Loneliness Analysis App

Fabiha Chowdhury

Introduction:

Knowing if someone is lonely is the first step towards offering support and connecting them with resources that can improve their overall well-being. It's a compassionate response that can make a significant difference in their life. Loneliness can significantly impact an individual's mental and physical health.

Project Objective:

I want to create a model that will be able to predict how much the person is lonely based on gender and other selected sociodemographic characteristics.

Data Description:

I will be using this website to scrape and collect the data.

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4510004901&cubeTimeFrame.startMonth=07&cubeTimeFrame.startYear=2021&cubeTimeFrame.endMonth=07&cubeTimeFrame.endYear=2024&referencePeriods=20210701%2C20240701 (percentage)

https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2022007-eng.htm (reason)

https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2021090-eng.htm (why)

Methodology:

First, I will scrape the data from the website making sure I have all the informations I need. Then, for my model which I used Random forest. If possible, with streamlit I want to be able to predict. Do a classification project.

Expected Deliverables:

For the final output I want to ble able to see if a person is lonely based on the age, and place that the person is living.

Timeline and Tasks:

- 22: Submit proposal and Scrape the website
- 23: Scrape all the data needed & EDA
- 24: Preprocess the model & Prain model
- 25: Train the final model & predict
- 26: Streamlit
- 27: Streamlit/ Powerpoint
- 28: Finish Powerpoint and Submit
- 29: PRESENT!!

Potential Challenges:

To train the model it might get some problems, but depending on what it is I will try and find tips from overstack flow.

To make the streamlit platform as it is quite new to me I might make many errors. For that I will try and get help either from the teacher .

Thank you!