

```
1 package com.example.template;  
2  
3 public class Base {  
4 }  
5
```

```
1 package com.example.template;
2
3 import java.util.ArrayList;
4
5 public class Player {
6     private String name;
7     private int amountOfTerritories = 0;
8     private ArrayList<Territory>
    allTerritoriesControlled = new ArrayList<>();
9
10    public Player(String name, int
    amountOfTerritories, Territory
    startingTerritory) {
11        this.name = name;
12        this.amountOfTerritories =
    amountOfTerritories;
13        allTerritoriesControlled.add(
    startingTerritory);
14    }
15 }
16
```

```
1 package com.example.template;
2
3 import java.util.ArrayList;
4
5 public class Territory {
6     private String territoryType;
7     private int territoryTypeID;
8     private Player controllingPlayer;
9     private ArrayList<Coordinates>
    allCoordinatesOfTerritory = new ArrayList
    <>();
10
11     public Territory() {
12
13     }
14 }
15
```

```
1 package com.example.template;  
2  
3 public class Coordinates {  
4     private int xPos;  
5     private int yPos;  
6     private boolean isABorderCord = false;  
7 }  
8
```

```
1 package com.example.template;
2
3 import javafx.event.ActionEvent;
4 import javafx.event.EventHandler;
5 import javafx.fxml.FXML;
6 import javafx.scene.control.Button;
7 import javafx.scene.control.Label;
8 import javafx.scene.control.TextArea;
9 import javafx.scene.control.TextField;
10 import javafx.scene.image.Image;
11 import javafx.scene.image.ImageView;
12 import javafx.scene.layout.GridPane;
13 import javafx.scene.text.Font;
14
15 import javax.swing.JOptionPane;
16 import java.io.FileInputStream;
17 import java.io.FileNotFoundException;
18 import java.io.FileReader;
19 import java.io.PrintWriter;
20 import java.util.ArrayList;
21 import java.util.Objects;
22 import java.util.Scanner;
23
24 public class HelloController {
25     @FXML
26     public GridPane mainGridPane;
27     @FXML
28     public Button startButton;
29     @FXML
30     public ImageView tempImageView;
31     Button[][] buttonArray = new Button[75][
32         125];
33
34     public void start() {
35         mainGridPane.setVisible(true);
36     }
37 }
```

```
35         startButton.setVisible(false);
36         startButton.setDisable(true);
37         try{
38             FileInputStream input = new
FileInputStream("src/main/resources/images/
worldMap.jpg");
39             tempImageView.setImage(new Image(
input));
40         }catch (FileNotFoundException
variable){
41             System.out.println("file not
found");
42         }
43         for(int row =0;row<buttonArray.length
;row++) {
44             for(int column=0;column<
buttonArray[0].length;column++) {
45                 buttonArray[row][column] =
new Button("");
46                 buttonArray[row][column].
setPrefHeight(10);
47                 buttonArray[row][column].
setPrefWidth(10);
48                 Font font = new Font(0);
49                 buttonArray[row][column].
setFont(font);
50                 buttonArray[row][column].
setStyle("-fx-background-radius: 0px; -fx-
border-color: LightBlue; -fx-background-color
: LightBlue;");
51                 mainGridPane.add(buttonArray[
row][column],column,row);
52             }
53         }
54         printWorldBorders();
```

```
55         EventHandler z = new EventHandler<
        ActionEvent>() {
56             @Override
57             public void handle(ActionEvent
        event) {
58                 int row = GridPane.
        getRowIndex((Button) event.getSource());
59                 int column = GridPane.
        getColumnIndex((Button) event.getSource());
60                 if (!buttonArray[row][column
        ].getText().equals("A")) {
61                     buttonArray[row][column].
        setStyle("-fx-border-color: Blue; -fx-
        background-color: Blue;");
62                     buttonArray[row][column].
        setText("A");
63                     addCoordinatesToTXT(row,
        column);
64                 }
65             }
66         };
67         for(int row =0;row<buttonArray.length
        ;row++) {
68             for(int column=0;column<
        buttonArray[0].length;column++) {
69                 buttonArray[row][column].
        setOnAction(z);
70             }
71         }
72     }
73
74     public void printWorldBorders() {
75
76     }
77
```

```
78     public void addCoordinatesToTXT(int
    rowOfClick, int columnOfClick) {
79         String outFile = "src/main/resources
    /tempCoordinates.txt";
80         try{
81             FileReader reader = new
    FileReader("src/main/resources/
    tempCoordinates.txt");
82             Scanner in = new Scanner(reader
    );
83             ArrayList<String> allCords = new
    ArrayList<>();
84             while (in.hasNext()) {
85                 allCords.add(in.nextLine());
86             }
87             PrintWriter out = new
    PrintWriter(outFile);
88             for (int i = 0;i<allCords.size
    ();i++) {
89                 out.println(allCords.get(i
    ));
90             }
91             out.println(rowOfClick + "," +
    columnOfClick);
92             out.close();
93         }catch (FileNotFoundException
    variable){
94             System.out.println("file not
    found");
95         }
96     }
97 }
```



```
1 package com.example.template;
2
3 import javafx.application.Application;
4 import javafx.fxml.FXMLLoader;
5 import javafx.scene.Scene;
6 import javafx.stage.Stage;
7
8 import java.io.IOException;
9
10 public class HelloApplication extends
    Application {
11     @Override
12     public void start(Stage stage) throws
        IOException {
13         FXMLLoader fxmlLoader = new
            FXMLLoader(HelloApplication.class.getResource
                ("hello-view.fxml"));
14         Scene scene = new Scene(fxmlLoader.
            load(), 1200, 800);
15         stage.setTitle("Infrastructure Risk"
            );
16         stage.setScene(scene);
17         stage.show();
18     }
19
20     public static void main(String[] args) {
21         launch();
22     }
23 }
```