**Project Meeting Minutes #3 (Week 5, Week 6 and Week 7)**

**GROUP 3 – DAB422-24W-001**

**Project Name: Crime Rate Analysis in Toronto, Canada**

|  |  |  |
| --- | --- | --- |
| **Date and Time** | **Location** | **Attendees** |
| 6th, 13rd and 20th February 2024, 8:00 AM– 10:00 AM | 1 Riverside Drive  R1012 | - Prof. Abiodun Sodiq Shofoluwe  - Srilakshmi Gummadidala  - Yen Nga Le  - Tehsin Shaikh  - Vinod Soloman Santhakumar |

**Agenda Items:**

1. Individually continue working on Crime Rate for the next steps as feature engineering and modeling methods
2. Prepare for individual interview for mid-term period
3. Suggestions for next course of action items

**Meeting Minutes:**

1. **Individually continue working on Crime Rate for the next steps as feature engineering and modeling methods**

* About feature engineering steps, we were trying to identify which features are important for modeling after encoding all the non-numerical features to numerical and then attempting to evaluate which are best for modeling.
* About modeling methods for predicting the trend, we tried applying for Time series forecasting methods as ARIMA and SARIMA, Regression Analytics and Clustering methods. Unfortunately, with ARIMA and SARIMA, the forecasting accuracy of these model are still low. The same low results for Logistic Regression accuracy and Random Forest Classifier accuracy. With Clustering model, the coding still gets error to run in python.

1. **Prepare for individual interview for mid-term period**

* Every team member rechecked and prepared based on their individual scope of contribution towards the capstone project and explained the same in the mid-term interview with Professor. Sodiq in February 13, 2024.

1. **Suggestions for next course of action items:**

* All team members will continue investigating, deploying the feature engineering and modeling methods. After that, we will discuss to find out which codes and model for predicting the trend are relevant for processing with this dataset.
* Main dataset link – Crime rate:

[Major Crime Indicators Open Data | Major Crime Indicators Open Data | Toronto Police Service Public Safety Data Portal](https://data.torontopolice.on.ca/datasets/TorontoPS::major-crime-indicators-open-data/explore)

* Additional dataset link - Demographic:

[Police Annual Statistical Report - Arrested and Charged Persons - City of Toronto Open Data Portal](https://open.toronto.ca/dataset/police-annual-statistical-report-arrested-and-charged-persons/)

* GitHub link:

<https://github.com/VinodSolomon/Crime-Rate-Analysis-Toronto>

**Next Meeting date and time:** February 27, 2024 8:00 AM - 10:00 AM.