**CCT College Dublin**

**Assessment Cover Page**

*To be provided separately as a word doc for students to include with every submission*

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| **Module Title:** | Combined MSc Data Analytics Assessment |
| **Assessment Title:** | Analysis of the Population of Ireland by region and analysis of Asylum Seekers within Ireland |
| **Lecturer Name:** | David McQuaid, Muhammad Iqbal, David Gonzalez, Marina Iantorno |
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| **Assessment Due Date:** | 10th November 2023 |
| **Date of Submission:** | 10th November 2023 |



**Declaration**

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| By submitting this assessment, I confirm that I have read the CCT policy on Academic Misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source. I declare it to be my own work and that all material from third parties has been appropriately referenced. I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution. |

**Analysis of Irish Population Growth by Region**

*Notes:*

* *Migration Rates by Region*
* *And projection of migration rates by region Average age by region?*
* *Watch Irish underpopulated video*
* *Famine on irish population*
* *Is migration higher is high ‘famine’ areas Projection of population growth by region Data analysis of population by region The Irish were breed to leave, some just have a stronger urge to leave compared to others*
* *Supplementary data: migration by region*
* *Population demographics by Irish Region*

**Introduction:**

The aim of this project is to investigate certain population demographics specifically within each region of the Republic of Ireland.

The motivation behind this project comes from an interest to explore whether certain regions differ in terms of population growth.

I also want to explore recent trends in terms of Asylum seekers within Ireland. I would like to investigate key statistics such as Asylum application acceptance rates, successful applicants resettlement locations…

This is particularly interesting in recent times considering the very topical protests in areas such as Cork…

The primary questions I will ask are:

* Do population growths differ significantly by region?
* I will projection current growth rates to project future populations by region.
* What are recent trends regarding asylum seekers with Ireland?
* Where are these asylum seekers given refuge within Ireland?

**Datasets:**

I will be using a datasets from the CSO (Central Statistics Office) in order to perform attempt to answer these questions:

* Estimated Population (Persons in April)
  + This is split by the 8 NUTS3 Region (Border, Midland, West, Dublin, Mid-East, Mid-West, South-East & South-West)
  + This will be used to assess historical growth rates by region and used to project

I will also be using a number of external datasets such as:

* Refugee…

**1. Analysis of Population Growth by Region in Ireland**

1.1 Introduction:

To begin I would like to explore historical population in each region of Ireland. One of the early decisions I had to make was how to divide the Republic of Ireland into respective regions. After performing some research I concluded that subdivided Ireland into their 7 NUTS3 regions would be most appropriate. I came to this conclusion as I felt that dividing the country into its 26 county regions was a step to far regarding the level of detail in this analysis. In short, I felt that the counties of Ireland are not as directly comparable as the respective NUT3 regions of Ireland.

I feel like the NUT3 regions are more directly comparable perhaps with the only exception being Dublin which has a very large density when compared to the other regions.

1.2 Dataset Used:

For this investigation I will be using the “Estimated Population (Persons in April)” dataset from the CSO’s website. This dataset details the population of each NUTS3 region from 1996-2022.

1.3 Data Preparation:

Firstly I regard

1.4 Data Visualisation:

As we are looking at population growth by region it would be most appropriate to use line charts to display my results. It would also be important to use a number of choropleth maps as we are making placing an importance of each respective region.

Line charts will be a key choice to displaying

**Projection of Population Growth split by Region in Ireland**

Introduction:

I will utilise the dataset above to project population growth for each region, I will then display my results in the form of line graphs and a choropleth map.

Dataset Used:

I will use the same dataset as above.

Projection Model:

Results:

**Asylum Seekers Application Success Rates**

**Number of Asylum Seekers coming to Ireland**

**Location of successful applicants within Ireland**

**Acknowledgements**

The idea and parts of the formatting for this template came from the Association for Learning Technology (UK) ALT-C 2004 Research Paper Format Template.

The report was hugely inspired by a YouTube video I watch called …. By ….

**References**

Region Classification:

https://www.cso.ie/en/methods/classifications/standardcountiesandnutsregions/