Project Report

# GitHub URL

UCDPA\_MeabhMcDonnell

<https://github.com/meabhmcdonnell/UCDPA_5April_MMcDonnell.git>

# Abstract (Short overview of the entire project and features)

*The purpose of this project is to look at the results of the General Elections in Ireland in 2016 and 2020. A particular focus of the project is to look at the progression of female candidates being elected or not elected in the intervening 4 years to determine what progress has been made via various political party incentives to boost the election rates of female T.D.s(Irish elected representatives).*

*It is expected that from the analysis of data contained in general election count result datasets along with candidate information datasets obtained via* [*https://data.gov.ie/*](https://data.gov.ie/) *I should be able to provide insights and what might future election outcomes be for female candidates.*

*This analysis is shown via course concepts learnt and put into practice to demonstrate the requested outcomes for this assignment.*

# Dataset

*(Provide a description of your dataset and source. Also, justify why you chose this source)*

*To begin an analysis of the data for this project I went to* [*www.data.gov.ie*](http://www.data.gov.ie) *which is an Irish website designed to promote innovation and transparency through the publication of Irish Public Sector data in open, free and reusable formats. From this website I downloaded a number of CSV files containing data relating to Irish General Elections in 2020 and 2016*

# Implementation Process

(Describe your entire process in detail)

The following list describes the areas being assessed, for a total of 150 points (points awarded are indicated in brackets).

1. Real-world scenario

* The project should use a real-world business dataset and include a reference of their source in the report (10)

2. Importing data - Your project should make use of one or more of the following

* Relational database or API or Web scraping (10)
* Import a CSV file into a Pandas DataFrame (10)

3. Analysing data

* Sorting, indexing, grouping (10)
* Replace missing values or dropping duplicates (10)
* Looping, iterrows (10)
* Merge DataFrames (10)

4. Python

* Define a custom function to create reusable code (10)
* NumPy (10)
* Dictionary or Lists (10)

5. Visualise

* Seaborn or MatPlotlib (20)

6. Generate valuable insights

* 5 insights from the visualisation (20)

7. Machine Learning (10)

* Describe what kind of predictions can you perform in future on the project using Machine Learning and Deep Learning
* Would you choose classification or regression?

# Results

(Include the charts and describe them)

# Insights

(Point out at least 5 insights in bullet points)

1. Insight 1
2. Insight 2
3. Insight 3
4. Insight 4
5. Insight 5 – Predictions to perform in future using Machine Learning and Deep Learning
6. Classification or Regression

# References

(Include any references if required)