Program Documentation

Classes

Main.java – the main class of the program, opens the start window, launches the game panel and the editor.

View

GamePanel.java - the game panel on which the action of the game takes place, regulates the state of the game, contains methods for updating the state and drawing game objects.

AssetSetter.java – a class for placing game objects on the field

Editor.java - a class for changing the map by the user

Field.java – background of the game

Map.java - a class that reads data from a text file that describes the map

Model

Collision.java – a class for handling collisions

Item.java – an abstract class containing inventory variables and functions. Classes are inherited from it:

> *HealthObj.java* (contains methods for drawing hearts that add health and hearts in the indicator)
>
> *Satellite.java*
>
> *Door.java*
>
> *Hammer.java*
>
> *Key.java*
>
> *Weapon.java*

Planet.java – an abstract class containing variables and functions for Pluto and for enemy planets. Classes are inherited from it:

> *Pluto.java*
>
> *Enemy.java*

PlanetModel.java - is used to download information about the last saved game. Contains methods for obtaining data about the location and state of objects.

Controller

KeyHandler.java - a class for handling keystrokes.

Technologies

Language:

Java 17

Assembly and compilation:

Maven 4.0.0

Libraries:

Java Swing

Java AWT

java.net.URL

java.util.logging.Logger

java.io.IOException

com.fasterxml.jackson.databind

The map is presented as a numeric table in a text file. Information about the game is downloaded and saved in json files.