

Student name:	Leyre Raga Mosteiro				
	Lucas Rodrigues Crema				
	Kornii Kuvaldin				
	Artem Događailo				
Student number:	3131025				
	3133143				
	3134926				
	3133807				
Faculty:	Computing Science				
Course:	BSCH/BSCO/EXCH	Stage/year:	2		
Subject:	Software Development 2				
Study Mode:	Full time	Part-time			
Lecturer Name:	Gemma Deery				
Assignment Title:	Review 2	_			
Date due:	16/04/2025				
Date submitted:	16/04/2025				

Plagiarism disclaimer:		
policy on plagiarism. I also understand that and properly attributed sources which has	offence and have read and understood the collect I may receive a mark of zero if I have not identified ave been used, referred to, or have in any want, or if I have knowingly allowed others to plagiarise	ed ay
research, and that I have acknowledged all certify that the assignment has not previous	ny own work, based on my personal study and/ material and sources used in its preparation. I all asly been submitted for assessment and that I hall lagiarised the work of anyone else, including oth	lso ve
Signed: <u>Leyre</u>	Date: <u>02/04/2025</u>	

Link to Repo

https://github.com/Kornii-Kuvaldin/SD2-Game

Link to Repo	2
Game Details	
Summary of the Game	4
Timer	4
Challenges	5
Inventory	5
Store and Selling	5
Challenges	5
Solution for Reported Problems	5
Lag with the Rendering of Images	5
Downscale Images	5
Make the Images Bigger	5
Work in Progress	6
Split Screen	6
Challenges	
What Has Everyone Done	6
Leyre Raga Mosteiro	
Lucas Rodriguez Crema	
Kornii Kuvaldin	7
Artem Događailo	
Bibliography	

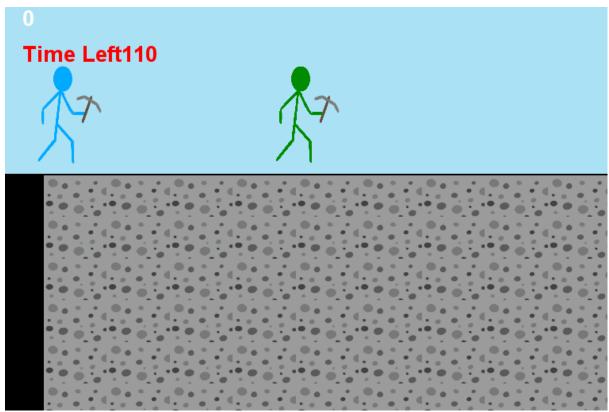
Game Details

Summary of the Game

Subterra Showdown it's a 2D, 2-player game. Two players race each other on who can make the most money in a limited time. To gain the money the player will need to mine certain precious gems that they can find scattered through the underground while they mine.

Timer

Since this is a competition on who can get the most ores mined in under a time we needed to create a countdown timer. We have decided to start for now the timer at 2 minutes, and when the game is more developed, we will decide if that is an appropriate amount of time if or if less or more time is needed.



The time right now is in seconds, maybe later on we will decide if we want it to be counting with minutes and seconds.

Challenges

One of the challenges we found while doing this was figuring out why the timer was going faster than it should be. After some research, we figured out that the computer goes through the loop much faster than a second, so we needed to make it stop some time before the next iteration of the loop.

Inventory

In this game, the players will be collecting the ore an inventory is needed for the players to know what they have collected thus far.

Store and Selling

The store is a place where the player can sell the ore they collected for money. At the end of the game, the player who collects the most money is the winner of the game.

Challenges

The challenges that we encountered with the Store were figuring out a way to detect whether the player was on top of the store, trying to sell their items. We ended up solving this problem by using multiple comparisons of the X and Y width and height values.

Solution for Reported Problems

Lag with the Rendering of Images

Downscale Images

The images we used for the blocks had a lot of blank space, so with a bit of modification, we made it so that there was not so much blank space on the image.

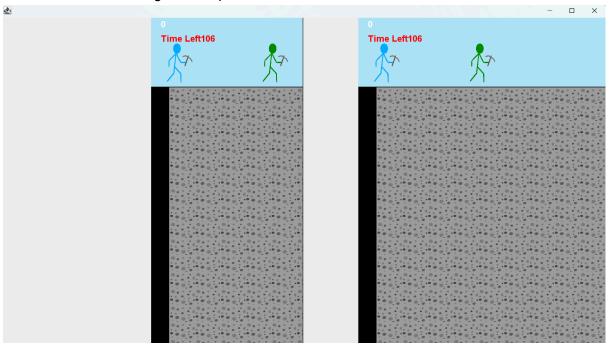
Make the Images Bigger

One of the issues why it was lagging so much was because it was painting a lot of images, so since we have made the images bigger, it does not need to print that many images compared to the previous code.

Work in Progress

Split Screen

We have started working on the split screen.



But as you can see, it is still a work in progress, so it will not be added in this code review.

Challenges

Thus far, the challenges I have encountered include, as you can see, that there are two players on both screens when there should be one and one. Another visible problem is that it is not split in half.

A problem that is not visible in that image is that the players can go right infinitely. Additionally, the screen on the left is following the player, which is not the intended behavior, but he other is static, something that we do want.

What Has Everyone Done

Leyre Raga Mosteiro

Timer, this report, fixed bugs created by deletions or changes to the code (fixed the loop that prints the images of the blocks), and started working on the split screen.

Lucas Rodriguez Crema

Added a store to the game, inventory, and the selling system.

Kornii Kuvaldin

Downscale images

Artem Događailo

???

Bibliography

Developer's Guide. (2022, November 25). How to make a countdown timer in Java [Video]. YouTube. https://www.youtube.com/watch?v=lwC5T5qtFl4

Java Programming. (2022, December 4). How to create a countdown timer in Java [Video]. YouTube. https://www.youtube.com/watch?v=mlo2tASXM_8

Hanley, C. (2019, December 17). *Create Timer - Countdown/Normal/Two Digit - Java Extra* 32 [Video]. YouTube. https://www.youtube.com/watch?v=zWw72j-Ebql