details to Include:**
 - Description of the dataset (e.g., features, samples).
 - Identify and justify the inclusion of any additional datasets.
 - Describe how these will enhance or complement your primary dataset.
 - Any preprocessing required or completed.
 - Limitations or challenges posed by the dataset.

Initial Exploratory Data Analysis (EDA)

- **Objective:** Conduct preliminary EDA to demonstrate the feasibility of your proposed project.
- **Details to Include:**
 - Summary statistics, distributions, and any patterns observed.
 - Visualizations highlighting key insights.
 - Preliminary findings that support the project's viability.

Technical Description of the Proposed Approach

- **Objective:** Describe the technical methodologies and algorithms you plan to employ.
- **Details to Include:**
 - Data processing and feature engineering techniques.
 - Proposed models or algorithms.
 - Any tools or frameworks to be used.

Submission Guidelines

- Format: Google Slides (you can upload pptx or pdf in e-class but also share the link and give me permission to comment).
- Presentation Length: 10-20 slides.
- Evaluation Criteria: Clarity, visual appeal, depth of analysis, feasibility, and creativity in addressing the project's components.

Additional Notes:

- Different groups can work on the same dataset, but each group must submit an original presentation.
- Make sure to cite any sources or references used in your analysis.
- This is a proposal and initial assessment; some flexibility in approach is allowed as the project progresses based on findings and feedback. However you should inform me about these changes.