

# Main Repository: CMPT459-Final-Group-Project

## Merging Guide

**Note:** Please feel free to ask questions about the implementation below and update/delete/insert your implementation of Step 1- 6 into the main branch where specified.

**Folder: Steps-1-2-3**

**Status: Complete**

**\*\*Used dataset files (../Steps-1-2-3/data):**

**cases\_2023\_test.csv**  
**cases\_2021\_train.csv**  
**Location\_2021.csv**

**\*\*Resulting dataset files(../Steps-1-2-3/results):**

**case\_test\_processed .csv**  
**case\_train\_processed.csv**

- 1) Downloaded Datasets from the introductory paragraph
- 2) Visualized data using 'data\_visuals.py'
  - a) This includes produced heatmaps and bar graphs as shown in (../Steps-1-2-3/plots)
    - **Include your plots here**
      - **This includes heatmap visuals and any other data visuals you could think of.**
- 3) Pre-processed Datasets from the intro paragraph
  - a) Removed LAST\_UPDATE column
  - b) Replaced missing age/sex values with -1
  - c) Removed unlikely ages from the dataset
  - d) Removed unlikely long/lat values from the dataset
  - e) Removed row if province is unknown
    - **Feel free to add/delete to accommodate for your implementation of Steps-1-2-3 of pre-processing the data**
- 4) Lastly joined datasets by combined key
- 5) Created a .ipynt file to show code

## **Folder: Steps-4-5**

**Status: Complete**

**\*\*Used dataset files (../Steps-4-5/data) as provided in highlighted text in step 2:**

**cases\_2021\_test\_processed\_unlabelled\_2.csv**

**Cases\_2021\_train\_processed\_2 - cases\_2021\_train\_processed\_2.csv**

**\*\*Resulting dataset files(../Steps-4-5/result):**

**oversampled\_processed\_data.csv**

- 1) Only performed pre\_processing on training data! Not sure what to do with testing data as it didnt say anything about that.
- 2) Converted Sex to categorical [for mapping] -> new column name is sex\_code
- 3) Converted Chronic\_Disease\_binary to categoical [for mapping] -> new column name is chronic\_disease\_binary\_code
- 4) Converted province to categorical [for mapping] -> new column name is province\_code
- 5) Converted country to categorical [for mapping] -> new column name is country\_code
- 6) Converted **outcome\_group** to categorical [for mapping] -> new column name is **outcome\_group\_code**.
- 7) Ensured that all types are numeric!
- 8) Removed date confirmation (unnecessary?)
- 9) **Balanced dataset using Oversampling**

## **Folder: Steps-6**

**Status: KNN Complete**

**\*\*Used dataset files (../Steps-4-5/result) for training the classifier models:**

**oversampled\_processed\_data.csv**

**\*\*Used dataset files (../Steps-6/hyperparameter\_tuning\_data) for hyperparamter tuning:**

**oversampled\_processed\_data.csv**

- 1) Pre-processed the dataset in the Introducotry paragraph as it told us to us that for hyperparamter tuning

- 2) **However**, that specified dataset was not fully pre-processed for hyperparameter tuning.
- 3) In ../Steps-6/Preprocessing/main.py I preprocessed the dataset so it could be used for hyperparameter tuning.
- 4) Implemented KNN model
  - **Here is where your implemented classifier models should go in the given folders**
  - **../Steps-6/Logistic\_Regression for Logistic Regression**
  - **../Steps-6/Random\_Forest for Random Forest**

**\*\*For step 6, To train/validate your classification models use dataset [../Step-4-5/result/oversampled\_processed\_data.csv]. Make sure to drop categorical columns!**

**For hyperparameter tuning use the dataset**

**[../Steps-6/hyperparameter\_tuning\_data/hyperparameter\_tuning\_data.csv]**