CSCI251 A2 Report

Ethan Dakin | SN: 8209194

Section 1.1: Political Issues

In my code, my five political issues are climate change, free healthcare, food security, equality, and mental health. I will write a brief description of each issue and why it is important.

Climate change is the long-term shifting of the temperature and or weather patterns, which can be natural or due to activities such as burning of fossil fuels. Climate change is important because it affects the environment, as well as both natural and human systems, including economic conditions.

Free healthcare is a socialist benefit where citizens are given either fully or partially government subsidized costs for medical billings. Universal health coverage allows countries to make the most of their strongest asset, which is the citizens. Supporting health represents an investment in human capital and economic growth.

Food securtity is a powerful tool in the battle against poverty, and is an essential part of everybody's day to day life.

Equality and diversity practices ensure that everyone is treated as equals, and are given the dignity and respect they deserve.
Mental health is an important factor in people's lives, as it helps them determine how to handle stress, relate to others and make healthy choices.

Section 1.2: Party characteristics and stance initialization

The party characteristics in my code are all held in a vector list, then the stances constructor initializes the strength and significance of each stance.

Section 1.3: Division’s names, stances’ initialization, and populations

My divisions are not named, as they are simply indexed in a vector list in my main function, but the stances are initialized in the constructor of the division, which first gets the population (random value between 0.5 and 1.5), and then pushes 5 stances into the vector list.

Section 1.4: Event rules and probabilities

My code’s events in the Campaign Event Days (section 1.4) are quite simple. I first choose a randomly distributed float between 0.0 and 1.0, and then I have 5 options from there. If it is between 0.0 and 0.2, then the rest of my code distributes the rest of the given events evenly, with each one being 20% each. The adjustment to the variables is also a random value chosen between –0.1 and 0.1 for candidate and division events, and –0.15 and 0.15 for the leader event.

Section 1.5: Coefficient derivation

In my code, my coefficients A, B and C used in the candidate voting score are 0.55, 0.35 and 0.1 respectively. I chose these based on the varying importance of each variable, that I thought was correct.

Section 2: UML Class Diagram