Project Progress

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02/03/2022

Discussion points:

- Discussed the overview of project.
- Received the clarifications for doubts and tasks for next week from the supervisor.

Deliverables:

- Find out the extra data to be added to the existing dataset. -- Got 2 datasets to add. Couldn't find the one related to unemployment.
- Find the literature reviews done in the same area and identify the methods used by them. -- Found old papers.
- Modify the research questions. -- Done

Date of next meeting: 09/03/2022 at 1.15 pm.

09/03/2022

Discussion points:

- Discussed about the previous papers and the methods used in those papers.
- Discussed the datasets to merge and how to merge it
- Discussed about the Google API for latitude and longitudes.

Deliverables:

- Merge datasets
- Find more papers related to Ireland.
- Google API for latitude and longitudes. --- Couldn't read data to jupiter. Found a code for Google API for latitudes and longitudes.

Date of next meeting: 16/03/2022 at 1.15 pm

16/03/2022

Discussion *Points:*

- Discussed about the dataset and how to solve the issue with reading the dataset.

Deliverables:

- Ethical consideration form – Filled

- Merging province dataset to original dataset. -- Done

Date of next meeting: 23/03/2022 at 1pm

23/03/2022

Discussion points:

- Discussed the problem with getting latitude and longitude through API. And suggested to look fordifferent ways.
- Suggested that price can be made category for analysis and make another column without removing the existing one.
- Discussed about the importance of literature review and asked to read more and more.

Tasks:

- Start cleaning and visualization

Next meeting: 30/03/2022 at 3pm

30/03/2022

Discussion points:

- Suggested to split the county column to Dublin and outside Dublin and add another column. Thiswill be useful for analysis.
- Discussed about the Latitude and longitude API and it is ok to do with that.
- Discussed about doing different model on the data.

Tasks:

- Make another column with Dublin and outside Dublin - done
- Try out different models - done there is some doubts and errors

Next meeting: 06/04/2022 at lpm

06/04/2022

Discussion Points:

- Discussed how to write literature review.
- Decided to implement both statistical and machine learning techniques.
- Supervisor suggested an article and asked to read it.

Deliverables:

- Read articles - done

- Make another column with Dublin and outside Dublin - done
- Start writing and visualizing - not completed but started

Next meeting: 27/04/2022 after Easter holidays at 1.30 PM

27/04/2022

Discussion points:

- Discussed about the literature review.
- Discussed about the article sent by supervisor.
- Clarified some doubts.

Deliverables:

- Start writing and visualizing - Ongoing

Next meeting: 04705/2022 at 3 pm

04/05/2022

Discussion points:

- Supervisor asked to finalize the ML and statistical methods using in the thesis.
- Suggested to perform all models and include the best in the report.
- Clarified some doubts regarding the ML techniques.

Deliverables:

- Literature review - Ongoing

Next meeting: 13/05/2022 at 9.30 am

13/05/2022

Discussion points:

- Clarified the doubts regarding the literature review.
- Asked doubts regarding choropleth

Deliverables:

- Start doing interim report works -ongoing

Next meeting: 26/05/2022 at 10 am

26/05/2022

Discussion Points:

- Discussed about the literature review and report and the sections to be included in the report.
- Discussed about the initial analyses to be included in the report
- Discussed about the plotly map of Ireland

Deliverables:

- Start doing report - completed visualizations

Next meeting on: 03/06/2022 at 9 am in College

03/06/2022

Discussion Points:

- Discussed about the literature review and report and the feedback comments.
- Discussed about the initial analyses to be included in the report.
- Suggested a plan to complete report by Wednesday and send it for reviewing.

Deliverables:

- Start doing report - completed visualizations and Literature review

Next meeting on: 08/06/2022 at 3.30 pm via zoom

08/06/2022

Discussion Points:

- Discussed about the ML algorithms and its implementation.
- Suggested not to remove the null values since it may affect the modelling.
- Shown the report via screen share and discussed it.

Deliverables:

- Report - Send it to Supervisor for review

Next meeting on: 10/06/2022 at 2.40 pm via zoom

10/06/2022

Discussion Points:

- Clarified the doubts regarding the feedback comments.

Deliverables:

- Report - Completed

Next meeting on: 15/06/2022 at 9 via zoom

15/6/22

Provided feedback for the report and submission.

Marks for the interim report has been shared.

Added everything related to project to the Git hub.

22/6/22

Started working on the code to get the map of Ireland. Searched different websites regarding the same.

29/6/22

Got the code to make the choropleth of Ireland.

The map to plot Dublin post codes was showing some error.

Did some research on how to plot the post codes.

6/7/22

The shape file to plot the post codes was downloaded and the error was solved. Choropleth for Dublin post codes have been plotted. Started reading about hedonic pricing.

13/7/22

After researching about hedonic models, it was found that MLR models with price as dependent variable is the hedonic models. So started writing the results for MLR models which was already implemented for interim report.

20/7/22

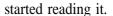Completed the writing for hedonic model.

Started implementing statistical models for Dublin data to analyze the price in Dublin. A new data has created for Dublin.

27/7/22

Completed the models for Dublin data and implemented SLR and MLR models. Started writing the interpretation for the models.

3/8/22

Completed the writing for Dublin data models and started researching research papers regarding the factors influencing house prices to add to literature review. Found two papers and

started reading it.

10/8/22

Read two papers regarding the factors influencing house prices and added them to the literature review.

17/8/22

Started working on ML models for the project and started with the LR and DCT.

24/8/22

Completed the LR, DCT, RF, Xg boost models and started writing the results section of report.

26/8/22

Completed the results section and then added one more model to the project ie. the NN model.

Updated the corresponding sections in the report and uploaded it to the git.

28/8/22

Updated the report and added the evaluation section and completed the report.

29/8/22

Added all the code and updated all files on GitHub.

Performed the review of report and corrected the formats and did spell check. Added some more figures to the results section and updated the figure numbers.

30/8/22

Added the appendix section to the report.

This includes the code, Mahara page and ethical approval form.

Added the final draft to GitHub.

1/9/22

Submit the report draft to supervisor for review.

11/9/22

Final submission.