Project 6: AI-Driven Exploration and Prediction of Company Registration Trends with Registrar of Companies (RoC)

PROJECT TITLE: ROC COMPANY ANALYSIS

Problem Definition :

The problem is to perform an AI-driven exploration and predictive analysis on the master details of companies registered with the Registrar of Companies (RoC). The objective is to uncover hidden patterns, gain insights into the company landscape, and forecast future registration trends. This project aims to develop predictive models using advanced Artificial Intelligence techniques to anticipate future company registrations and support informed decision-making for businesses, investors, and policymakers.

Objective:

The objective of this project is to leverage advanced Artificial Intelligence techniques to perform an in-depth exploration and predictive analysis on the master details of companies registered with the Registrar of Companies (RoC).

The AI-driven analysis aims to uncover hidden patterns, discover valuable insights into the company landscape, and forecast future registration trends.

By applying cutting-edge AI algorithms, the study seeks to identify unique characteristics and relationships among registered companies, enabling a more sophisticated understanding of the business ecosystem in Tamil Nadu.

The ultimate goal is to develop predictive models that can anticipate future company registrations and contribute to informed decision-making for businesses, investors, and policymakers.

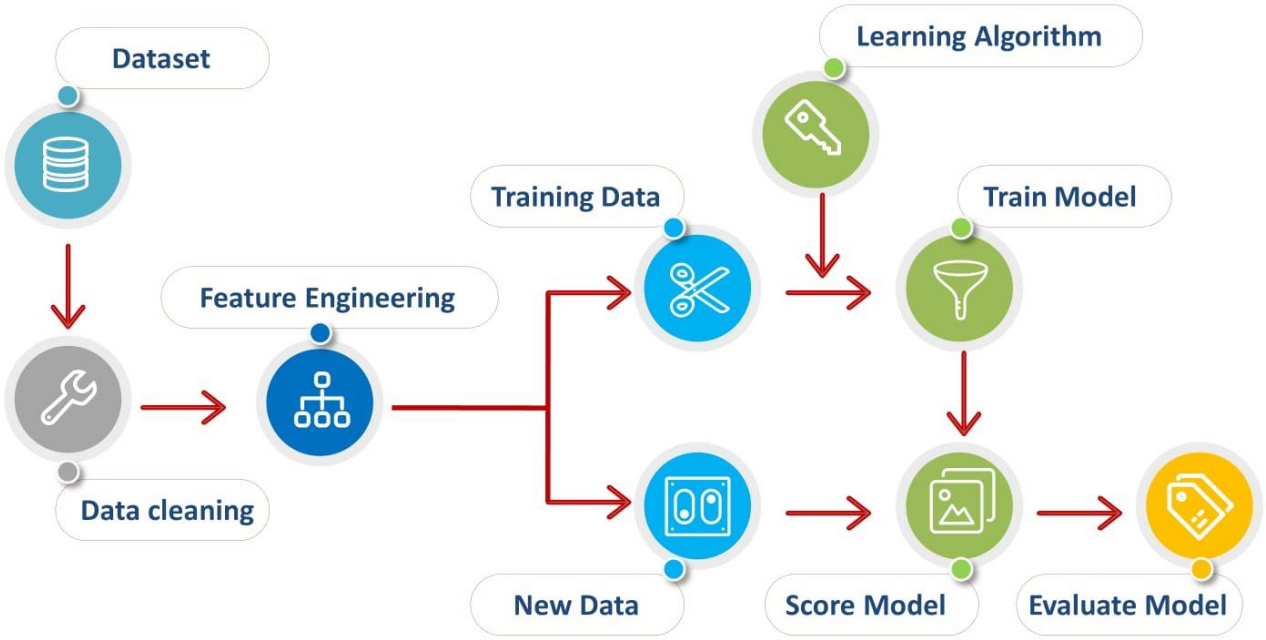
Design Thinking:

Data Source

Utilize the dataset containing information about registered companies, including columns like company name, status, class, category, registration date, authorized capital, paid-up capital, and more.

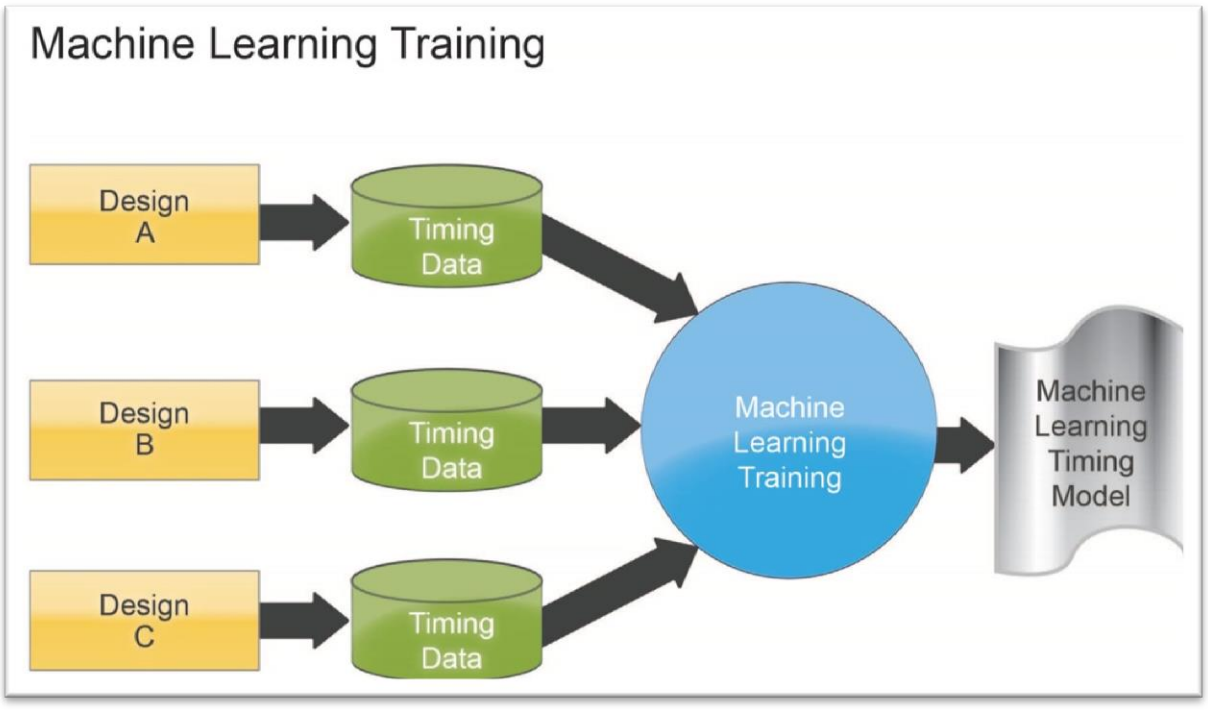
Data Preprocessing:

Clean and preprocess the data, handle missing values, and convert categorical features into numerical representations.



Exploratory Data Analysis (EDA):

Perform EDA to understand the distribution, relationships, and unique characteristics of registered companies.



Feature Engineering:

Create relevant features that can contribute to predictive analysis.

Predictive Modelling:

Apply AI algorithms to develop predictive models for future company registrations.

Model Evaluation:

Evaluate the predictive models using appropriate metrics, such as accuracy and precision.

The sample Dataset:

Link: https://tn.data.gov.in/resource/company-master-data-tamil-nadu-upto-28th-february-2019