Description of implementation decisions

* We implemented the observer pattern for many classes to regulary notify the GUI if changes happen. We encapsulated all classes as far as possible by setting attributes to private and restricting the accessibility of each class as far as possible.
* Grid:  
  we implemented the iterator pattern to be able to iterate over all the cells of the grid. We also implemented a reversed iterator to iterate backwards.
* GUIInitializer:  
  We used design by contract to set the player names and player colors. (input is checked by parser)
* InitializerParser:  
  We used design by contract to validate the name of the players.
* PlayerColor:  
  We used an enum to represent the colors. This way we could make a color-class which has all the desired attributes and the state space of color is equal to our abstract space.

The GUI is implemented in JavaFX. Make sure to have JavaFX installed and add the path to the folder to the library to run the application.

Starting the game

GUI

Run the GameOfLife file.

Terminal

Run the TerminalMain file