**AAI-510 – Team Project Status Update Form**

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

Team Number: **1**

Team Leader/Representative: **Kwabena Mensah**

Full Names of Team Members:

**1. Frank Ivey**

**2. Bin Lu**

**3. Kwabena Mensah**

Title of Your Project: Credit Card Users - Churn Prediction

Short Description of Your Project and Objectives:

Description:

We at Thera bank need to come up with a classification model that will help the bank improve its services so that customers do not renounce their credit cards.

Objectives:

Explore and visualize the dataset.

Build a classification model to predict if the customer is going to churn or not.

Optimize the model using appropriate techniques.

Generate a set of insights and recommendations that will help the bank.

Name of Your Selected Dataset: Credit Card Users - Churn Prediction

Description of Your Selected Dataset (data source, number of variables, size of dataset, etc.):

Data Source: [Credit Card Users - Churn Prediction | Kaggle](https://www.kaggle.com/datasets/hoorqasim/credit-card-users-churn-prediction)

Number of Variables: 20

Size of Dataset: 10127

The Thera bank recently saw a steep decline in the number of users of their credit card, credit cards are a good source of income for banks because of different kinds of fees charged by the banks like annual fees, balance transfer fees, and cash advance fees, late payment fees, foreign transaction fees, and others. Some fees are charged to every user irrespective of usage, while others are charged under specified circumstances.

Customers’ leaving credit cards services would lead bank to loss, so the bank wants to analyze the data of customers and identify the customers who will leave their credit card services and reason for same – so that bank could improve upon those areas.

Please provide GitHub the link here: <https://github.com/ithllc/AAI_510_02_SU23>

How many times have your members met in the last two weeks? Three Times: Saturday May 20; Thursday May 25; June 1

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 – Frank Ivey | Team Member 2 – Bin Lu | Team Member 3 – Kwabena Mensah |
| --- | --- | --- |
| List of contributions   1. Problem statement and justification for the proposed approach. 2. Data understanding (EDA) – a graphical and non-graphical representation of relationships between the response variable and predictor variables. 3. Data preparation. 4. Feature engineering – data pre-processing – missing values, outliers, etc. 5. Modeling – selection, comparison, tuning, and analysis – consider ensembles. 6. Evaluation – performance measures, results, and conclusions. 7. Discussion and conclusions – address the problem statement and recommendation. | List of contributions   1. Problem statement and justification for the proposed approach. 2. Data understanding (EDA) – a graphical and non-graphical representation of relationships between the response variable and predictor variables. 3. Data preparation. 4. Feature engineering – data pre-processing – missing values, outliers, etc. 5. Modeling – selection, comparison, tuning, and analysis – consider ensembles. 6. Evaluation – performance measures, results, and conclusions. 7. Discussion and conclusions – address the problem statement and recommendation. | List of contributions:   1. Problem statement and justification for the proposed approach. 2. Data understanding (EDA) – a graphical and non-graphical representation of relationships between the response variable and predictor variables. 3. Data preparation. 4. Feature engineering – data pre-processing – missing values, outliers, etc. 5. Modeling – selection, comparison, tuning, and analysis – consider ensembles. 6. Evaluation – performance measures, results, and conclusions. 7. Discussion and conclusions – address the problem statement and recommendation. |

Comments/ Roadblocks: All team members will contribute equally on different tasks which are and will be assigned as we progress.