

# FIT3179 VISUALISATION 2

## Domain

This project will focus on the social domain, specifically analysing refugee population trends in Malaysia from 2000 to 2023. The study will cover key areas, including the trends of refugee arrivals over time, demographic factors influencing these trends, and regional variations in terms of countries of origin.

## Why?

Understanding marriage and divorce trends is crucial for several reasons:

1. **Policy Implications:** Insights into these trends help policymakers develop effective refugee and immigration policies, including resettlement programs, integration efforts, and humanitarian aid.
2. **Social Dynamics:** Examining these patterns provides a better understanding of the social, political, and economic dynamics affecting both refugees and host communities in Malaysia.
3. **Public Awareness:** This information raises awareness among the general public and supports organizations working with refugees, such as NGOs, human rights groups, and international agencies.

## Target Audience

- **Policymakers and Social Researchers:** For developing data-driven refugee policies, resettlement programs, and humanitarian initiatives.
- **Human Rights Organizations and NGOs:** To understand the needs of refugee populations and provide appropriate aid and advocacy.
- **General Public and Media:** To raise awareness and foster discussions on refugee issues, social integration, and humanitarian responsibilities.

## Expected Outcomes

- Identification of key trends in refugee arrivals and population changes in Malaysia over the last two decades.
- Insights into the demographic factors, such as country of origin and population type (refugees, asylum-seekers, stateless individuals), influencing these trends.
- A comprehensive understanding of the political, social, and economic factors affecting refugee populations in Malaysia.

## Datasets

The datasets for this project are compiled from publicly available sources and cover the period from 2000 to 2023. They include:

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- **Population:** This dataset contains information on the year, origin countries of refugees, the country of asylum (with a focus on Malaysia), and the number of refugees under different population types, such as refugees under UNHCR's mandate, asylum-seekers, stateless persons, and others of concern.
- **Footnotes:** This dataset provides additional context and metadata regarding refugee populations, including potential explanations for data variations or exceptions.

**Source:** <https://www.unhcr.org/refugee-statistics/download/?url=AJI2Ex>

## Methodology

1. **Data Cleaning:** Handle missing or inconsistent data entries, such as incomplete records.
2. **Data Analysis:** Perform statistical analysis to identify trends, correlations, and significant patterns.
3. **Data Wrangling:** Add longitudes and latitudes of each region (merging two datasets)
4. **Visualization:** Use visualization tools to create interactive charts and maps, making the data accessible and understandable for the target audience.

## Design Ideas

To visualize and analyse the data effectively, the following charts will be used:

1. **Connection Map:** Using the "Origin" and "Country of Asylum" (Malaysia) to create a geographical map that visualizes the flow of refugees from various countries to Malaysia.
2. **Line Chart:** visualize the trend of refugee populations over time (2000–2023) by summing up different population types (e.g., refugees, asylum-seekers).
3. **Spider Chart:** Show the distribution or frequency of different population types (such as REF, ASY, etc.) across the years. It can highlight the types that appear most often from 2000 to 2023.
4. **Word Cloud:** A word cloud can represent the origin countries of refugees to visually highlight the countries contributing the most to the refugee population in Malaysia.
5. **Timeline Chart:** plot world events (e.g., wars, natural disasters) alongside the refugee data for each year, showing the correlation between global events and refugee surges.
6. **Boxplot:** explore the distribution of refugee numbers across different continents by grouping countries by their continent (Asia, Europe, Africa, etc.).