**Game Description**

**AntiPlague Coronavirus Game**  
**AntiPlague Coronavirus Game** is a strategic simulation game where the player takes on the role of a global health protector. The goal is to prevent a deadly virus from spreading across the world and infecting the entire population. Inspired by games like **Plague Inc.**, this game flips the script by putting the player in charge of **stopping the virus**, rather than spreading it.

**Gameplay Overview**

In **AntiPlague Coronavirus Game**, the player is presented with a **world map divided into at least 10 regions**. The virus starts in one country (chosen by the player) and begins to spread based on the selected difficulty level. The player must manage **travel routes** between countries, purchase **upgrades**, and make strategic decisions to slow down or stop the virus before it infects everyone.

**Key Features**

**1. World Map and Travel Routes**

* The game features a **world map** with at least **10 regions** connected by various **travel routes** (e.g., airlines, ships, and cars).
* Each country has different criteria for allowing travel (e.g., based on the number of infected people), which can be modified through upgrades.
* Travel routes are visualized with **simple animations**, such as an airplane icon moving between countries for air travel.

**2. Upgrades and Points System**

* The player can purchase **upgrades** using points earned by saving people from infection or curing infected individuals.
* There are **9 unique upgrades** (e.g., infected, cured, died, number of hospitals, vaccine, mask, quarantine, remote work, hospital capacity), each with different effects (e.g., slowing the virus spread, improving travel restrictions, or increasing cure rates).
* Upgrades are essential for managing the virus and preventing it from spreading too quickly.

**3. Difficulty Levels**

* The game has **3 difficulty levels**, each with a unique **day speed** (time progression).
* Higher difficulty levels present a greater challenge, requiring more strategic planning and quicker decision-making.

**4. Graphical Interface**

* The game features a **fully functional graphical interface** built using the **Swing framework**.
* The main menu includes options to start a **New Game**, view **High Scores**, and **Exit** the game.
* During gameplay, the player can see a **day counter** (time counter) and a **points counter**, which are constantly updated.
* The game can be interrupted at any time using the keyboard shortcut **Ctrl+Shift+Q**, which returns the player to the main menu.

**5. High Scores**

* After finishing a game, the player is prompted to enter their name, and their score is saved in the **High Scores** list.
* High scores are calculated based on the formula:  
  **FinalScore = (remaining Budget \* 10) + (cured people in the whole world) - (died people in the whole world \* 2)**.
* The High Scores list is displayed in a **scrollable window** and persists even after the application is closed, thanks to the use of the **Serializable** interface. The score list is limited to **20 players**.