



DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECT PROPOSAL

1. Project Title: - Enron Investigation Project

2. Project Scope: - (Max 500 words)

The Enron scandal was one of the biggest corporate fraud cases in history, and it resulted in the collapse of Enron Corporation, one of the largest energy companies in the world. The scandal involved accounting irregularities, insider trading, and other illegal activities that resulted in the loss of billions of dollars for investors, employees, and the general public.

Collect and preprocess data: Start by collecting relevant data related to the Enron scandal, such as financial statements, email communications, and news articles. Preprocess the data by cleaning, transforming, and formatting it for analysis.

Define ML tasks: Define the ML tasks that you want to perform on the data, such as classification, clustering, or regression. For example, you could use classification to identify Enron employees involved in the scandal or use clustering to group similar email communications.

Train ML models: Train ML models using various algorithms and techniques, such as decision trees, neural networks, and deep learning. Use cross-validation and hyperparameter tuning to optimize the models' performance.

Evaluate model performance: Evaluate the performance of the ML models using metrics such as accuracy, precision, recall, and F1 score. Use visualizations such as confusion matrices, ROC curves, and precision-recall curves to interpret the model's performance.

Develop web application: Develop a web application that showcases the ML models and provides interactive visualizations of the data. Use frameworks such as Flask or Django for the web application and deploy it on a cloud service such as Heroku.

Create a presentation: Create a presentation that summarizes the project's objectives, methodology, and results. Include a demo of the web application and explain how the ML models can be used to gain insights into the Enron scandal.

3. Requirements: -

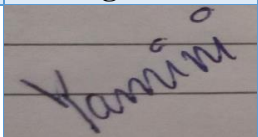
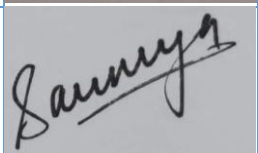
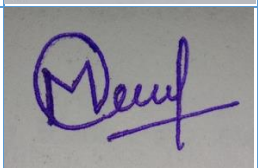
➤ Hardware Requirements

1. Computer: A high-performance computer with a multi-core CPU, at least 8GB of RAM.
2. Storage: Sufficient storage to store the Enron data.
3. Display: A high-resolution display to visualize and interact with the data.
4. Web server: A web server to host the web application.
5. Cloud service: A cloud service to deploy the web application, such as Heroku

➤ Software Requirements

1. Python: Python is a popular programming language for machine learning and web development.
2. Machine learning libraries: There are several machine learning libraries available for Python, including scikit-learn, TensorFlow, and Keras.
3. Web development frameworks: There are several web development frameworks available for Python, including Flask.
4. Text editors: A text editor is necessary for writing and editing code. Such as Visual Studio Code, and Sublime Text.
5. Database software: Database is required to store and manage the Enron data. Some popular options for Python include PostgreSQL.

STUDENTS DETAILS

Name	UID	Signature
Yamini	20BCS6766	
Saumya Dua	20BCS6746	
Mayank	20BCS6788	

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)