Asteroid Mining

Team name: Pied Pipers

Title: Complete Program

Supervisor:

Dr. Balla Katalin

Members:

Abdelrahman Desoki	DOHDZF	adesoki@edu.bme.hu
Neda Radonjic	NQC17Y	neda.radonjic@edu.bme.hu
Tushig Bat-Erdene	QBI3JH	bat-erdene.tushig@edu.bme.hu
Chaitanya Arora	BWTFX8	chaitanya.arora@edu.bme.hu
Janibyek Bolatkhan	BOI6FK	janibyekbolatkhan@edu.bme.hu
Kasay Ito	LX5RFB	kasay.ito@edu.bme.hu

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13. Complete program

13.1 Deployment guide

13.1.1 List of files

File name	Size	Date	Content
Asteriod.java	4 KB	2022.05.17	The class contains the GUI and major attributes of the class Asteroid like depth, hollow, distancefromSun etc, and some functions required in rendering the file, getting resources, deepen hole etc which covers most of the use case related to asteroid
Carbon.java	1 KB	2022.05.17	Carbon class is a child class of resource
Direction.java	1 KB	2022.05.17	The direction is an enum containing the movements up. Down, left right, which is used to handle the movement of the spaceship
Game.java	5 KB	2022.05.17	The game is one of our main classes, which is initiating the game by beginning the threads when the game begins and renders all objects like asteroids, spaceships etc, which need to be displayed. It contains functions like render, tick and run which

			control the main structure of the game.
GameObject.java	2 KB	2022.05.17	Besides having the normal getter ,setter. This function is used to change the movements of the objects like asteroids and spaceship and check for collisions
Handler.java	2 KB	2022.05.17	Handler class is for getting neighbor place, adding and removing objects, getting settler, and checking if the asteroid is explosive.
ID.java	1 KB	2022.05.17	Enumeration of Settler, Robot, Asteroid, RadioActiveAsteroid, TeleportationGate, SunStorm, Iron, Carbon, Uranium, and WaterIce.
Iron.java	1 KB	2022.05.17	Iron class is a child class of resources.
KeyHandler.java	3 KB	2022.05.17	Handles the key input events.
Place.java	2 KB	2022.05.17	The place class is superclass of
RadioactiveAsteriod .java	1 KB	2022.05.17	RadioActiveAsteroid is a superclass of Asteroid with explode method.
Resources.java	1 KB	2022.05.17	Class defines the type of resources.

Robot.java	2 KB	2022.05.17	The robot class is the graphical user interface of the robot which involves the movements, basic rendering, and it can get damage.
Settler.java	10 KB	2022.05.17	The settler class is the GUI of the settler and will involve the movements and basic rendering.
Spaceship.java	2 KB	2022.05.17	This class is responsible for initializing spaceship with its capacity and current inventory.
Sunstorm.java	2 KB	2022.05.17	SunStorm class is GUI implementation sunstorm itself.
Teleportationgate.java	1 KB	2022.05.17	The TeleportationGate class is the graphical user interface of the gates.
Uranium.java	1 KB	2022.05.17	Uranium class is a child class of resource
Visitor.java	3 KB	2022.05.17	Visitor class extends the game object and deals with the what things can be done when a settler visit the asteroid and similar functions like drill, hide etc.
WaterIce.java	1 KB	2022.05.17	WaterIce class is a child class of resource. It differs with sublime() method from other resources.

Window.java	1 KB	2022.05.17	Window class has topmost GUI functionalities in this application.

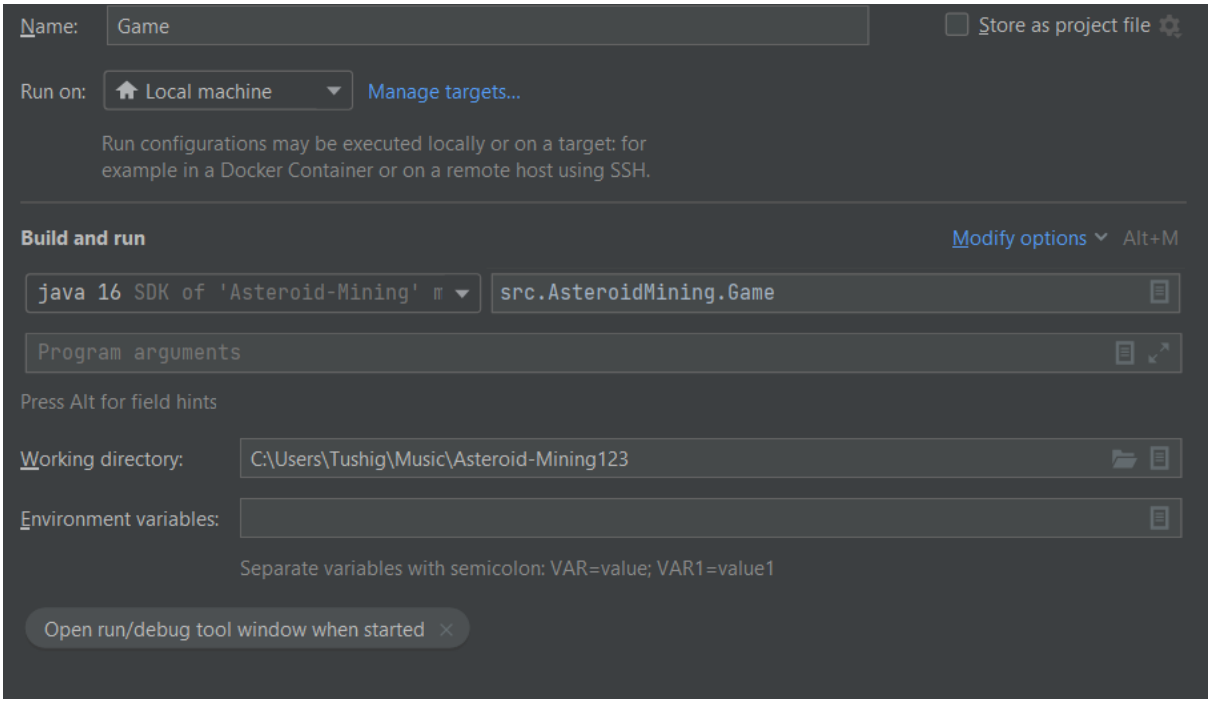
13.1.2 Compilation

In order to do the successful compilation of the code, one can clone the project or download the zip file and run it in Intellij IDE.
To execute the program we need to run the main function present in the Game.java file. Namely, the entry point is this function.
The link to github repository:
https://github.com/jackdotb/Asteroid-Mining

13.1.3 Run

There are no particular requirements except the fact that jdk should be installed in the users IDE and should preferably use intellij IDE. In order to compile the project successfully, “Game” class is needed to configured in “Run/Debug Configuration” section of the IntelliJ IDE. Especially, some of test cases are suggested that they should be checked in debugging mode with breakpoints.

Run/Debug Configuration:



13.2 Evaluation

[Evaluation shows every team member's participation rate in the project (percents) **from the beginning of the project** to the date of evaluation. The sum of percent values must be 100.]

Name of the team member	Participation (%)
Abdelrahman Desoki	16.67%
Neda Radonjic	16.67%
Tushig Bat-Erdene	16.67%
Chaitanya Arora	16.67%
Janibyek Bolatkhan	16.67%
Kasay Ito	16.67%

13.3 Protocol

Start (date & time)	Duration (hours)	Performer(s) name	Activity description

11/5	*6-9 pm*	*Tushig, Desoki, Neda, Arora, Jack*	*Discuss the main methods that need to be updated, as well as designing of sunstorm, and the hole in the asteroid.*
12/5	1-2 pm	Jack, Desoki	Implementing hide method , and connecting the GUI with the Logic.
15/5	1 hour	Kasay	Defining algorithm for autonomous robots.
16/5		Janibyek	Implementing missing graphics for the main functions and checking the quality of code to program to be run smoothly.
15/5	1 hour	Tushig	Implementing drill GUI scene