Task Board

User Story 1: Global Population Report

Objective: To deliver a comprehensive report ranking all countries by population size, aiding the organization in global demographic analysis.

Assigned to: Piri

Detailed Tasks:

- Data Acquisition: Utilize authoritative global databases (e.g., UN, World Bank) to extract the most recent population data for each country.
- Data Validation: Implement a two-step validation process, first automated for anomalies and outliers, followed by manual verification of top and bottom 10% of the dataset for accuracy.
- Report Generation: Develop an interactive report allowing sorting by population size, with expandable country profiles showing detailed demographics.

Progress: Planning

Challenges & Mitigations: Ensuring data accuracy across numerous sources; mitigation through cross-referencing with multiple authoritative databases.

<u>User Story 2: Continent-wise Population Analysis</u>

Objective: To analyze and rank countries within a specified continent by population size for targeted regional studies.

Assigned to: Jonny

Detailed Tasks:

- Continent Selection: Interface with the organization to determine the continent(s) of interest for the report.
- Data Compilation: Gather comprehensive population data for countries within the selected continent from regional statistical offices and international databases.
- Analytical Reporting: Create dynamic reports that not only rank countries but also provide insights into population growth trends and comparisons with historical data.

Progress: In Progress

<u>Challenges & Mitigations:</u> Handling varying data formats and standards; using data normalization and transformation techniques to ensure consistency.

User Story 3: Urban Population Insights

Objective: To provide detailed insights into city populations, emphasizing the largest urban centers for urban development planning.

Assigned to: Micheal

Detailed Tasks:

- Urban Data Collection: Collect data on city populations globally, focusing on major urban centers, from municipal records and urban studies.
- Ranking and Analysis: Utilize statistical software to rank cities by population and identify significant urbanization trends.
- Visual Report Design: Design a visually engaging report featuring interactive maps and graphs showcasing urban population distributions.

Progress: In Progress

<u>Challenges & Mitigations:</u> Diverse definitions of "city" across countries; adopt a standardized criterion for what constitutes a city in this context.

User Story 4: Capital City Demographics

Objective: To conduct a demographic analysis of capital cities around the world, organized by population size, for geopolitical and social studies.

Assigned to: Assia

Detailed Tasks:

- Capital City Identification: Identify all global capital cities using official government and international sources.
- Population Data Gathering: Collect accurate and up-to-date population data for each capital city, ensuring consistency in the data collection period.

• Comparative Analysis: Develop a comparative analysis feature in the report that allows for direct comparison between capitals, highlighting unique demographic features.

Progress: In Planning

<u>Challenges & Mitigations:</u> Political changes affecting capital status; continuous monitoring of global political developments to keep data current.

User Story 5: Language and Population

Objective: To analyze and report on the number and percentage of speakers of Chinese, English, Hindi, Spanish, and Arabic, enriching the cultural dimension of the organization's analysis.

Assigned to: Georgy

Detailed Tasks:

- Linguistic Data Mining: Extract data on language speakers from linguistic research, national censuses, and international language databases.
- Demographic Correlation: Correlate language data with demographic trends to provide insights into linguistic distribution and growth patterns.
- Interactive Language Maps: Create interactive maps and charts in the report, showing linguistic distribution and providing userselectable views for detailed analysis.

Progress: In Planning

<u>Challenges & Mitigations:</u> Accounting for multilingual speakers; develop a methodology to accurately represent multilingualism without double-counting individuals.