MANUAL TÉCNICO

JUEGO COMO PROYECTO DE IPC1
APLICACIÓN DE ESCRITORIO EN JAVA

HERRAMIENTAS UTILIZADAS

● LENGUAJE DE PROGRAMACIÓN JAVA - VERSIÓN 11

Java es un lenguaje de programación y una plataforma informática comercializada por primera vez en 1995 por Sun Microsystems.

El lenguaje Java proporciona:

- El paradigma de la programación orientada a objetos.
- Ejecución de un mismo programa en múltiples sistemas operativos y plataformas.
- Es posible utilizarlo para múltiples propósitos, desde aplicaciones de escritorio hasta en servidores web.
- Tiene una curva de aprendizaje media pero también toma lo mejor de otros lenguajes orientados a objetos, como C++.

● IDE: APACHE NETBEANS 14

NetBeans es un entorno de desarrollo integrado, de código abierto y sigue la filosofía del software libre, y está hecho principalmente para el uso del lenguaje de programación Java. También existen muchísimos módulos extras para extender su funcionamiento. NetBeans es un producto libre y gratuito sin restricciones de uso y es un proyecto de código abierto de gran éxito con una gran base de usuarios y una comunidad en constante crecimiento.

● GITHUB

Es un sistema de control de versiones de código y gestión de proyectos, a su vez también funciona como una plataforma de estilo red social diseñada para desarrolladores para poder compartir código entre más personas y colaborar en el mismo.

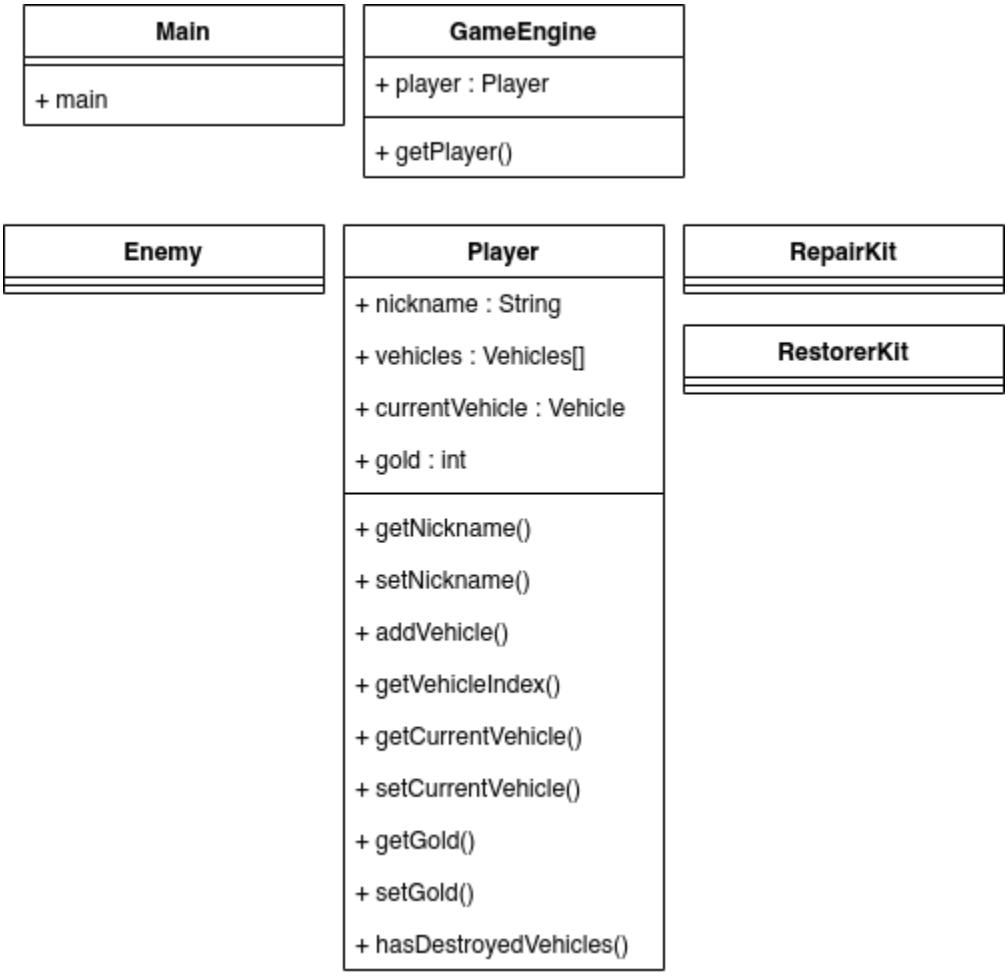
- ## DIAGRAMS.NET - DRAW.IO

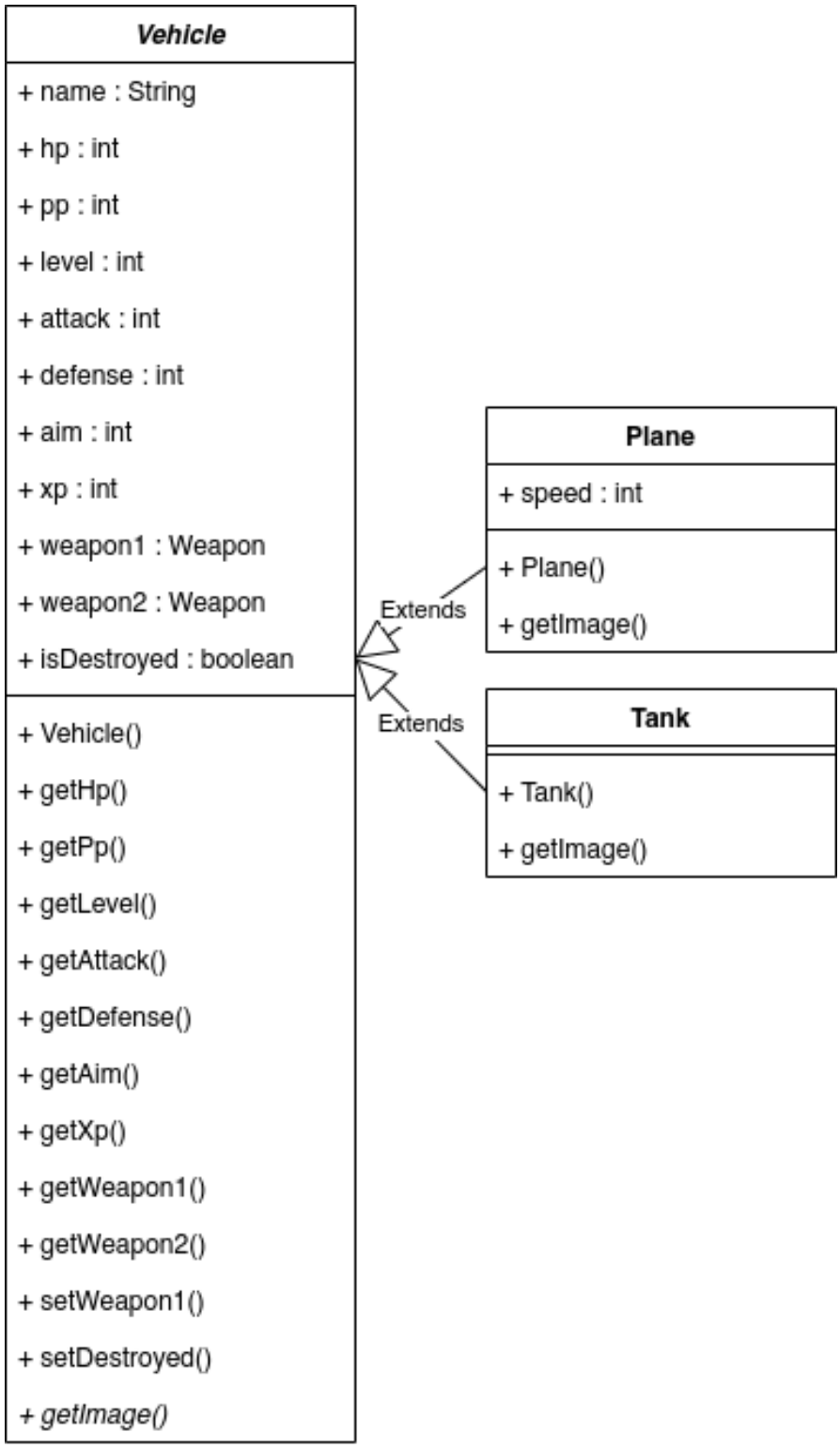
Draw.io es una herramienta de creación y edición de diagramas libre que permite la integración con diversas plataformas, principalmente Google Drive, el cual permite la compartición y colaboración de varias personas dentro del mismo proyecto. El software consiste en una aplicación web realizada mayoritariamente en JavaScript y licenciada con Apache v2, lo que la hace funcionar en una amplia gama de navegadores y permite la creación de diagramas, contando con modelos para diversos tipos como pueden ser diagramas UML, esquemas de red, flujogramas, etc. También permite crear colecciones de diagramas e imágenes personalizados para utilizar en los diagramas.

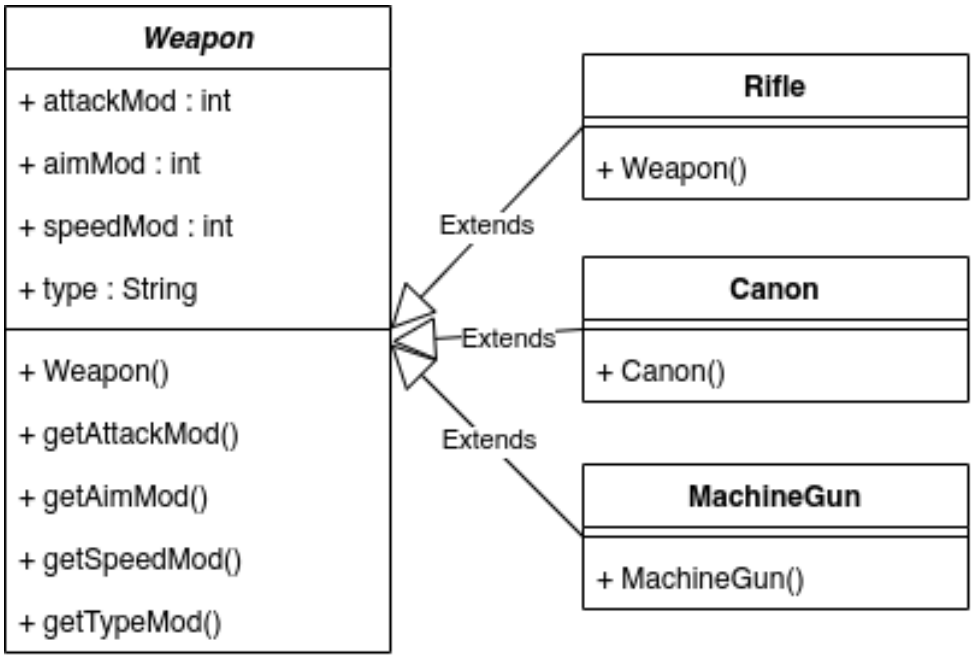
- ## FEDORA LINUX 36 - SISTEMA OPERATIVO

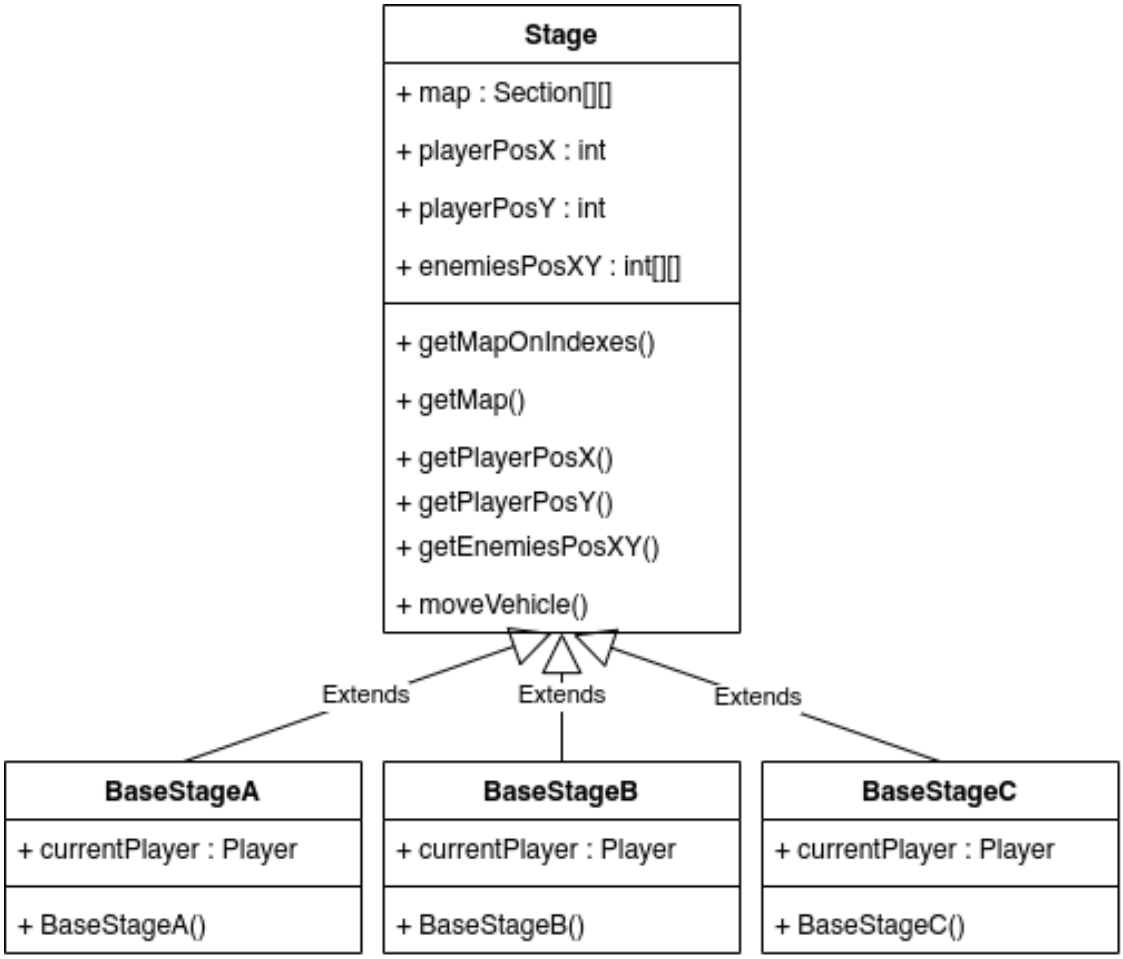
Fedora Linux es una distribución GNU/Linux para propósitos generales basada en RPM, y es mantenida por una comunidad internacional de ingenieros, diseñadores gráficos y usuarios. Se caracteriza por su estabilidad, innovación y contar con el apoyo y patrocinio de RedHat (subsidiaria de IBM). El proyecto no busca sólo incluir software libre y de código abierto, sino ser el líder en ese ámbito tecnológico.

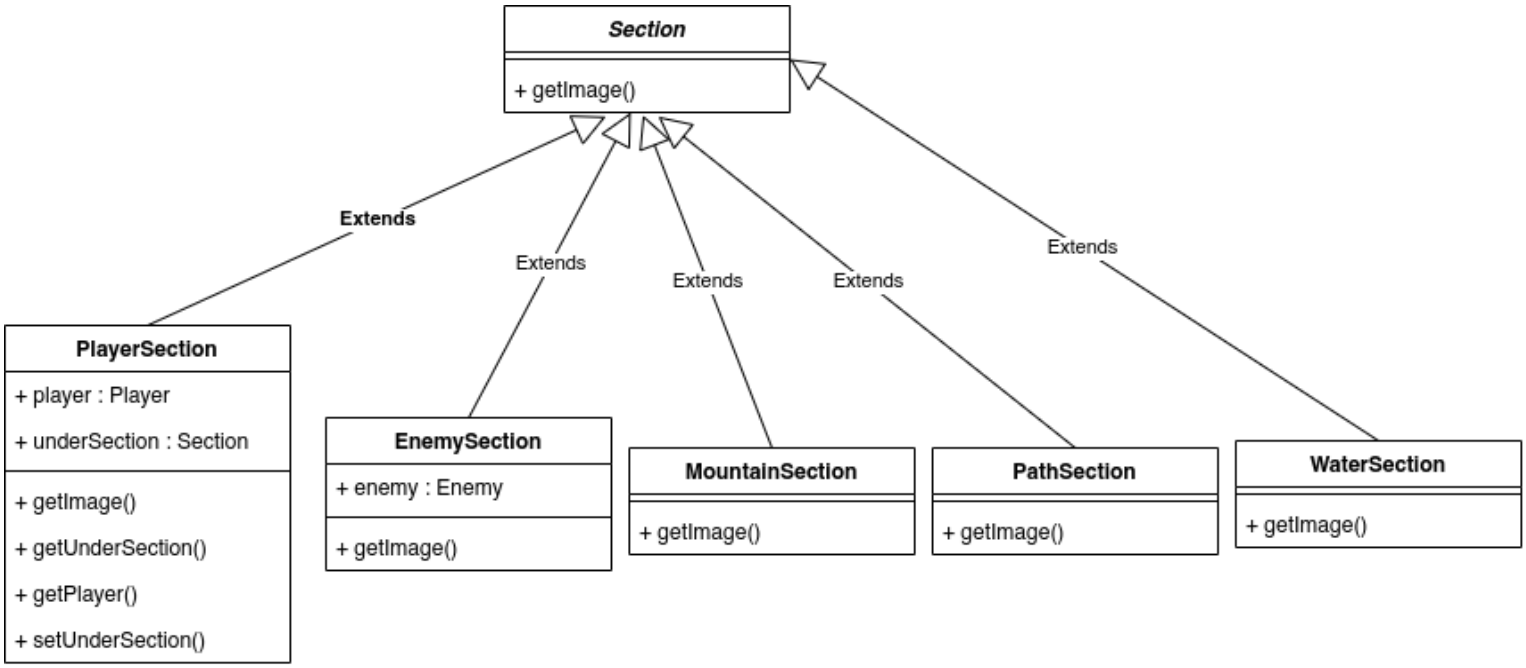
DIAGRAMA DE CLASES

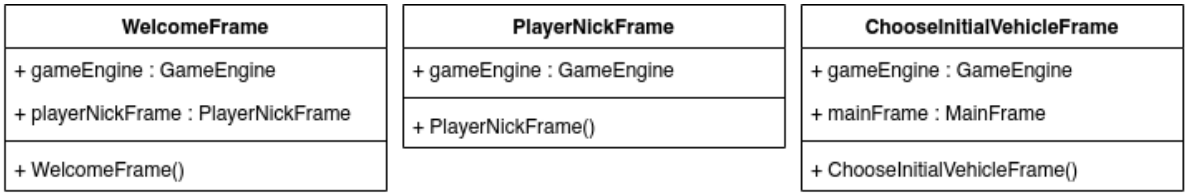


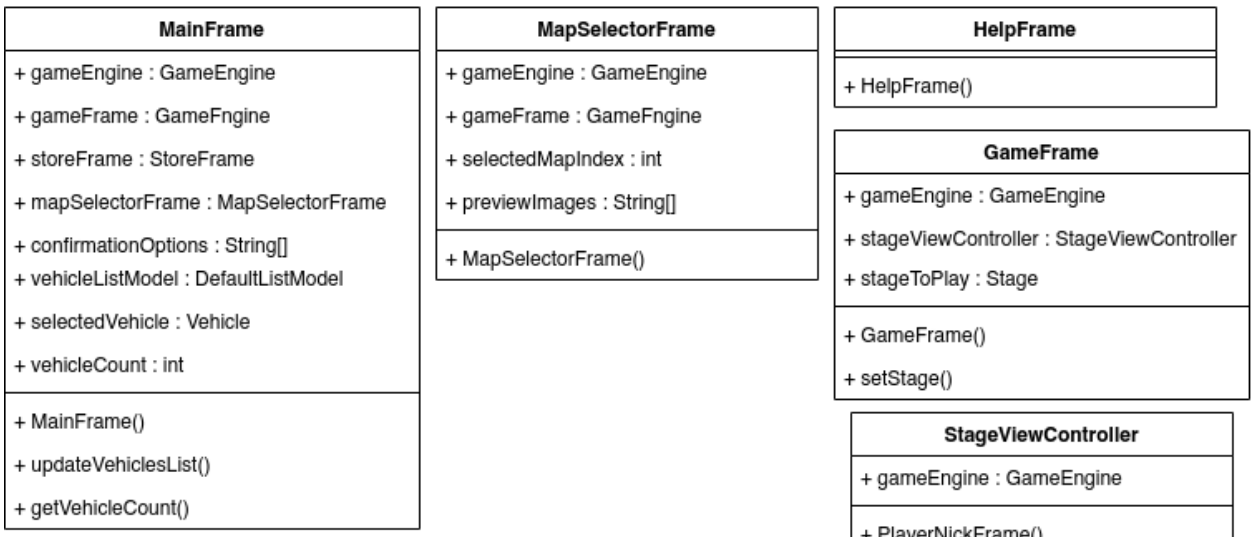

Vehicle
+ name : String
+ hp : int
+ pp : int
+ level : int
+ attack : int
+ defense : int
+ aim : int
+ xp : int
+ weapon1 : Weapon
+ weapon2 : Weapon
+ isDestroyed : boolean
+ Vehicle()
+ getHp()
+ getPp()
+ getLevel()
+ getAttack()
+ getDefense()
+ getAim()
+ getXp()
+ getWeapon1()
+ getWeapon2()
+ setWeapon1()
+ setDestroyed()
+ getImage()
Extends
Plane
+ speed : int
+ Plane()
+ getImage()
Extends
Tank
+ Tank()
+ getImage()

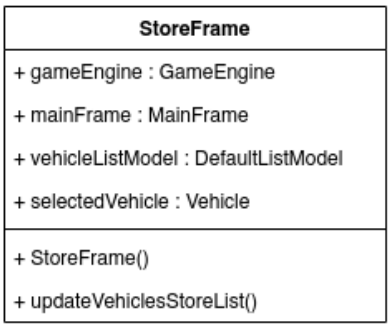

Weapon
+ attackMod : int
+ aimMod : int
+ speedMod : int
+ type : String
+ Weapon()
+ getAttackMod()
+ getAimMod()
+ getSpeedMod()
+ getTypeMod()
Extends
Extends
Extends
Rifle
+ Weapon()
Canon
+ Canon()
MachineGun
+ MachineGun()


Stage
+ map : Section[][]
+ playerPosX : int
+ playerPosY : int
+ enemiesPosXY : int[][]
+ getMapOnIndexes()
+ getMap()
+ getPlayerPosX()
+ getPlayerPosY()
+ getEnemiesPosXY()
+ moveVehicle()
Extends
Extends
Extends
BaseStageA
+ currentPlayer : Player
+ BaseStageA()
BaseStageB
+ currentPlayer : Player
+ BaseStageB()
BaseStageC
+ currentPlayer : Player
+ BaseStageC()


Section
+ getImage()
Extends
Extends
Extends
Extends
Extends
PlayerSection
+ player : Player
+ underSection : Section
+ getImage()
+ getUnderSection()
+ getPlayer()
+ setUnderSection()
EnemySection
+ enemy : Enemy
+ getImage()
MountainSection
+ getImage()
PathSection
+ getImage()
WaterSection
+ getImage()


WelcomeFrame
+ gameEngine : GameEngine
+ playerNickFrame : PlayerNickFrame
+ WelcomeFrame()
PlayerNickFrame
+ gameEngine : GameEngine
+ PlayerNickFrame()
ChooseInitialVehicleFrame
+ gameEngine : GameEngine
+ mainFrame : MainFrame
+ ChooseInitialVehicleFrame()


MainFrame
+ gameEngine : GameEngine
+ gameFrame : GameFngine
+ storeFrame : StoreFrame
+ mapSelectorFrame : MapSelectorFrame
+ confirmationOptions : String[]
+ vehicleListModel : DefaultListModel
+ selectedVehicle : Vehicle
+ vehicleCount : int
+ MainFrame()
+ updateVehiclesList()
+ getVehicleCount()
MapSelectorFrame
+ gameEngine : GameEngine
+ gameFrame : GameFngine
+ selectedMapIndex : int
+ previewImages : String[]
+ MapSelectorFrame()
HelpFrame
+ HelpFrame()
GameFrame
+ gameEngine : GameEngine
+ stageViewController : StageViewController
+ stageToPlay : Stage
+ GameFrame()
+ setStage()
StageViewController
+ gameEngine : GameEngine
+ PlayerNickFrame()


StoreFrame
+ gameEngine : GameEngine
+ mainFrame : MainFrame
+ vehicleListModel : DefaultListModel
+ selectedVehicle : Vehicle
+ StoreFrame()
+ updateVehiclesStoreList()

PAQUETE MAIN:

Main.java

```
package com.robertob.proyecto1.ipc1;
import com.robertob.proyecto1.ipc1.engine.*;
import com.robertob.proyecto1.ipc1.frames.WelcomeFrame;

public class Main {

    public static void main(String[] args) {
        System.out.println("Iniciando juego");
        new WelcomeFrame().setVisible(true);

    }
}
```

PAQUETE ENGINE:

GameEngine.java

```
package com.robertob.proyecto1.ipc1.engine;

import com.robertob.proyecto1.ipc1.frames.*;
import com.robertob.proyecto1.ipc1.engine.characters.*;

public class GameEngine {

    private Player player = new Player();

    public Player getPlayer() {
        return player;
    }

}
```

PAQUETE ENGINE.CHARACTERS:

Player.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.characters;
import com.robertob.proyecto1.ipc1.engine.vehicles.*;

/**
 *
 * @author robertob
 */
public class Player {

    private String nickname;
    private Vehicle[] vehicles = new Vehicle[3];
    private Vehicle currentVehicle;
    private int gold;

    public Player() {
        this.gold = 1000;

    }

    public String getNickname() {
        return nickname;
    }

    public void setNickname(String nickname) {
        this.nickname = nickname;
    }

    public void addVehicle(Vehicle newVehicle){
        for (int i = 0; i < vehicles.length; i++) {
            if (vehicles[i] == null) {
                vehicles[i] = newVehicle;
                break;
            }

        }
    }

    public Vehicle getVehicleIndex(int index){
        return vehicles[index];
    }

    public Vehicle getCurrentVehicle() {
        return currentVehicle;
    }
```

```
    public void setCurrentVehicle(Vehicle currentVehicle) {
        this.currentVehicle = currentVehicle;
    }

    public int getGold() {
        return gold;
    }

    public void setGold(int gold) {
        this.gold = gold;
    }

    public boolean hasDestroyedVehicles(){
        for (int i = 0; i < vehicles.length; i++) {
            if (vehicles[i].isDestroyed()){
                return true;
            }
        }
        return false;
    }

    // TESTING
    public void showAllVehicles(){

        for (int i=0; i < vehicles.length; i++) {
            if (vehicles[i] != null){
                System.out.println("(TEST) "+i+vehicles[i].getClass().getSimpleName()+vehicles[i].getName());
                break;
            }

        }
    }


}
```

Enemy.java

```
/*
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 */
package com.robertob.proyecto1.ipc1.engine.characters;

/**
 *
 * @author robertob
 */
public class Enemy {
}
```

PAQUETE ENGINE.REPAIRS:

RestorerKit.java

```
/*
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 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.repairs;

/**
 *
 * @author robertob
 */
public class RestorerKit {

}
```

RepairKit.java

```
/*
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 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.repairs;

/**
 *
 * @author robertob
 */
public class RepairKit {
}
```

PAQUETE ENGINE.STAGES:

Stage.java

```
/*
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 */
package com.robertob.proyecto1.ipc1.engine.stages;
import com.robertob.proyecto1.ipc1.engine.vehicles.*;
import com.robertob.proyecto1.ipc1.engine.characters.Player;
import javax.swing.JOptionPane;


public class Stage {

    Section[][] map;
    int playerPosX;
    int playerPosY;
    int[][] enemiesPosXY;

//    public Stage(Player currentPlayer) {
//        this.currentPlayer = currentPlayer;
//    }

    public Section getMapOnIndexes(int indexA, int indexB) {
        return map[indexA][indexB];
    }

    public Section[][] getMap(){
        return map;
    }

    public int getPlayerPosX() {
        return playerPosX;
    }

    public int getPlayerPosY() {
        return playerPosY;
    }

    public int[][] getEnemiesPosXY() {
        return enemiesPosXY;
    }

    public void moveVehicle(String direction, int spaces){
        // guardando posicion actual del jugador y el tipo de casilla sobre la que esta, la casilla sobre la que esta, y a la que se quiere
mover
        PlayerSection oldPlayerSection = (PlayerSection) getMapOnIndexes(playerPosX, playerPosY);
        Section oldUnderSection = oldPlayerSection.getUnderSection();
        Section nextSection;
```

```
        System.out.println(direction);

        switch (direction) {
            case "Arriba":

                try {
                    // guardamos la seccion a la que se quiere mover para comprobarla
                    nextSection = map[playerPosX-spaces][playerPosY];
                    // comprobamos si el vehiculo es un avion
                    if (oldPlayerSection.getPlayer().getCurrentVehicle() instanceof Plane){
                        // comprobamos si la seccion a moverse es montaña
                        if (nextSection instanceof MountainSection) {
                            System.out.println("cant move here: mountain");
                            JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                        } else {
                            oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                            map[playerPosX-spaces][playerPosY] = oldPlayerSection; //movemos al jugador a la nueva posicion
                            map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                            this.playerPosX -= spaces;
                        }
                    } else { // en caso sea un tanque:
                        if (nextSection instanceof MountainSection || nextSection instanceof WaterSection) {
                            System.out.println("cant move here: mountain or water");
                            JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                        } else {
                            oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                            map[playerPosX-spaces][playerPosY] = oldPlayerSection; //movemos al jugador a la nueva posicion
                            map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                            this.playerPosX -= spaces;
                        }
                    }

                } catch (Exception e) {
                    e.printStackTrace();
                    System.out.println("cant move outside map");
                    JOptionPane.showMessageDialog(null, "No puedes fuera del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                }
                break;
            case "Abajo":
                try {
                // guardamos la seccion a la que se quiere mover para comprobarla
                nextSection = map[playerPosX+spaces][playerPosY];
                // comprobamos si el vehiculo es un avion
                    if (oldPlayerSection.getPlayer().getCurrentVehicle() instanceof Plane){
                        // comprobamos si la seccion a moverse es montaña
                        if (nextSection instanceof MountainSection) {
                            System.out.println("cant move here: mountain");
                            JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
```

```
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX+spaces][playerPosY] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosX += spaces;
                }
            } else { // en caso sea un tanque:
                if (nextSection instanceof MountainSection || nextSection instanceof WaterSection) {
                    System.out.println("cant move here: mountain or water");
                    JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX+spaces][playerPosY] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosX += spaces;
                }
            }

        } catch (Exception e) {
            System.out.println("cant move outside map");
            JOptionPane.showMessageDialog(null, "No puedes moverte fuera del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
        }
        break;
      case "Derecha":
        try {
            // guardamos la seccion a la que se quiere mover para comprobarla
            nextSection = map[playerPosX][playerPosY+spaces];
            // comprobamos si el vehiculo es un avion
            if (oldPlayerSection.getPlayer().getCurrentVehicle() instanceof Plane){
                // comprobamos si la seccion a moverse es montaña
                if (nextSection instanceof MountainSection) {
                    System.out.println("cant move here: mountain");
                    JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX][playerPosY+spaces] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosY += spaces;
                }
            } else { // en caso sea un tanque:
                if (nextSection instanceof MountainSection || nextSection instanceof WaterSection) {
                    System.out.println("cant move here: mountain or water");
                    JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX][playerPosY+spaces] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosY += spaces;
```

```
                }
            }

        } catch (Exception e) {
            System.out.println("cant move outside map");
            JOptionPane.showMessageDialog(null, "No puedes moverte fuera del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
        }
        break;
      case "Izquierda":
        try {
            // guardamos la seccion a la que se quiere mover para comprobarla
            nextSection = map[playerPosX][playerPosY-spaces];
            // comprobamos si el vehiculo es un avion
            if (oldPlayerSection.getPlayer().getCurrentVehicle() instanceof Plane){
                // comprobamos si la seccion a moverse es montaña
                if (nextSection instanceof MountainSection) {
                    System.out.println("cant move here: mountain");
                    JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX][playerPosY-spaces] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosY -= spaces;
                }
            } else { // en caso sea un tanque:
                if (nextSection instanceof MountainSection || nextSection instanceof WaterSection) {
                    System.out.println("cant move here: mountain or water");
                    JOptionPane.showMessageDialog(null, "No puedes moverte a esta sección del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
                } else {
                    oldPlayerSection.setUnderSection(nextSection); // asignamos la casilla sobre la que se pondra el jugador a el
                    map[playerPosX][playerPosY-spaces] = oldPlayerSection; //movemos al jugador a la nueva posicion
                    map[playerPosX][playerPosY] = oldUnderSection; // en la casilla vieja la regresamos al tipo que era
                    this.playerPosY -= spaces;
                }
            }

        } catch (Exception e) {
            System.out.println("cant move outside map");
            JOptionPane.showMessageDialog(null, "No puedes moverte fuera del mapa!","Movimiento
prohibido",JOptionPane.ERROR_MESSAGE);
        }
        break;
      default:
            throw new AssertionError();
    }

  }

  }
```

BaseStageA.java

```
/*
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 */
package com.robertob.proyecto1.ipc1.engine.stages;
import com.robertob.proyecto1.ipc1.engine.characters.Player;

/**
 *
 * @author robertob
 */
public class BaseStageA extends Stage{

    Player currentPlayer;

    public BaseStageA(Player currentPlayer) {
        this.currentPlayer = currentPlayer;

        map = new Section[][]{
            {new PathSection(), new EnemySection(), new EnemySection(), new PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new EnemySection(), new WaterSection()},
            {new MountainSection(), new PathSection(), new MountainSection(), new MountainSection(), new PathSection(), new
WaterSection()},
            {new MountainSection(), new PathSection(), new MountainSection(), new MountainSection(), new PathSection(), new
WaterSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PlayerSection(currentPlayer, new PathSection()), new PathSection(), new
PathSection(), new PathSection(),},
        };
        playerPosX = 5;
        playerPosY = 2;
        enemiesPosXY = new int[][]{
            {0,1},
            {0,2},
            {1,4}
        };
    }



}
```

BaseStageB.java

```
/*
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 */
package com.robertob.proyecto1.ipc1.engine.stages;

import com.robertob.proyecto1.ipc1.engine.characters.Player;

/**
 *
 * @author robertob
 */
public class BaseStageB extends Stage {

    Player currentPlayer;

    public BaseStageB(Player currentPlayer) {
        this.currentPlayer = currentPlayer;
        map = new Section[][]{
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new WaterSection(), new WaterSection(), new EnemySection(), new EnemySection(), new
EnemySection(), new PathSection(), new WaterSection(), new WaterSection(), new PathSection()},
            {new PathSection(), new WaterSection(), new WaterSection(), new PathSection(), new PathSection(), new PathSection(),new
PathSection(), new WaterSection(), new WaterSection(), new PathSection()},
            {new EnemySection(), new MountainSection(), new MountainSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new EnemySection()},
            {new PathSection(), new MountainSection(), new MountainSection(), new PathSection(), new PathSection(), new
WaterSection(), new MountainSection(), new MountainSection(), new MountainSection(), new PathSection()},
            {new PathSection(), new MountainSection(), new MountainSection(), new PathSection(), new PathSection(), new
WaterSection(), new MountainSection(), new MountainSection(), new MountainSection(), new PathSection()},
            {new PathSection(), new MountainSection(), new MountainSection(), new PathSection(), new PathSection(), new
WaterSection(), new MountainSection(), new MountainSection(), new MountainSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
MountainSection(), new MountainSection(), new MountainSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PlayerSection(currentPlayer, new
PathSection()), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        };
        playerPosX = 9;
        playerPosY = 4;
        enemiesPosXY = new int[][]{
            {4,1},
            {2,4},
            {2,5},
            {2,6},
            {4,10},
        };
    }
```

}

BaseStageC.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;

import com.robertob.proyecto1.ipc1.engine.characters.Player;

/**
 *
 * @author robertob
 */
public class BaseStageC extends Stage {

    Player currentPlayer;

    public BaseStageC(Player currentPlayer) {
        this.currentPlayer = currentPlayer;
        map = new Section[][]{
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new EnemySection(), new EnemySection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
EnemySection(), new EnemySection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection()},
            {new WaterSection(), new MountainSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection(), new PathSection(), new PathSection(), new EnemySection(), new EnemySection(), new
PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection()},
            {new PlayerSection(currentPlayer, new PathSection()), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection(), new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection()},
            {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new
PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(),
new PathSection(), new PathSection()},
```

```
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},
        {new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection(), new PathSection()},


    };
    playerPosX = 10;
    playerPosY = 5;
    enemiesPosXY = new int[][]{
      {4,1},
      {2,4},
      {2,5},
      {2,6},
      {4,10},
    };
  }



}
```

Section.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;

/**
 *
 * @author robertob
 */
public abstract class Section {

    public abstract String getImage(int size);

}
```

EnemySection.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;
import com.robertob.proyecto1.ipc1.engine.characters.*;

/**
 *
 * @author robertob
 */
public class EnemySection extends Section{

    private Enemy enemy;

    public String getImage(int size) {

        switch (size) {
            case 6:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/enemySection6.png";
            case 10:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/enemySection10.png";
            case 15:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/enemySection15.png";
            default:
                return null;
        }

    }

}
```

PlayerSection.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;
import com.robertob.proyecto1.ipc1.engine.characters.*;

/**
 *
 * @author robertob
 */
public class PlayerSection extends Section{

    private Player player;
    private Section underSection;

    public PlayerSection(Player player, Section underSection) {
        this.player = player;
        this.underSection = underSection;
    }

    public String getImage(int size) {

        switch (size) {
            case 6:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/playerSection6.png";
            case 10:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/playerSection10.png";
            case 15:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/playerSection15.png";
            default:
                return null;
        }

    }

    public Section getUnderSection(){
        return underSection;
    }

    public Player getPlayer() {
        return player;
    }

    public void setUnderSection(Section underSection) {
        this.underSection = underSection;
    }

    }
```

PathSection.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;

/**
 *
 * @author robertob
 */
public class PathSection extends Section{

    public String getImage(int size) {

        switch (size) {
            case 6:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/pathSection6.png";
            case 10:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/pathSection10.png";
            case 15:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/pathSection15.png";
            default:
                return null;
        }

    }
}
```

MountainSection.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;

/**
 *
 * @author robertob
 */
public class MountainSection extends Section{

    int hp = 3;

    public String getImage(int size) {

        switch (size) {
            case 6:
                return "src/main/resources/com/robertob/proyecto1-ipc1/images/mountainSection6.png";
            case 10:
```

```
            return "src/main/resources/com/robertob/proyecto1-ipc1/images/mountainSection10.png";
        case 15:
            return "src/main/resources/com/robertob/proyecto1-ipc1/images/mountainSection15.png";
        default:
            return null;
    }

  }

}
```

WaterSection.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.stages;

/**
 *
 * @author robertob
 */
public class WaterSection extends Section{

  public String getImage(int size) {

    switch (size) {
        case 6:
            return "src/main/resources/com/robertob/proyecto1-ipc1/images/waterSection6.png";
        case 10:
            return "src/main/resources/com/robertob/proyecto1-ipc1/images/waterSection10.png";
        case 15:
            return "src/main/resources/com/robertob/proyecto1-ipc1/images/waterSection15.png";
        default:
            return null;
    }

  }

}
```

PAQUETE ENGINE.VEHICLES:

Vehicle.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.vehicles;

import com.robertob.proyecto1.ipc1.engine.weapons.Weapon;

/**
 *
 * @author robertob
 */
public abstract class Vehicle {

    private String name;
    private int hp;
    private int pp;
    private int level;
    private int attack;
    private int defense;
    private int aim;
    private int xp;
    private Weapon weapon1;
    private Weapon weapon2;
    private boolean isDestroyed;

    public Vehicle(String name, int attack, int defense, int aim, Weapon weapon1, Weapon weapon2) {
        this.name = name;
        this.hp = 50;
        this.pp = 5;
        this.level = 1;
        this.xp = 0;
        this.attack = attack;
        this.defense = defense;
        this.aim = aim;
        this.weapon1 = weapon1;
        this.weapon2 = weapon2;
        this.isDestroyed = false;
    }

    public String getName() {
        return name;
    }

    public int getHp() {
        return hp;
    }
```

```
    public int getPp() {
        return pp;
    }

    public int getLevel() {
        return level;
    }

    public int getAttack() {
        return attack;
    }

    public int getDefense() {
        return defense;
    }

    public int getAim() {
        return aim;
    }

    public int getXp() {
        return xp;
    }

    public Weapon getWeapon1() {
        return weapon1;
    }

    public Weapon getWeapon2() {
        return weapon2;
    }

    public void setWeapon1(Weapon weapon1) {
        this.weapon1 = weapon1;
    }

    public void setWeapon2(Weapon weapon2) {
        this.weapon2 = weapon2;
    }

    public boolean isDestroyed(){
        return isDestroyed;
    }

    public void setDestroyed(){
        isDestroyed = true;
    }

    public abstract String getImage();

}
```

Tank.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.vehicles;

import com.robertob.proyecto1.ipc1.engine.weapons.Rifle;



/**
 *
 * @author robertob
 */
public class Tank extends Vehicle{

    public Tank(String name) {
        super(name, 10, 6, 50, new Rifle(), null);
    }

    public String getImage(){
        return "src/main/resources/com/robertob/proyecto1-ipc1/images/tankSmallBlack.png";
    }
}
```

Plane.java

```
package com.robertob.proyecto1.ipc1.engine.vehicles;

import com.robertob.proyecto1.ipc1.engine.weapons.Rifle;

public class Plane extends Vehicle{

    int speed;

    public Plane(String name) {
        super(name, 7, 3, 70, new Rifle(), null);
        this.speed = 1;
    }

    public String getImage(){
        return "src/main/resources/com/robertob/proyecto1-ipc1/images/planeSmallBlack.png";
    }


}
```

PAQUETE ENGINE.WEAPONS:

Weapon.Java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.weapons;

/**
 *
 * @author robertob
 */
public abstract class Weapon {

    private int attackMod;
    private int aimMod;
    private int speedMod;
    private String type;

    public Weapon(int attackMod, int aimMod, int speedMod, String type) {
        this.attackMod = attackMod;
        this.aimMod = aimMod;
        this.speedMod = speedMod;
        this.type = type;
    }

    public int getAttackMod() {
        return attackMod;
    }

    public int getAimMod() {
        return aimMod;
    }

    public int getSpeedMod() {
        return speedMod;
    }

    public String getType() {
        return type;
    }




}
```

Rifle.Java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.weapons;

/**
 *
 * @author robertob
 */
public class Rifle extends Weapon{

    public Rifle() {
        super(5, 5, 10, "Rifle");
    }

}
```

Canon.Java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.weapons;

/**
 *
 * @author robertob
 */
public class Canon extends Weapon{

    public Canon() {
        super(20, 0, -15, "Cañon");
    }


}
```

MachineGun.Java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.engine.weapons;

/**
 *
 * @author robertob
 */
public class MachineGun extends Weapon{

    public MachineGun() {
        super(3, -10, 15, "Ametralladora");
    }



}
```

PAQUETE FRAMES:

WelcomeFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.*;

/**
 *
 * @author robertob
 */
public class WelcomeFrame extends javax.swing.JFrame {

    GameEngine gameEngine = new GameEngine();
    PlayerNickFrame playerNickFrame = new PlayerNickFrame(gameEngine);

    public WelcomeFrame() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
```

```
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        welcomeTitle = new javax.swing.JLabel();
        welcomeTitle1 = new javax.swing.JLabel();
        welcomeTitle2 = new javax.swing.JLabel();
        startWelcomeBtn = new javax.swing.JButton();
        exitWelcomeBtn = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.DO_NOTHING_ON_CLOSE);
        setTitle("Bienvenida");
        setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
        setResizable(false);

        welcomeTitle.setFont(new java.awt.Font("Cantarell", 1, 24)); // NOI18N
        welcomeTitle.setText("¡Bienvenid@ al juego!");

        welcomeTitle1.setFont(new java.awt.Font("Cantarell", 0, 24)); // NOI18N
        welcomeTitle1.setText("o presiona \"Salir\" para salir del juego");

        welcomeTitle2.setFont(new java.awt.Font("Cantarell", 0, 24)); // NOI18N
        welcomeTitle2.setText("Presiona el botón \"Iniciar\" para empezar,");

        startWelcomeBtn.setBackground(new java.awt.Color(0, 255, 204));
        startWelcomeBtn.setFont(new java.awt.Font("Cantarell", 1, 18)); // NOI18N
        startWelcomeBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/playIcon.png"))); // NOI18N
        startWelcomeBtn.setText(" INICIAR");
        startWelcomeBtn.setBorderPainted(false);
        startWelcomeBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        startWelcomeBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                startWelcomeBtnActionPerformed(evt);
            }
        });

        exitWelcomeBtn.setBackground(new java.awt.Color(255, 204, 204));
        exitWelcomeBtn.setFont(new java.awt.Font("Cantarell", 1, 18)); // NOI18N
        exitWelcomeBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/exitIconSymBlack.png"))); // NOI18N
        exitWelcomeBtn.setText(" SALIR");
        exitWelcomeBtn.setBorderPainted(false);
        exitWelcomeBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        exitWelcomeBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                exitWelcomeBtnActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap(46, Short.MAX_VALUE)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                            .addComponent(welcomeTitle)
                            .addGap(135, 135, 135))
                        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                            .addComponent(welcomeTitle2)
                            .addGap(34, 34, 34))
                        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                            .addComponent(welcomeTitle1)
                            .addGap(54, 54, 54)))
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(exitWelcomeBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 145,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(startWelcomeBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 145,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(45, 45, 45))))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(38, 38, 38)
                .addComponent(welcomeTitle)
                .addGap(38, 38, 38)
                .addComponent(welcomeTitle2)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(welcomeTitle1)
                .addGap(49, 49, 49)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(exitWelcomeBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(startWelcomeBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addContainerGap(43, Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>

    private void startWelcomeBtnActionPerformed(java.awt.event.ActionEvent evt) {
        this.dispose();
        playerNickFrame.setVisible(true);

    }
```

```
    private void exitWelcomeBtnActionPerformed(java.awt.event.ActionEvent evt) {
        System.out.println("Saliendo del juego");
        System.exit(0);
    }


    // Variables declaration - do not modify
    private javax.swing.JButton exitWelcomeBtn;
    private javax.swing.JButton startWelcomeBtn;
    private javax.swing.JLabel welcomeTitle;
    private javax.swing.JLabel welcomeTitle1;
    private javax.swing.JLabel welcomeTitle2;
    // End of variables declaration
}
```

PlayerNickFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.GameEngine;

/**
 *
 * @author robertob
 */
public class PlayerNickFrame extends javax.swing.JFrame {

    GameEngine gameEngine;

    public PlayerNickFrame(GameEngine gameEngine) {
        this.gameEngine = gameEngine;
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        createCharacterTitle1 = new javax.swing.JLabel();
        createCharacterTitle2 = new javax.swing.JLabel();
        nicknameTextField = new javax.swing.JTextField();
        continueNicknameBtn = new javax.swing.JButton();
```

```
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setTitle("Creando personaje");
        setResizable(false);

        createCharacterTitle1.setFont(new java.awt.Font("Noto Sans", 1, 24)); // NOI18N
        createCharacterTitle1.setText("¡Creemos tu personaje!");

        createCharacterTitle2.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        createCharacterTitle2.setText("Dale un nickname a tu personaje:");

        nicknameTextField.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyTyped(java.awt.event.KeyEvent evt) {
                nicknameTextFieldKeyTyped(evt);
            }
        });

        continueNicknameBtn.setBackground(new java.awt.Color(0, 255, 204));
        continueNicknameBtn.setFont(new java.awt.Font("Cantarell", 1, 18)); // NOI18N
        continueNicknameBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/playIcon.png"))); // NOI18N
        continueNicknameBtn.setText(" CONTINUAR");
        continueNicknameBtn.setBorderPainted(false);
        continueNicknameBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        continueNicknameBtn.setEnabled(false);
        continueNicknameBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                continueNicknameBtnActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(109, 109, 109)
                        .addComponent(nicknameTextField, javax.swing.GroupLayout.PREFERRED_SIZE, 357,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(138, 138, 138)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(createCharacterTitle2)
                            .addComponent(createCharacterTitle1)))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(188, 188, 188)
                        .addComponent(continueNicknameBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 190,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addContainerGap(111, Short.MAX_VALUE))
        );
```

```
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(36, 36, 36)
                .addComponent(createCharacterTitle1)
                .addGap(18, 18, 18)
                .addComponent(createCharacterTitle2)
                .addGap(31, 31, 31)
                .addComponent(nicknameTextField, javax.swing.GroupLayout.PREFERRED_SIZE, 39,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(44, 44, 44)
                .addComponent(continueNicknameBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(45, Short.MAX_VALUE))
        );

        pack();
    }// </editor-fold>

    private void continueNicknameBtnActionPerformed(java.awt.event.ActionEvent evt) {
        gameEngine.getPlayer().setNickname(nicknameTextField.getText());
        new ChooseInitialVehicleFrame(gameEngine).setVisible(true);
        this.dispose();
        System.out.println("(TEST) PLAYERNICKNAME= "+gameEngine.getPlayer().getNickname());

    }

    private void nicknameTextFieldKeyTyped(java.awt.event.KeyEvent evt) {
        if (nicknameTextField.getText().equals("")){
            continueNicknameBtn.setEnabled(false);
        } else {
            continueNicknameBtn.setEnabled(true);
        }
    }


    // Variables declaration - do not modify
    private javax.swing.JButton continueNicknameBtn;
    private javax.swing.JLabel createCharacterTitle1;
    private javax.swing.JLabel createCharacterTitle2;
    private javax.swing.JTextField nicknameTextField;
    // End of variables declaration
}
```

ChooseInitialVehicleFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.GameEngine;
import com.robertob.proyecto1.ipc1.engine.vehicles.*;
import javax.swing.JOptionPane;

/**
 *
 * @author robertob
 */
public class ChooseInitialVehicleFrame extends javax.swing.JFrame {

    GameEngine gameEngine;
    MainFrame mainFrame;

    public ChooseInitialVehicleFrame(GameEngine gameEngine) {
        this.gameEngine = gameEngine;
        this.mainFrame = new MainFrame(gameEngine);
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        selectVehicleTitle1 = new javax.swing.JLabel();
        selectVehicleTitle2 = new javax.swing.JLabel();
        continueVehicleBtn = new javax.swing.JButton();
        TankVehicleToggleBtn = new javax.swing.JToggleButton();
        AirVehicleToggleBtn = new javax.swing.JToggleButton();
        tankTitle = new javax.swing.JLabel();
        planeTitle = new javax.swing.JLabel();
        youSelectedTitle = new javax.swing.JLabel();
        selectedVehicleLbl = new javax.swing.JLabel();
        vehicleNameTextField = new javax.swing.JTextField();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setResizable(false);

        selectVehicleTitle1.setFont(new java.awt.Font("Noto Sans", 1, 24)); // NOI18N
        selectVehicleTitle1.setText("¡Prepárate para la batalla!");
```

```
        selectVehicleTitle2.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        selectVehicleTitle2.setText("Elige un vehiculo y dale un nombre para comenzar:");

        continueVehicleBtn.setBackground(new java.awt.Color(0, 255, 204));
        continueVehicleBtn.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        continueVehicleBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/playIcon.png"))); // NOI18N
        continueVehicleBtn.setText(" CONTINUAR");
        continueVehicleBtn.setBorderPainted(false);
        continueVehicleBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        continueVehicleBtn.setEnabled(false);
        continueVehicleBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                continueVehicleBtnActionPerformed(evt);
            }
        });

        TankVehicleToggleBtn.setBackground(new java.awt.Color(238, 238, 238));
        TankVehicleToggleBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/tankBlack.png"))); // NOI18N
        TankVehicleToggleBtn.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 153, 102), 4, true));
        TankVehicleToggleBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        TankVehicleToggleBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                TankVehicleToggleBtnActionPerformed(evt);
            }
        });

        AirVehicleToggleBtn.setBackground(new java.awt.Color(238, 238, 238));
        AirVehicleToggleBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/planeBlack.png"))); // NOI18N
        AirVehicleToggleBtn.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 153, 102), 4, true));
        AirVehicleToggleBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        AirVehicleToggleBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                AirVehicleToggleBtnActionPerformed(evt);
            }
        });

        tankTitle.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        tankTitle.setText("TANQUE");

        planeTitle.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        planeTitle.setText("AVIÓN");

        youSelectedTitle.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        youSelectedTitle.setText("Has seleccionado:");

        selectedVehicleLbl.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N

        vehicleNameTextField.setFont(new java.awt.Font("Noto Sans", 2, 18)); // NOI18N
```

```
        vehicleNameTextField.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyTyped(java.awt.event.KeyEvent evt) {
                vehicleNameTextFieldKeyTyped(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(194, 194, 194)
                .addComponent(tankTitle)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(planeTitle)
                .addGap(196, 196, 196))
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGap(237, 237, 237)
                        .addComponent(selectVehicleTitle1))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(172, 172, 172)
                        .addComponent(selectVehicleTitle2))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(114, 114, 114)
                        .addComponent(TankVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 240,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(88, 88, 88)
                        .addComponent(AirVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 240,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(263, 263, 263)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(vehicleNameTextField, javax.swing.GroupLayout.PREFERRED_SIZE, 225,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(youSelectedTitle)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(selectedVehicleLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 87,
javax.swing.GroupLayout.PREFERRED_SIZE)))))
                .addContainerGap(108, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(continueVehicleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 190,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(296, 296, 296))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
```

```
            .addGap(45, 45, 45)
            .addComponent(selectVehicleTitle1)
            .addGap(18, 18, 18)
            .addComponent(selectVehicleTitle2)
            .addGap(32, 32, 32)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
               .addComponent(tankTitle)
               .addComponent(planeTitle))
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
               .addComponent(TankVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 215,
javax.swing.GroupLayout.PREFERRED_SIZE)
               .addComponent(AirVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 215,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
               .addComponent(youSelectedTitle)
               .addComponent(selectedVehicleLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 25,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(vehicleNameTextField, javax.swing.GroupLayout.PREFERRED_SIZE, 43,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 27, Short.MAX_VALUE)
            .addComponent(continueVehicleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(39, 39, 39))
      );

      pack();
   }// </editor-fold>

   private void continueVehicleBtnActionPerformed(java.awt.event.ActionEvent evt) {
      if (TankVehicleToggleBtn.isSelected()) {
         System.out.println("adding tank");
         gameEngine.getPlayer().addVehicle(new Tank(vehicleNameTextField.getText()));
         JOptionPane.showMessageDialog(this, "Comenzarás con un tanque basico con un rifle basico montado","Vehiculo
agregado",JOptionPane.INFORMATION_MESSAGE);
         gameEngine.getPlayer().showAllVehicles();

      } else if (AirVehicleToggleBtn.isSelected()) {
         System.out.println("adding plane");
         gameEngine.getPlayer().addVehicle(new Plane(vehicleNameTextField.getText()));
         JOptionPane.showMessageDialog(this, "Comenzarás con un avion basico con un rifle basico montado","Vehiculo
agregado",JOptionPane.INFORMATION_MESSAGE);
         gameEngine.getPlayer().showAllVehicles();
      }
      mainFrame.updateVehiclesList();
      this.dispose();
      mainFrame.setVisible(true);
   }

   private void TankVehicleToggleBtnActionPerformed(java.awt.event.ActionEvent evt) {
```

```
        AirVehicleToggleBtn.setSelected(false);
        selectedVehicleLbl.setText("Tanque");
        tryEnableContinueBtn();
    }

    private void AirVehicleToggleBtnActionPerformed(java.awt.event.ActionEvent evt) {
        TankVehicleToggleBtn.setSelected(false);
        selectedVehicleLbl.setText("Avión");
        tryEnableContinueBtn();
    }

    private void vehicleNameTextFieldKeyTyped(java.awt.event.KeyEvent evt) {
        tryEnableContinueBtn();
    }

    private void tryEnableContinueBtn(){
        if((TankVehicleToggleBtn.isSelected() || AirVehicleToggleBtn.isSelected()) && !vehicleNameTextField.getText().equals("")) {
            System.out.println("(TEST) Trying to enable button...");
            continueVehicleBtn.setEnabled(true);
        } else {
            System.out.println("(TEST) Button couldnt been enabled");
            continueVehicleBtn.setEnabled(false);
        }
    }


    // Variables declaration - do not modify
    private javax.swing.JToggleButton AirVehicleToggleBtn;
    private javax.swing.JToggleButton TankVehicleToggleBtn;
    private javax.swing.JButton continueVehicleBtn;
    private javax.swing.JLabel planeTitle;
    private javax.swing.JLabel selectVehicleTitle1;
    private javax.swing.JLabel selectVehicleTitle2;
    private javax.swing.JLabel selectedVehicleLbl;
    private javax.swing.JLabel tankTitle;
    private javax.swing.JTextField vehicleNameTextField;
    private javax.swing.JLabel youSelectedTitle;
    // End of variables declaration
}
```

MainFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.GameEngine;
import com.robertob.proyecto1.ipc1.engine.vehicles.*;
import javax.swing.DefaultListModel;
import javax.swing.ImageIcon;
import javax.swing.JOptionPane;

/**
 *
 * @author robertob
 */
public class MainFrame extends javax.swing.JFrame {

    GameEngine gameEngine;
    GameFrame gameFrame;
    StoreFrame storeFrame;
    MapSelectorFrame mapSelectorFrame;
    String[] confirmationOptions = {"Si","No"};
    DefaultListModel vehiclesListModel = new DefaultListModel();
    Vehicle selectedVehicle;
    int vehicleCount;

    public MainFrame(GameEngine gameEngine) {
        initComponents();
        this.gameEngine = gameEngine;
        playerNicknameLbl.setText(gameEngine.getPlayer().getNickname().toUpperCase()+"?");
        gameFrame = new GameFrame(gameEngine);
        storeFrame = new StoreFrame(gameEngine, this);
        mapSelectorFrame = new MapSelectorFrame(gameEngine);
    }

    public void updateVehiclesList(){
        this.vehiclesListModel.removeAllElements();
        for (int i = 0; i < 3; i++) {
            if (gameEngine.getPlayer().getVehicleIndex(i) != null) {
                vehiclesListModel.addElement(gameEngine.getPlayer().getVehicleIndex(i).getName());
            }
        }
        this.vehicleList.setModel(vehiclesListModel);
        vehicleCount = this.vehicleList.getModel().getSize();
    }

    public int getVehicleCount() {
        return vehicleCount;
    }
```

```
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    playerNicknameLbl = new javax.swing.JLabel();
    readyForBattleTitle = new javax.swing.JLabel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    vehicleList = new javax.swing.JList<>();
    jLabel3 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    nameLbl = new javax.swing.JLabel();
    hpLbl = new javax.swing.JLabel();
    ppLbl = new javax.swing.JLabel();
    levelLbl = new javax.swing.JLabel();
    jLabel12 = new javax.swing.JLabel();
    aimLbl = new javax.swing.JLabel();
    defenseLbl = new javax.swing.JLabel();
    jLabel15 = new javax.swing.JLabel();
    jLabel16 = new javax.swing.JLabel();
    attackLbl = new javax.swing.JLabel();
    jlabel18 = new javax.swing.JLabel();
    xpLbl = new javax.swing.JLabel();
    jLabel20 = new javax.swing.JLabel();
    weaponALbl = new javax.swing.JLabel();
    weaponBLbl = new javax.swing.JLabel();
    vehicleTypeLbl = new javax.swing.JLabel();
    vehiclePicture = new javax.swing.JLabel();
    storeButton = new javax.swing.JButton();
    jLabel8 = new javax.swing.JLabel();
    startGameButton = new javax.swing.JButton();
    stateLbl = new javax.swing.JLabel();
    jMenuBar1 = new javax.swing.JMenuBar();
    jMenu1 = new javax.swing.JMenu();
    jMenuItem1 = new javax.swing.JMenuItem();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    playerNicknameLbl.setFont(new java.awt.Font("Noto Sans", 1, 22)); // NOI18N
    playerNicknameLbl.setText("PLAYER.NICKNAME?");
```

```
readyForBattleTitle.setFont(new java.awt.Font("Noto Sans", 1, 22)); // NOI18N
readyForBattleTitle.setText("¿LIST@ PARA LA BATALLA,");

jLabel1.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
jLabel1.setText("Elige uno de los vehiculos que tienes, o compra mas en la tienda para comenzar una partida:");

jLabel2.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
jLabel2.setText("MIS VEHICULOS");

jScrollPane1.setBorder(null);

vehicleList.setBackground(new java.awt.Color(238, 238, 238));
vehicleList.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(175, 175, 175), 2, true));
vehicleList.setFont(new java.awt.Font("Noto Sans", 0, 22)); // NOI18N
vehicleList.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
vehicleList.addMouseListener(new java.awt.event.MouseAdapter() {
   public void mouseClicked(java.awt.event.MouseEvent evt) {
      vehicleListMouseClicked(evt);
   }
});
jScrollPane1.setViewportView(vehicleList);

jLabel3.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
jLabel3.setText("ESTADO DEL VEHÍCULO | TIPO:");

jLabel4.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
jLabel4.setText("NOMBRE:");

jLabel5.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
jLabel5.setText("HP:");

jLabel6.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
jLabel6.setText("PP:");

jLabel7.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
jLabel7.setText("NIVEL:");

nameLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

hpLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

ppLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

levelLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

jLabel12.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
jLabel12.setText("PUNTERIA:");

aimLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

defenseLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
```

```
        jLabel15.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel15.setText("DEFENSA:");

        jLabel16.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel16.setText("ATAQUE:");

        attackLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jlabel18.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jlabel18.setText("XP:");

        xpLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel20.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel20.setText("ARMAS:");

        weaponALbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        weaponBLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addComponent(jLabel20)
                    .addComponent(jLabel4)
                    .addComponent(jLabel7)
                    .addComponent(jLabel6)
                    .addComponent(jLabel5))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(nameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(hpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(ppLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(levelLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(18, 18, 18)
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(jlabel18)
                            .addComponent(jLabel12)
                            .addComponent(jLabel15)
                            .addComponent(jLabel16))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
                    .addComponent(xpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(attackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(defenseLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(0, 0, Short.MAX_VALUE))
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addComponent(weaponALbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(weaponBLbl, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)))
        .addGap(0, 0, 0))
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addGroup(jPanel1Layout.createSequentialGroup()
                            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addGroup(jPanel1Layout.createSequentialGroup()
                                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                        .addComponent(jlabel18)
                                        .addComponent(xpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                    .addComponent(jLabel16))
                                .addComponent(attackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                            .addComponent(jLabel15))
                        .addComponent(defenseLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addComponent(jLabel12)
                        .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGroup(jPanel1Layout.createSequentialGroup()
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                        .addGroup(jPanel1Layout.createSequentialGroup()
                            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addGroup(jPanel1Layout.createSequentialGroup()
                                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                        .addComponent(jLabel4)
                                        .addComponent(nameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel5))
                    .addComponent(hpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel6))
            .addComponent(ppLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
          .addComponent(jLabel7)
          .addComponent(levelLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))))
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
      .addComponent(jLabel20)
      .addComponent(weaponALbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE)
      .addComponent(weaponBLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
    .addGap(0, 27, Short.MAX_VALUE))
);

vehicleTypeLbl.setFont(new java.awt.Font("Noto Sans", 0, 20)); // NOI18N

storeButton.setBackground(new java.awt.Color(0, 102, 102));
storeButton.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
storeButton.setForeground(new java.awt.Color(255, 255, 255));
storeButton.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/storeIconSym.png"))); // NOI18N
storeButton.setText("ABRIR TIENDA");
storeButton.setBorderPainted(false);
storeButton.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
storeButton.addActionListener(new java.awt.event.ActionListener() {
  public void actionPerformed(java.awt.event.ActionEvent evt) {
    storeButtonActionPerformed(evt);
  }
});

jLabel8.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
jLabel8.setText("Abre la tienda para comprar mas vehiculos o mas armas para ellos");

startGameButton.setBackground(new java.awt.Color(0, 255, 102));
startGameButton.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
startGameButton.setForeground(new java.awt.Color(0, 0, 0));
startGameButton.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/swordBlack.png"))); // NOI18N
startGameButton.setText(" INICIAR PARTIDA");
startGameButton.setBorderPainted(false);
startGameButton.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
startGameButton.setEnabled(false);
startGameButton.addActionListener(new java.awt.event.ActionListener() {
```

```
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                startGameButtonActionPerformed(evt);
            }
        });

        stateLbl.setFont(new java.awt.Font("Open Sans", 3, 18)); // NOI18N

        jMenu1.setText("Juego");

        jMenuItem1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/exitIconSymBlack.png"))); // NOI18N
        jMenuItem1.setText("Salir del juego");
        jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jMenuItem1ActionPerformed(evt);
            }
        });
        jMenu1.add(jMenuItem1);

        jMenuBar1.add(jMenu1);

        setJMenuBar(jMenuBar1);

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(35, 35, 35)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(readyForBattleTitle)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(playerNicknameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 415,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel2)
                            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 280,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGap(55, 55, 55)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jLabel3)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(vehicleTypeLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGroup(layout.createSequentialGroup()
                                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
                        .addGroup(layout.createSequentialGroup()
                            .addGap(18, 18, 18)
                            .addComponent(vehiclePicture, javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(layout.createSequentialGroup()
                            .addGap(37, 37, 37)
                            .addComponent(stateLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 105,
javax.swing.GroupLayout.PREFERRED_SIZE))))))
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(jLabel8)
                        .addComponent(storeButton, javax.swing.GroupLayout.PREFERRED_SIZE, 195,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGap(100, 100, 100)
                    .addComponent(startGameButton, javax.swing.GroupLayout.PREFERRED_SIZE, 235,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap(29, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(25, 25, 25)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(playerNicknameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(readyForBattleTitle, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel1)
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(vehicleTypeLbl, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel2)
                        .addComponent(jLabel3)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 150,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(vehiclePicture, javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(stateLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(50, 50, 50)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel8)
```

```
                    .addGap(23, 23, 23)
                    .addComponent(storeButton, javax.swing.GroupLayout.PREFERRED_SIZE, 43,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addComponent(startGameButton, javax.swing.GroupLayout.PREFERRED_SIZE, 73,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(35, 35, 35))
        );

        pack();
    }// </editor-fold>

    private void vehicleListMouseClicked(java.awt.event.MouseEvent evt) {
        try {
            selectedVehicle = gameEngine.getPlayer().getVehicleIndex(vehicleList.getSelectedIndex());
            gameEngine.getPlayer().setCurrentVehicle(selectedVehicle);
            setStatsText(selectedVehicle);
            enableStartGameBtn();

        } catch (ArrayIndexOutOfBoundsException aioobe) {
            System.out.println("No hay vehiculo seleccionado");
        }
    }

    private void storeButtonActionPerformed(java.awt.event.ActionEvent evt) {
        storeFrame.updateVehiclesStoreList();
        storeFrame.setVisible(true);
    }

    private void startGameButtonActionPerformed(java.awt.event.ActionEvent evt) {
        mapSelectorFrame.setVisible(true);
//        gameFrame.stageViewController.paintPanel();
//        gameFrame.setVisible(true);
    }

    private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
        int confirmation = JOptionPane.showOptionDialog(this, "¿Estas seguro que quieres salir del juego?",
"Confirmacion",JOptionPane.YES_NO_OPTION,JOptionPane.QUESTION_MESSAGE,null,confirmationOptions,confirmationOptions[0]);
            if(confirmation == JOptionPane.YES_OPTION){
                System.exit(0);
            }
    }

    private void setStatsText(Vehicle vehicle){
        nameLbl.setText(vehicle.getName());
        hpLbl.setText(String.valueOf(vehicle.getHp()));
        ppLbl.setText(String.valueOf(vehicle.getPp()));
        levelLbl.setText(String.valueOf(vehicle.getLevel()));
        xpLbl.setText(String.valueOf(vehicle.getXp()));
        attackLbl.setText(String.valueOf(vehicle.getAttack()));
        defenseLbl.setText(String.valueOf(vehicle.getDefense()));
        aimLbl.setText(String.valueOf(vehicle.getAim()));
        weaponALbl.setText(vehicle.getWeapon1().getType());
```

```
    if (vehicle.getWeapon2() == null){
        weaponBLbl.setText("Sin segunda arma");
    } else {
        weaponBLbl.setText(vehicle.getWeapon2().getType());
    }


    if(vehicle instanceof Tank) {
        vehicleTypeLbl.setText("TANQUE");
    } else {vehicleTypeLbl.setText("AVIÓN");}

    if(vehicle.isDestroyed()){
        stateLbl.setText("DESTRUIDO");
    } else {
        stateLbl.setText("ACTIVO");
    }

    vehiclePicture.setIcon(new ImageIcon(vehicle.getImage()));
}

private void enableStartGameBtn(){
    if (!vehicleList.isSelectionEmpty()) {
        startGameButton.setEnabled(true);
    }
}

// Variables declaration - do not modify
private javax.swing.JLabel aimLbl;
private javax.swing.JLabel attackLbl;
private javax.swing.JLabel defenseLbl;
private javax.swing.JLabel hpLbl;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel20;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JMenu jMenu1;
private javax.swing.JMenuBar jMenuBar1;
private javax.swing.JMenuItem jMenuItem1;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JLabel jlabel18;
private javax.swing.JLabel levelLbl;
private javax.swing.JLabel nameLbl;
```

```
    private javax.swing.JLabel playerNicknameLbl;
    private javax.swing.JLabel ppLbl;
    private javax.swing.JLabel readyForBattleTitle;
    private javax.swing.JButton startGameButton;
    private javax.swing.JLabel stateLbl;
    private javax.swing.JButton storeButton;
    private javax.swing.JList<String> vehicleList;
    private javax.swing.JLabel vehiclePicture;
    private javax.swing.JLabel vehicleTypeLbl;
    private javax.swing.JLabel weaponALbl;
    private javax.swing.JLabel weaponBLbl;
    private javax.swing.JLabel xpLbl;
    // End of variables declaration
}
```

StoreFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.GameEngine;
import com.robertob.proyecto1.ipc1.engine.vehicles.Plane;
import com.robertob.proyecto1.ipc1.engine.vehicles.Tank;
import com.robertob.proyecto1.ipc1.engine.vehicles.Vehicle;
import com.robertob.proyecto1.ipc1.engine.weapons.Canon;
import com.robertob.proyecto1.ipc1.engine.weapons.MachineGun;
import com.robertob.proyecto1.ipc1.engine.weapons.Rifle;
import javax.swing.DefaultListModel;
import javax.swing.JOptionPane;

/**
 *
 * @author robertob
 */
public class StoreFrame extends javax.swing.JFrame {

    GameEngine gameEngine;
    MainFrame mainFrame;
    DefaultListModel vehiclesListModel = new DefaultListModel();
    Vehicle selectedVehicle;

    public StoreFrame(GameEngine gameEngine, MainFrame mainFrame) {
        initComponents();
        this.gameEngine = gameEngine;
        this.mainFrame = mainFrame;
        updateWeaponImpact();
    }
```

```
public void updateVehiclesStoreList(){
    this.vehiclesListModel.removeAllElements();
    for (int i = 0; i < 3; i++) {
        if (gameEngine.getPlayer().getVehicleIndex(i) != null) {
            vehiclesListModel.addElement(gameEngine.getPlayer().getVehicleIndex(i).getName());
        }
    }
    this.vehicleList.setModel(vehiclesListModel);
}

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    exitStoreButton = new javax.swing.JButton();
    jLabel2 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jTabbedPane1 = new javax.swing.JTabbedPane();
    jPanel1 = new javax.swing.JPanel();
    jLabel3 = new javax.swing.JLabel();
    TankVehicleToggleBtn = new javax.swing.JToggleButton();
    AirVehicleToggleBtn = new javax.swing.JToggleButton();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel7 = new javax.swing.JLabel();
    vehicleNameTextField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    buyVehicleButton = new javax.swing.JButton();
    jPanel2 = new javax.swing.JPanel();
    jLabel9 = new javax.swing.JLabel();
    weaponComboBox = new javax.swing.JComboBox<>();
    jLabel10 = new javax.swing.JLabel();
    jLabel11 = new javax.swing.JLabel();
    jLabel12 = new javax.swing.JLabel();
    jLabel13 = new javax.swing.JLabel();
    atackLbl = new javax.swing.JLabel();
    aimLbl = new javax.swing.JLabel();
    speedLbl = new javax.swing.JLabel();
    jLabel14 = new javax.swing.JLabel();
    jScrollPane1 = new javax.swing.JScrollPane();
    vehicleList = new javax.swing.JList<>();
    jLabel15 = new javax.swing.JLabel();
    buyWeaponButton = new javax.swing.JButton();
    jPanel3 = new javax.swing.JPanel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
        jLabel1.setFont(new java.awt.Font("Noto Sans", 1, 21)); // NOI18N
        jLabel1.setText("¿QUE QUIERES COMPRAR?");

        exitStoreButton.setBackground(new java.awt.Color(255, 51, 51));
        exitStoreButton.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        exitStoreButton.setForeground(new java.awt.Color(255, 255, 255));
        exitStoreButton.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/exitIconSymWhite.png"))); // NOI18N
        exitStoreButton.setText("SALIR");
        exitStoreButton.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        exitStoreButton.setFocusPainted(false);
        exitStoreButton.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                exitStoreButtonActionPerformed(evt);
            }
        });

        jLabel2.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel2.setText("TIENES:");

        jLabel4.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel4.setIcon(new javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/gold.png"))); //
NOI18N
        jLabel4.setText("99999");

        jTabbedPane1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0), 0));
        jTabbedPane1.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N

        jLabel3.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel3.setText("TIPO DE VEHICULO");

        TankVehicleToggleBtn.setBackground(new java.awt.Color(238, 238, 238));
        TankVehicleToggleBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/tankBlack.png"))); // NOI18N
        TankVehicleToggleBtn.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 153, 102), 4, true));
        TankVehicleToggleBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        TankVehicleToggleBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                TankVehicleToggleBtnActionPerformed(evt);
            }
        });

        AirVehicleToggleBtn.setBackground(new java.awt.Color(238, 238, 238));
        AirVehicleToggleBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/planeBlack.png"))); // NOI18N
        AirVehicleToggleBtn.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(0, 153, 102), 4, true));
        AirVehicleToggleBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        AirVehicleToggleBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                AirVehicleToggleBtnActionPerformed(evt);
            }
```

```
        });

        jLabel5.setFont(new java.awt.Font("Open Sans", 1, 19)); // NOI18N
        jLabel5.setText("Tanque");

        jLabel6.setFont(new java.awt.Font("Open Sans", 1, 19)); // NOI18N
        jLabel6.setText("Avión");

        jLabel7.setFont(new java.awt.Font("Noto Sans", 1, 16)); // NOI18N
        jLabel7.setIcon(new javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/helpBlack.png")));
// NOI18N
        jLabel7.setText("SOLO PUEDES TENER HASTA 3 VEHICULOS");

        vehicleNameTextField.setFont(new java.awt.Font("Open Sans", 2, 20)); // NOI18N
        vehicleNameTextField.addKeyListener(new java.awt.event.KeyAdapter() {
            public void keyTyped(java.awt.event.KeyEvent evt) {
                vehicleNameTextFieldKeyTyped(evt);
            }
        });

        jLabel8.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel8.setText("DALE UN NOMBRE");

        buyVehicleButton.setBackground(new java.awt.Color(0, 204, 153));
        buyVehicleButton.setFont(new java.awt.Font("Open Sans", 1, 22)); // NOI18N
        buyVehicleButton.setForeground(new java.awt.Color(51, 51, 51));
        buyVehicleButton.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/basket.png"))); // NOI18N
        buyVehicleButton.setText("COMPRAR");
        buyVehicleButton.setBorderPainted(false);
        buyVehicleButton.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        buyVehicleButton.setEnabled(false);
        buyVehicleButton.setFocusPainted(false);
        buyVehicleButton.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                buyVehicleButtonActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(34, 34, 34)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanel1Layout.createSequentialGroup()
                                .addGap(64, 64, 64)
                                .addComponent(jLabel6))
```

```
                    .addComponent(AirVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 180,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(0, 0, Short.MAX_VALUE))
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(TankVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 0, Short.MAX_VALUE))
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGap(55, 55, 55)
                        .addComponent(jLabel5)))
                .addGap(75, 75, 75)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                            .addComponent(jLabel8, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                            .addComponent(buyVehicleButton, javax.swing.GroupLayout.DEFAULT_SIZE, 201, Short.MAX_VALUE)
                            .addComponent(vehicleNameTextField))
                        .addGap(0, 0, Short.MAX_VALUE)))))
            .addGap(451, 451, 451))
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(20, 20, 20)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel3)
                    .addComponent(jLabel8))
                .addGap(18, 18, 18)
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addComponent(TankVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel5))
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()
                        .addComponent(vehicleNameTextField, javax.swing.GroupLayout.PREFERRED_SIZE, 53,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(33, 33, 33)
                        .addComponent(buyVehicleButton, javax.swing.GroupLayout.PREFERRED_SIZE, 87,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(AirVehicleToggleBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 140,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel6)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 33, Short.MAX_VALUE)
                .addComponent(jLabel7)
```

```
        .addContainerGap())
);

jTabbedPane1.addTab("VEHICULOS", jPanel1);

jLabel9.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
jLabel9.setText("¿VEHICULO?");

weaponComboBox.setFont(new java.awt.Font("Open Sans", 0, 21)); // NOI18N
weaponComboBox.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Cañon", "Ametralladora", "Rifle" }));
weaponComboBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        weaponComboBoxActionPerformed(evt);
    }
});

jLabel10.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
jLabel10.setText("IMPACTO");

jLabel11.setFont(new java.awt.Font("Open Sans", 1, 18)); // NOI18N
jLabel11.setText("ATAQUE:");

jLabel12.setFont(new java.awt.Font("Open Sans", 1, 18)); // NOI18N
jLabel12.setText("PUNTERIA:");

jLabel13.setFont(new java.awt.Font("Open Sans", 1, 18)); // NOI18N
jLabel13.setText("VELOCIDAD:");

atackLbl.setFont(new java.awt.Font("Open Sans", 0, 18)); // NOI18N

aimLbl.setFont(new java.awt.Font("Open Sans", 0, 18)); // NOI18N

speedLbl.setFont(new java.awt.Font("Open Sans", 0, 18)); // NOI18N

jLabel14.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
jLabel14.setText("ARMA");

jScrollPane1.setBackground(new java.awt.Color(238, 238, 238));
jScrollPane1.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(175, 175, 175), 1, true));

vehicleList.setBackground(new java.awt.Color(238, 238, 238));
vehicleList.setFont(new java.awt.Font("Open Sans", 0, 22)); // NOI18N
vehicleList.setForeground(new java.awt.Color(51, 51, 51));
vehicleList.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        vehicleListMouseClicked(evt);
    }
});
jScrollPane1.setViewportView(vehicleList);

jLabel15.setFont(new java.awt.Font("Noto Sans", 1, 16)); // NOI18N
```

```
        jLabel15.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/helpBlack.png"))); // NOI18N
        jLabel15.setText("SOLO PUEDES AÑADIR 1 ARMA MÁS EN CADA VEHICULO");

        buyWeaponButton.setBackground(new java.awt.Color(0, 204, 153));
        buyWeaponButton.setFont(new java.awt.Font("Open Sans", 1, 22)); // NOI18N
        buyWeaponButton.setForeground(new java.awt.Color(51, 51, 51));
        buyWeaponButton.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/basket.png"))); // NOI18N
        buyWeaponButton.setText("COMPRAR");
        buyWeaponButton.setBorderPainted(false);
        buyWeaponButton.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        buyWeaponButton.setEnabled(false);
        buyWeaponButton.setFocusPainted(false);
        buyWeaponButton.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                buyWeaponButtonActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addGap(33, 33, 33)
                        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addGroup(jPanel2Layout.createSequentialGroup()
                                .addComponent(jLabel13)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(speedLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGroup(jPanel2Layout.createSequentialGroup()
                                .addComponent(jLabel12)
                                .addGap(18, 18, 18)
                                .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGroup(jPanel2Layout.createSequentialGroup()
                                .addComponent(jLabel11)
                                .addGap(39, 39, 39)
                                .addComponent(atackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE))
                            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                                .addComponent(jLabel10, javax.swing.GroupLayout.DEFAULT_SIZE, 165, Short.MAX_VALUE)
                                .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                            .addComponent(weaponComboBox, 0, 0, Short.MAX_VALUE))
                        .addGap(66, 66, 66)
                        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
                    .addComponent(jLabel9, javax.swing.GroupLayout.PREFERRED_SIZE, 165,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 199,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(116, 116, 116)
                        .addComponent(buyWeaponButton, javax.swing.GroupLayout.DEFAULT_SIZE, 201, Short.MAX_VALUE))))
                .addGroup(jPanel2Layout.createSequentialGroup()
                    .addGap(203, 203, 203)
                    .addComponent(jLabel15)))
            .addGap(103, 103, 103))
        );
        jPanel2Layout.setVerticalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addGap(20, 20, 20)
                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addComponent(jLabel14, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(jLabel9, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                .addGap(13, 13, 13)
                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                            .addGroup(jPanel2Layout.createSequentialGroup()
                                .addComponent(weaponComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addGap(28, 28, 28)
                                .addComponent(jLabel10)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                    .addComponent(jLabel11)
                                    .addComponent(atackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                    .addComponent(jLabel12)
                                    .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                                    .addComponent(jLabel13)
                                    .addComponent(speedLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                            .addComponent(jScrollPane1))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 197, Short.MAX_VALUE)
                        .addComponent(jLabel15)
                        .addContainerGap())
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addGap(64, 64, 64)
```

```
                .addComponent(buyWeaponButton, javax.swing.GroupLayout.PREFERRED_SIZE, 87,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
        );

        jTabbedPane1.addTab("ARMAS", jPanel2);

        javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
        jPanel3.setLayout(jPanel3Layout);
        jPanel3Layout.setHorizontalGroup(
            jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGap(0, 894, Short.MAX_VALUE)
        );
        jPanel3Layout.setVerticalGroup(
            jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGap(0, 486, Short.MAX_VALUE)
        );

        jTabbedPane1.addTab("OBJETOS", jPanel3);

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                .addGap(35, 35, 35)
                .addComponent(exitStoreButton)
                .addGap(166, 166, 166)
                .addComponent(jLabel1)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jLabel2)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED_SIZE, 95, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(36, 36, 36))
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 894,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(36, 36, 36)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel1)
                    .addComponent(exitStoreButton)
                    .addComponent(jLabel2)
                    .addComponent(jLabel4))
                .addGap(18, 18, 18)
                .addComponent(jTabbedPane1)
```

```
                .addContainerGap())
        );

        pack();
    }// </editor-fold>

    private void TankVehicleToggleBtnActionPerformed(java.awt.event.ActionEvent evt) {
        AirVehicleToggleBtn.setSelected(false);
        tryEnableBuyVehicleBtn();
    }

    private void AirVehicleToggleBtnActionPerformed(java.awt.event.ActionEvent evt) {
        TankVehicleToggleBtn.setSelected(false);
        tryEnableBuyVehicleBtn();
    }

    private void vehicleNameTextFieldKeyTyped(java.awt.event.KeyEvent evt) {
        tryEnableBuyVehicleBtn();
    }

    private void exitStoreButtonActionPerformed(java.awt.event.ActionEvent evt) {
        this.setVisible(false);
        mainFrame.updateVehiclesList();
    }

    private void buyVehicleButtonActionPerformed(java.awt.event.ActionEvent evt) {
        if (mainFrame.getVehicleCount() == 3) {
            JOptionPane.showMessageDialog(this, "Ya no puedes comprar mas vehiculos!","Vehiculos
llenos",JOptionPane.ERROR_MESSAGE);
        } else {
            if (TankVehicleToggleBtn.isSelected()) {
                System.out.println("adding tank");
                gameEngine.getPlayer().addVehicle(new Tank(vehicleNameTextField.getText()));
                JOptionPane.showMessageDialog(this, "Has comprado un nuevo vehiculo","Vehiculo
agregado",JOptionPane.INFORMATION_MESSAGE);
                gameEngine.getPlayer().showAllVehicles();

            } else if (AirVehicleToggleBtn.isSelected()) {
                System.out.println("adding plane");
                gameEngine.getPlayer().addVehicle(new Plane(vehicleNameTextField.getText()));
                JOptionPane.showMessageDialog(this, "Has comprado un nuevo vehiculo","Vehiculo
agregado",JOptionPane.INFORMATION_MESSAGE);
                gameEngine.getPlayer().showAllVehicles();
            }
        }


        mainFrame.updateVehiclesList();
    }

    private void buyWeaponButtonActionPerformed(java.awt.event.ActionEvent evt) {
        int selectedWeaponIndex = weaponComboBox.getSelectedIndex();
```

```
    if(selectedVehicle.getWeapon1() != null && selectedVehicle.getWeapon2() != null){
        JOptionPane.showMessageDialog(this, "Ya no puedes agregar mas armas!","Armas llenos",JOptionPane.ERROR_MESSAGE);
    } else {
        switch (selectedWeaponIndex) {
            case 0:
                selectedVehicle.setWeapon2(new Canon());
                break;
            case 1:
                selectedVehicle.setWeapon2(new MachineGun());
                break;
            case 2:
                selectedVehicle.setWeapon2(new Rifle());
                break;
            default:
                throw new AssertionError();
            }
    }


}

private void vehicleListMouseClicked(java.awt.event.MouseEvent evt) {
    tryEnableBuyWeaponBtn();
    selectedVehicle = gameEngine.getPlayer().getVehicleIndex(vehicleList.getSelectedIndex());
}

private void weaponComboBoxActionPerformed(java.awt.event.ActionEvent evt) {
    updateWeaponImpact();
}

private void tryEnableBuyVehicleBtn(){
    if((TankVehicleToggleBtn.isSelected() || AirVehicleToggleBtn.isSelected()) && !vehicleNameTextField.getText().equals("")) {
        System.out.println("(TEST) Trying to enable button...");
        buyVehicleButton.setEnabled(true);
    } else {
        System.out.println("(TEST) Button couldnt been enabled");
        buyVehicleButton.setEnabled(false);
    }
}

private void tryEnableBuyWeaponBtn(){
    if (!vehicleList.isSelectionEmpty()) {
        buyWeaponButton.setEnabled(true);
    }
}

private void updateWeaponImpact(){
    int selectedWeaponIndex = weaponComboBox.getSelectedIndex();

    switch (selectedWeaponIndex) {
        case 0:
```

```
            atackLbl.setText("20");
            aimLbl.setText("0");
            speedLbl.setText("-15");
            break;
        case 1:
            atackLbl.setText("3");
            aimLbl.setText("-10");
            speedLbl.setText("15");
            break;
        case 2:
            atackLbl.setText("5");
            aimLbl.setText("5");
            speedLbl.setText("10 ");
            break;
        default:
            throw new AssertionError();
    }

}


// Variables declaration - do not modify
private javax.swing.JToggleButton AirVehicleToggleBtn;
private javax.swing.JToggleButton TankVehicleToggleBtn;
private javax.swing.JLabel aimLbl;
private javax.swing.JLabel atackLbl;
private javax.swing.JButton buyVehicleButton;
private javax.swing.JButton buyWeaponButton;
private javax.swing.JButton exitStoreButton;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTabbedPane jTabbedPane1;
private javax.swing.JLabel speedLbl;
private javax.swing.JList<String> vehicleList;
private javax.swing.JTextField vehicleNameTextField;
```

```
    private javax.swing.JComboBox<String> weaponComboBox;
    // End of variables declaration
}
```

MapSelectorFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

import com.robertob.proyecto1.ipc1.engine.GameEngine;
import com.robertob.proyecto1.ipc1.engine.stages.*;
import javax.swing.ImageIcon;

/**
 *
 * @author robertob
 */
public class MapSelectorFrame extends javax.swing.JFrame {

    GameEngine gameEngine;
    GameFrame gameFrame;
    int selectedMapIndex;
    String[] preveiwImages = new String[]{
        "src/main/resources/com/robertob/proyecto1-ipc1/images/map6Preview.png",
        "src/main/resources/com/robertob/proyecto1-ipc1/images/map10Preview.png",
        "src/main/resources/com/robertob/proyecto1-ipc1/images/map15Preview.png"
    };

    public MapSelectorFrame(GameEngine gameEngine) {
        initComponents();
        this.gameEngine = gameEngine;
        gameFrame = new GameFrame(gameEngine);
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        whichMapTitle = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        mapList = new javax.swing.JList<>();
        mapPreviewLbl = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();
```

```
        continueMapBtn = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        whichMapTitle.setFont(new java.awt.Font("Noto Sans", 1, 22)); // NOI18N
        whichMapTitle.setText("¿EN QUE ESCENARIO QUIERES JUGAR?");

        mapList.setBackground(new java.awt.Color(238, 238, 238));
        mapList.setFont(new java.awt.Font("Noto Sans", 0, 19)); // NOI18N
        mapList.setForeground(new java.awt.Color(0, 0, 0));
        mapList.setModel(new javax.swing.AbstractListModel<String>() {
            String[] strings = { "Mapa 1 (6x6)", "Mapa 2 (10x10)", "Mapa 3 (15x15)", "*Sin funcionamiento Escenario aleatorio (6x6) ",
"*Sin funcionamiento Escenario aleatorio (10x10)", "*Sin funcionamiento Escenario aleatorio (15x15)" };
            public int getSize() { return strings.length; }
            public String getElementAt(int i) { return strings[i]; }
        });
        mapList.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        mapList.addMouseListener(new java.awt.event.MouseAdapter() {
            public void mouseClicked(java.awt.event.MouseEvent evt) {
                mapListMouseClicked(evt);
            }
        });
        jScrollPane1.setViewportView(mapList);

        mapPreviewLbl.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/map6Preview.png"))); // NOI18N

        jButton1.setBackground(new java.awt.Color(204, 204, 204));
        jButton1.setFont(new java.awt.Font("Noto Sans", 1, 12)); // NOI18N
        jButton1.setForeground(new java.awt.Color(0, 0, 0));
        jButton1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/helpBlack.png"))); // NOI18N
        jButton1.setText("¿QUE REPRESENTA CADA CUADRO?");
        jButton1.setBorderPainted(false);
        jButton1.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        continueMapBtn.setBackground(new java.awt.Color(0, 255, 204));
        continueMapBtn.setFont(new java.awt.Font("Noto Sans", 1, 19)); // NOI18N
        continueMapBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/playIcon.png"))); // NOI18N
        continueMapBtn.setText(" CONTINUAR");
        continueMapBtn.setBorderPainted(false);
        continueMapBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        continueMapBtn.setEnabled(false);
        continueMapBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                continueMapBtnActionPerformed(evt);
```

```
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(36, 36, 36)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                        .addComponent(whichMapTitle, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(jScrollPane1))
                    .addGap(18, 18, 18)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addComponent(mapPreviewLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 395,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 260,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addGap(21, 21, 21))))
                .addGroup(layout.createSequentialGroup()
                    .addGap(362, 362, 362)
                    .addComponent(continueMapBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 203,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addContainerGap(43, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(32, 32, 32)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(whichMapTitle, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 26, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(12, 12, 12)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(mapPreviewLbl, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jScrollPane1))
            .addGap(43, 43, 43)
            .addComponent(continueMapBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 68,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(43, Short.MAX_VALUE))
    );

    pack();
  }// </editor-fold>

  private void continueMapBtnActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    Stage stageToPlay;

    switch (selectedMapIndex) {
        case 0:
            BaseStageA baseStageA = new BaseStageA(gameEngine.getPlayer());
            stageToPlay = baseStageA;
            gameFrame.setStage(stageToPlay);
            break;
        case 1:
            BaseStageB baseStageB = new BaseStageB(gameEngine.getPlayer());
            stageToPlay = baseStageB;
            gameFrame.setStage(stageToPlay);
            break;
        case 2:

            break;
        default:
            throw new AssertionError();
    }
    gameFrame.setVisible(true);
}

private void mapListMouseClicked(java.awt.event.MouseEvent evt) {
    selectedMapIndex = mapList.getSelectedIndex();
    tryEnableContinueMapButton();
    updateMapPreview();
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    new HelpFrame().setVisible(true);
}

private void tryEnableContinueMapButton(){
    if (!mapList.isSelectionEmpty()) {
        continueMapBtn.setEnabled(true);
    }
}

private void updateMapPreview(){
    switch (selectedMapIndex) {
        case 0:
            mapPreviewLbl.setIcon(new ImageIcon(preveiwImages[0]));
            break;
        case 1:
            mapPreviewLbl.setIcon(new ImageIcon(preveiwImages[1]));
            break;
        case 2:
            mapPreviewLbl.setIcon(new ImageIcon(preveiwImages[2]));
            break;
        default:
            throw new AssertionError();
    }
```

```
    }


    // Variables declaration - do not modify
    private javax.swing.JButton continueMapBtn;
    private javax.swing.JButton jButton1;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JList<String> mapList;
    private javax.swing.JLabel mapPreviewLbl;
    private javax.swing.JLabel whichMapTitle;
    // End of variables declaration
}
```

GameFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;
import com.robertob.proyecto1.ipc1.engine.GameEngine;
import com.robertob.proyecto1.ipc1.engine.stages.*;

/**
 *
 * @author robertob
 */
public class GameFrame extends javax.swing.JFrame {

    GameEngine gameEngine;
    StageViewController stageViewController;
    Stage stageToPlay;

    public GameFrame(GameEngine gameEngine) {
        initComponents();
        this.gameEngine = gameEngine;
       // stageToPlay = new Stage(gameEngine.getPlayer());
    //    stageToPlay.setBaseStageA();
//        stageViewController = new StageViewController(stageToPlay.getMap(), mapPanel);
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
```

```
mapPanel = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();
jPanel1 = new javax.swing.JPanel();
jButton3 = new javax.swing.JButton();
jLabel6 = new javax.swing.JLabel();
jComboBox2 = new javax.swing.JComboBox<>();
jPanel3 = new javax.swing.JPanel();
jButton5 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
jList1 = new javax.swing.JList<>();
jPanel2 = new javax.swing.JPanel();
jLabel4 = new javax.swing.JLabel();
moveDirectionSelector = new javax.swing.JComboBox<>();
jLabel5 = new javax.swing.JLabel();
spacesTextBox = new javax.swing.JTextField();
moveBtn = new javax.swing.JButton();
jButton6 = new javax.swing.JButton();
jPanel4 = new javax.swing.JPanel();
jLabel7 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
nameLbl = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
hpLbl = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
ppLbl = new javax.swing.JLabel();
jLabel16 = new javax.swing.JLabel();
attackLbl = new javax.swing.JLabel();
jLabel15 = new javax.swing.JLabel();
defenseLbl = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
aimLbl = new javax.swing.JLabel();
jLabel20 = new javax.swing.JLabel();
weaponBLbl = new javax.swing.JLabel();
weaponALbl = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setResizable(false);

javax.swing.GroupLayout mapPanelLayout = new javax.swing.GroupLayout(mapPanel);
mapPanel.setLayout(mapPanelLayout);
mapPanelLayout.setHorizontalGroup(
   mapPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
   .addGap(0, 816, Short.MAX_VALUE)
);
mapPanelLayout.setVerticalGroup(
   mapPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
   .addGap(0, 418, Short.MAX_VALUE)
);

jLabel1.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
```

```
        jLabel1.setText("MAPA");

        jLabel2.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel2.setText("USANDO VEHICULO:");

        jLabel3.setFont(new java.awt.Font("Noto Sans", 1, 20)); // NOI18N
        jLabel3.setText("¿QUÉ QUIERES HACER?");

        jPanel1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

        jButton3.setBackground(new java.awt.Color(204, 153, 0));
        jButton3.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jButton3.setForeground(new java.awt.Color(51, 51, 51));
        jButton3.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/shootBlack.png"))); // NOI18N
        jButton3.setText("ATACAR");
        jButton3.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(204, 153, 0), 3, true));
        jButton3.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jButton3.setEnabled(false);
        jButton3.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton3ActionPerformed(evt);
            }
        });

        jLabel6.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel6.setText("Dirección");

        jComboBox2.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        jComboBox2.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Arriba", "Abajo", "Derecha", "Izquierda" }));

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jButton3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addGroup(jPanel1Layout.createSequentialGroup()
                        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jComboBox2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel6))
                        .addGap(0, 110, Short.MAX_VALUE)))
                .addContainerGap())
        );
        jPanel1Layout.setVerticalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addContainerGap()
```

```
            .addComponent(jLabel6)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jComboBox2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
      );

      jPanel3.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

      jButton5.setBackground(new java.awt.Color(204, 153, 0));
      jButton5.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
      jButton5.setForeground(new java.awt.Color(51, 51, 51));
      jButton5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/changeBlack.png"))); // NOI18N
      jButton5.setText("CAMBIAR VEHICULO");
      jButton5.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(204, 153, 0), 3, true));
      jButton5.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
      jButton5.setEnabled(false);
      jButton5.addActionListener(new java.awt.event.ActionListener() {
         public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton5ActionPerformed(evt);
         }
      });

      jList1.setFont(new java.awt.Font("Noto Sans", 0, 20)); // NOI18N
      jScrollPane1.setViewportView(jList1);

      javax.swing.GroupLayout jPanel3Layout = new javax.swing.GroupLayout(jPanel3);
      jPanel3.setLayout(jPanel3Layout);
      jPanel3Layout.setHorizontalGroup(
         jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
         .addGroup(jPanel3Layout.createSequentialGroup()
            .addContainerGap()
            .addGroup(jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
               .addComponent(jScrollPane1)
               .addComponent(jButton5, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addContainerGap())
      );
      jPanel3Layout.setVerticalGroup(
         jPanel3Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
         .addGroup(jPanel3Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 92, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
      );

      jPanel2.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
```

```
        jLabel4.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel4.setText("Dirección");

        moveDirectionSelector.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        moveDirectionSelector.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "Arriba", "Abajo", "Derecha",
"Izquierda" }));
        moveDirectionSelector.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                moveDirectionSelectorActionPerformed(evt);
            }
        });

        jLabel5.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel5.setText("Cantidad de espacios");

        spacesTextBox.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N
        spacesTextBox.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                spacesTextBoxActionPerformed(evt);
            }
        });

        moveBtn.setBackground(new java.awt.Color(204, 153, 0));
        moveBtn.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        moveBtn.setForeground(new java.awt.Color(51, 51, 51));
        moveBtn.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/moveBlack.png"))); // NOI18N
        moveBtn.setText("MOVER");
        moveBtn.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(204, 153, 0), 3, true));
        moveBtn.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        moveBtn.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                moveBtnActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
        jPanel2.setLayout(jPanel2Layout);
        jPanel2Layout.setHorizontalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(moveDirectionSelector, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel4)
                            .addComponent(jLabel5)
                            .addComponent(spacesTextBox, javax.swing.GroupLayout.PREFERRED_SIZE, 135,
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
                    .addGap(0, 63, Short.MAX_VALUE))
                .addComponent(moveBtn, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
            .addContainerGap())
        );
        jPanel2Layout.setVerticalGroup(
            jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel2Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel4)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(moveDirectionSelector, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(jLabel5)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(spacesTextBox, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(moveBtn, javax.swing.GroupLayout.PREFERRED_SIZE, 65, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addContainerGap(31, Short.MAX_VALUE))
        );

        jButton6.setBackground(new java.awt.Color(204, 153, 0));
        jButton6.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jButton6.setForeground(new java.awt.Color(51, 51, 51));
        jButton6.setIcon(new javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/runBlack.png")));
// NOI18N
        jButton6.setText("RENDIRME");
        jButton6.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(204, 153, 0), 3, true));
        jButton6.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
        jButton6.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton6ActionPerformed(evt);
            }
        });

        jPanel4.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

        jLabel8.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel8.setText("NOMBRE:");

        nameLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel9.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel9.setText("HP:");

        hpLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel10.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel10.setText("PP:");
```

```
        ppLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel16.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel16.setText("ATAQUE:");

        attackLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel15.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel15.setText("DEFENSA:");

        defenseLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel12.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel12.setText("PUNTERIA:");

        aimLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        jLabel20.setFont(new java.awt.Font("Noto Sans", 1, 18)); // NOI18N
        jLabel20.setText("ARMAS:");

        weaponBLbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        weaponALbl.setFont(new java.awt.Font("Noto Sans", 0, 18)); // NOI18N

        javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
        jPanel4.setLayout(jPanel4Layout);
        jPanel4Layout.setHorizontalGroup(
            jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel4Layout.createSequentialGroup()
                .addContainerGap()
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel7, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                    .addComponent(jLabel12)
                                    .addComponent(jLabel15)
                                    .addComponent(jLabel16)
                                    .addComponent(jLabel20))
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                    .addComponent(attackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addComponent(defenseLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addComponent(weaponALbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
                        .addComponent(weaponBLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(jLabel8)
                            .addComponent(jLabel10)
                            .addComponent(jLabel9))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(nameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(hpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(ppLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 115,
javax.swing.GroupLayout.PREFERRED_SIZE))))
                .addGap(0, 14, Short.MAX_VALUE)))
            .addContainerGap())
        );
        jPanel4Layout.setVerticalGroup(
            jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(jPanel4Layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 145, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addGroup(jPanel4Layout.createSequentialGroup()
                                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                    .addComponent(jLabel8)
                                    .addComponent(nameLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jLabel9))
                            .addComponent(hpLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel10))
                    .addComponent(ppLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                    .addGroup(jPanel4Layout.createSequentialGroup()
                        .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                            .addComponent(jLabel16)
                            .addComponent(attackLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel15))
                    .addComponent(defenseLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
```

```
                .addComponent(jLabel12)
                .addComponent(aimLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addGroup(jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel20)
                .addComponent(weaponALbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(weaponBLbl, javax.swing.GroupLayout.PREFERRED_SIZE, 26, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        );

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(22, 22, 22)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel3)
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jPanel3, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 158,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(44, 44, 44))))
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addContainerGap()
                        .addComponent(mapPanel, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(18, 18, 18)
                        .addComponent(jLabel1)))
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(jLabel2)
                        .addGap(0, 0, Short.MAX_VALUE))
                    .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
```

```
            .addContainerGap())
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(17, 17, 17)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel1)
                    .addComponent(jLabel2))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                    .addGroup(layout.createSequentialGroup()
                        .addComponent(mapPanel, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addComponent(jLabel3))
                    .addComponent(jPanel4, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                            .addComponent(jPanel3, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                            .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                        .addContainerGap())
                    .addGroup(layout.createSequentialGroup()
                        .addGap(96, 96, 96)
                        .addComponent(jButton6, javax.swing.GroupLayout.PREFERRED_SIZE, 65,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))))
        );

        pack();
    }// </editor-fold>

    public void setStage(Stage stage){
        this.stageToPlay = stage;
        stageViewController = new StageViewController(stageToPlay.getMap(), mapPanel);
        stageViewController.paintPanel();

    }


    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void moveBtnActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    System.out.println(moveDirectionSelector.getSelectedItem());
    stageToPlay.moveVehicle(moveDirectionSelector.getSelectedItem().toString(), Integer.parseInt(spacesTextBox.getText()));
    stageViewController.paintPanel();
}

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void spacesTextBoxActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {

}

private void moveDirectionSelectorActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}


// Variables declaration - do not modify
private javax.swing.JLabel aimLbl;
private javax.swing.JLabel attackLbl;
private javax.swing.JLabel defenseLbl;
private javax.swing.JLabel hpLbl;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private javax.swing.JComboBox<String> jComboBox2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel20;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JList<String> jList1;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JPanel mapPanel;
```

```
    private javax.swing.JButton moveBtn;
    private javax.swing.JComboBox<String> moveDirectionSelector;
    private javax.swing.JLabel nameLbl;
    private javax.swing.JLabel ppLbl;
    private javax.swing.JTextField spacesTextBox;
    private javax.swing.JLabel weaponALbl;
    private javax.swing.JLabel weaponBLbl;
    // End of variables declaration
}
```

HelpFrame.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/GUIForms/JFrame.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;

/**
 *
 * @author robertob
 */
public class HelpFrame extends javax.swing.JFrame {

    /**
     * Creates new form HelpFrame
     */
    public HelpFrame() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        jLabel5 = new javax.swing.JLabel();
        jLabel6 = new javax.swing.JLabel();
        jLabel7 = new javax.swing.JLabel();
        jLabel8 = new javax.swing.JLabel();
        jLabel9 = new javax.swing.JLabel();
        jLabel10 = new javax.swing.JLabel();
        jSeparator1 = new javax.swing.JSeparator();
```

```
        jLabel11 = new javax.swing.JLabel();
        jLabel12 = new javax.swing.JLabel();
        jLabel13 = new javax.swing.JLabel();
        jLabel14 = new javax.swing.JLabel();
        jLabel16 = new javax.swing.JLabel();
        jButton1 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
        setTitle("AYUDA");

        jLabel1.setFont(new java.awt.Font("Open Sans", 1, 20)); // NOI18N
        jLabel1.setText("CAMINO");

        jLabel2.setFont(new java.awt.Font("Open Sans", 1, 20)); // NOI18N
        jLabel2.setText("MONTAÑA");

        jLabel3.setFont(new java.awt.Font("Open Sans", 1, 20)); // NOI18N
        jLabel3.setText("AGUA");

        jLabel4.setFont(new java.awt.Font("Open Sans", 1, 20)); // NOI18N
        jLabel4.setText("ENEMIGO");

        jLabel5.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/pathSection6.png"))); // NOI18N
        jLabel5.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(51, 51, 51), 3, true));

        jLabel6.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/mountainSection10.png"))); // NOI18N
        jLabel6.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(51, 51, 51), 3, true));

        jLabel7.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/waterSection10.png"))); // NOI18N
        jLabel7.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(51, 51, 51), 3, true));

        jLabel8.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/enemySection10.png"))); // NOI18N
        jLabel8.setBorder(new javax.swing.border.LineBorder(new java.awt.Color(51, 51, 51), 3, true));

        jLabel9.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel9.setText("Tu vehiculo puede estar en cualquiera de estas casillas ");

        jLabel10.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel10.setText("y no representan ningun obstaculo");

        jSeparator1.setOrientation(javax.swing.SwingConstants.VERTICAL);

        jLabel11.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel11.setText("les dispares para destruirlas");

        jLabel12.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel12.setText("Ningun vehiculo puede pasar por estas casillas a menos que");
```

```
        jLabel13.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel13.setText("de tipo avión pueden pasar sobre ellas");

        jLabel14.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel14.setText("Puedes disparar a traves de estas casillas, y solo los vehiculos");

        jLabel16.setFont(new java.awt.Font("Open Sans", 0, 20)); // NOI18N
        jLabel16.setText("Esta casilla representa un enemigo, quien intentará derrotarte");

        jButton1.setBackground(new java.awt.Color(255, 51, 51));
        jButton1.setFont(new java.awt.Font("Open Sans", 1, 17)); // NOI18N
        jButton1.setForeground(new java.awt.Color(51, 51, 51));
        jButton1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/com/robertob/proyecto1-ipc1/images/exitIconSymBlack.png"))); // NOI18N
        jButton1.setText("CERRAR");
        jButton1.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jButton1ActionPerformed(evt);
            }
        });

        javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGap(31, 31, 31)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(jLabel1)
                    .addGroup(layout.createSequentialGroup()
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(jLabel4)
                            .addComponent(jLabel3)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
                                .addComponent(jLabel5, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.PREFERRED_SIZE, 85, javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jLabel2)))
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                        .addComponent(jSeparator1, javax.swing.GroupLayout.PREFERRED_SIZE, 10,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                            .addComponent(jLabel9)
                            .addComponent(jLabel10)
                            .addComponent(jLabel12)
```

```
                    .addComponent(jLabel11)
                    .addComponent(jLabel14)
                    .addComponent(jLabel13)
                    .addComponent(jLabel16))))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jButton1)
            .addGap(17, 17, 17))
        );
        layout.setVerticalGroup(
           layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
           .addGroup(layout.createSequentialGroup()
              .addGap(29, 29, 29)
              .addComponent(jLabel1)
              .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                 .addGroup(layout.createSequentialGroup()
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                       .addGroup(layout.createSequentialGroup()
                          .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                             .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                             .addGroup(layout.createSequentialGroup()
                                .addComponent(jLabel9)
                                .addGap(3, 3, 3)
                                .addComponent(jLabel10)))
                          .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                             .addGroup(layout.createSequentialGroup()
                                .addGap(18, 18, 18)
                                .addComponent(jLabel2)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                                .addComponent(jLabel3)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jLabel7, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                                .addComponent(jLabel4)
                                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                                .addComponent(jLabel8, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE))
                             .addGroup(layout.createSequentialGroup()
                                .addGap(53, 53, 53)
                                .addComponent(jLabel12)
                                .addGap(3, 3, 3)
                                .addComponent(jLabel11)
                                .addGap(73, 73, 73)
                                .addComponent(jLabel14)
                                .addGap(3, 3, 3)
                                .addComponent(jLabel13)
```

```
                        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                        .addComponent(jLabel16)
                        .addGap(41, 41, 41))))
                    .addComponent(jSeparator1))
                .addContainerGap(72, Short.MAX_VALUE))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addComponent(jButton1)
                .addGap(26, 26, 26))))
        );

        pack();
    }// </editor-fold>

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        this.dispose();
    }


    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    private javax.swing.JLabel jLabel11;
    private javax.swing.JLabel jLabel12;
    private javax.swing.JLabel jLabel13;
    private javax.swing.JLabel jLabel14;
    private javax.swing.JLabel jLabel16;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JSeparator jSeparator1;
    // End of variables declaration
}
```

StageViewController.java

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.robertob.proyecto1.ipc1.frames;
import com.robertob.proyecto1.ipc1.engine.stages.*;
import java.awt.Color;
import javax.swing.BorderFactory;
import javax.swing.ImageIcon;
import javax.swing.JLabel;
import javax.swing.JPanel;

/**
 *
 * @author robertob
 */
public class StageViewController {

    Section[][] stageToShow;
    JPanel displayPanel;
    JLabel[][] iconMatrix;
    int size;

    public StageViewController(Section[][] stageToShow, JPanel displayPanel) {
        this.stageToShow = stageToShow;
        this.displayPanel = displayPanel;
        this.size = stageToShow.length;
    }

    public void paintPanel(){
        iconMatrix = null;
        iconMatrix = new JLabel[size][size];
        displayPanel.removeAll();
        int width = displayPanel.getWidth()/size;
        int height = displayPanel.getHeight()/size;
        for (int i = 0; i < iconMatrix.length; i++) {
            for (int j = 0; j < iconMatrix[0].length; j++) {
                JLabel newIcon = new JLabel(new ImageIcon(stageToShow[j][i].getImage(size)));
                newIcon.setBounds(width*i, height*j, width, height);
                newIcon.setBorder(BorderFactory.createLineBorder(Color.gray, 1, false));
                iconMatrix[i][j] = newIcon;
            }
        }
        for (int i = 0; i < iconMatrix.length; i++) {
            for (int j = 0; j < iconMatrix[0].length; j++) {
                displayPanel.add(iconMatrix[j][i]);
                displayPanel.repaint();
                System.out.println("Pintndo mapa");
            }
```

```
        }
        System.out.println("(TEST) width: "+width);
        System.out.println("(TEST) height: "+height);

    }

}
```

ACERCA DE

Lenguaje utilizado: Java
Link de repositorio en GitHub:
https://github.com/rrobertobt/p1ipc1-vac
Desarrollador:
José Roberto Bautista Rojas - 202131284
Curso : Introducción a la computación y programación 1 - USAC - CUNOC