AAI-510 – Team Project Status Update Form

Fill out this form and submit it by the end of Module 4 in Canvas.

Team Number: ___1___

Team Leader/Representative: Outhai Xayavongsa (Thai)

Full Names of Team Members:

1. Aaron Ramirez.
2. Muhammad Haris
3. Outhai Xayavongsa (Thai)

Title of Your Project: Detection and Prevention of Vehicle Insurance Claim Fraud

Short Description of Your Project and Objectives: Our project aims to address the significant challenge insurance companies face due to fraudulent claims, which result in financial losses and erode trust in the insurance system. The objective is to develop a dependable predictive model that efficiently detects fraudulent insurance claims by leveraging historical claim data. This model will assist insurance companies in reducing financial losses, enhancing claim processing efficiency, and maintaining fair premium pricing for customers.

Name of Your Selected Dataset: Vehicle Claim Fraud Detection

Description of Your Selected Dataset (data source, number of variables, size of dataset, etc.): The dataset used for this project is sourced from Kaggle and is titled "Vehicle Insurance Claim Fraud Detection." It comprises 33 variables, providing a comprehensive range of features related to vehicle insurance claims. The dataset includes both categorical and numerical variables such as the month of the accident, day of the week, make of the vehicle, accident area, age of the policyholder, and various policy details. With a total of 15,420 records, the dataset offers a robust sample size for training and evaluating the predictive model. Each record includes an indicator of whether the claim was fraudulent, making it suitable for building a classification model to detect fraud. This dataset allows for detailed analysis and feature engineering to enhance the model's ability to distinguish between legitimate and fraudulent claims.

Please provide GitHub the link here: https://github.com/oxayavongsa/aai-510-ml-group-1

How many times have your members met in the last two weeks? _____3_____

List the specific contributions that each team member is providing for the Final Team Project in the table below.
- **NOTE:** ALL students on the team should contribute equally to the Final Team Project.

Team Member 1 Aaron Ramirez	Team Member 2 Muhammad Haris	Team Member 3 Outhai Xayavongsa
Dataset Contributions Review & Select a Dataset Data Clean Feature Selection (team) Model #1 Train Baseline Model & Evaluate Model #1 Hyperparameter Tuning & Evaluate Model #1 Select the Best Model & Ensemble (team) Final Model Training (team) Add Text blocks code /graphs (Data Clean & Model #1) Discussion / Conclusion Final Code Review 4 Slides (5-6 mins) GitHub Read Me MP4 Conversion	Dataset Contributions Review & Select a Dataset References Pre-Processing / Feature Engineering Feature Selection (team) Model #2 Train Baseline Model & Evaluate Model #2 Hyperparameter Tuning & Evaluate Model #2 Select the Best Model & Ensemble (team) Final Model Training (team) Add Text blocks code /graphs (Features and Model #2) Final Review of all text blocks 4 Slides (5-6 mins)	Dataset Contributions Review & Select a Dataset Created Task List Complete & Submit "Team Project" Form EDA Introduction Feature Selection (team) Model #3 Train Baseline Model & Evaluate Model #3 Hyperparameter Tuning & Evaluate Model #3 Select the Best Model & Ensemble (team) Final Model Training (team) Add Text blocks code /graphs (EDA, Intro, Model #3) 4 Slides (5-6 mins) Final Review and APA (All) Format check for PowerPoint

Comments/ Roadblocks: ___None_____