

We are planning to create a game which will be similar to the famously-known Space Invaders arcade game. The main idea of the whole game is that there are enemies/aliens who are trying to corrupt the game by destroying the shooters. Aliens will be moving from the upper part of the screen towards the lower part of a screen thereby decreasing the time for the user to react and destroy them. Each enemy has a certain amount of lives, and the positions of shooters will be randomly placed on the playing board.

Enemies will appear in a group of 15 at a time, and the user will have to destroy all of them (based on the number of lives of each respective enemy) in order to pass to the other level of the game. On the next level, the game speed will be incremented, so it will be harder for the user to destroy the enemies.

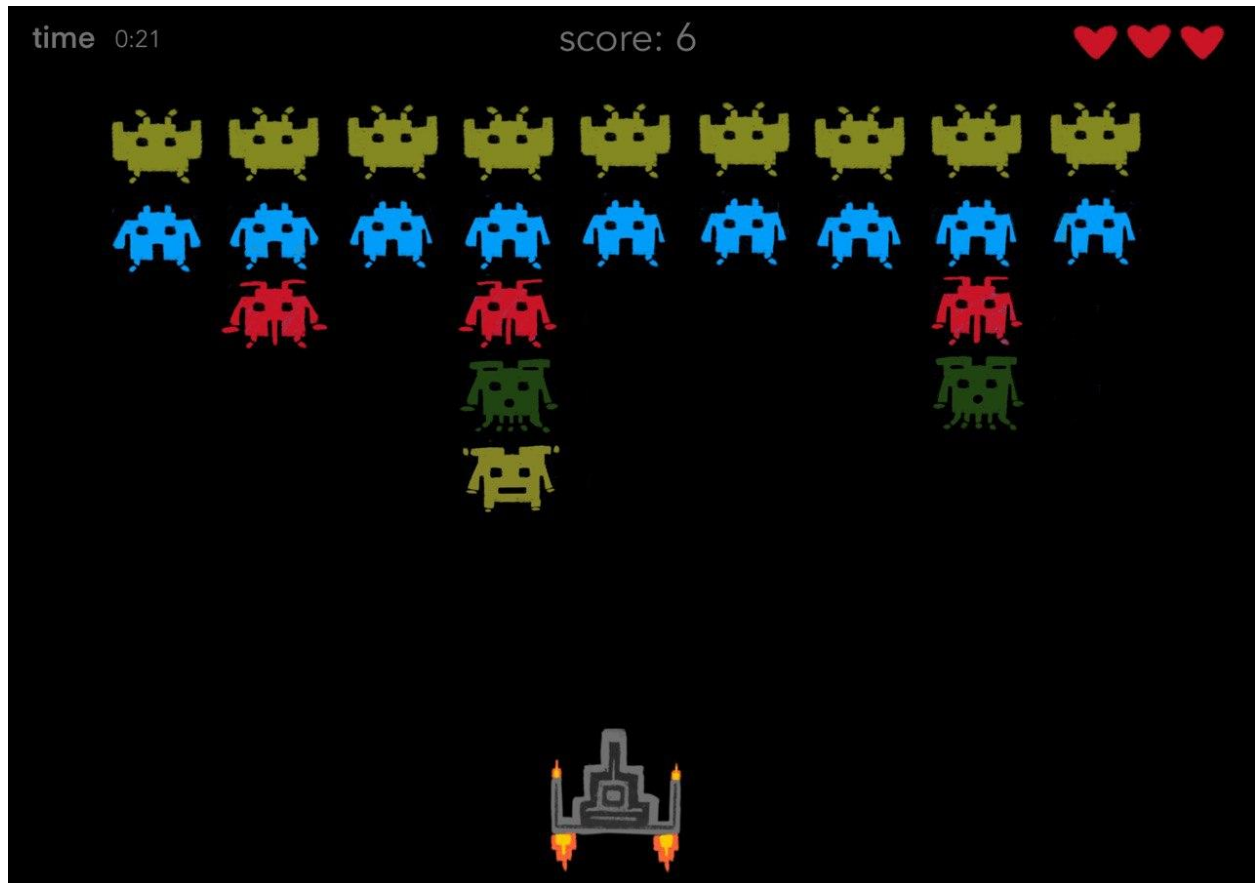
After 10 levels being successfully passed by the user - the boss of the game will appear. If the user is able to destroy a boss of the game - the user wins the game (and the current rating is displayed). Rating is a combination of the time spent and the score earned in order to win a game. Rating of the game will be displayed in case you have lost the game as well.

Game is over in case the invaders reach the shooter level 5 times, because that is the number of lives the user can have.

In the background the current score, time spent on the game, and the number of lives is displayed. Game can be reset with a mouse click after the game is either won or lost.

The game can be played if the following is clicked: <https://freeinvaders.org/>. The setup of the game that could be opened via link is very similar to what we plan to implement.

This is the sample illustration of how our game might look like. Please note that this might be a subject to change, but so far we see it in the following way:



The game will consist of several classes: The Game class, the enemy class, shooter and boss classes. The game class controls all the mechanics of the game, while the shooter and the enemy class contain information about the shooter and the enemies. Luka is going to work on the enemy class, Yan is going to work on the shooter and boss classes, and we are both collectively going to work on the Game class as well as all the graphics connected to the game.

We admit that throughout the implementation of the project some additional classes (we are currently thinking of a shelter class) might appear. We also plan to incorporate the sound and graphics which will make the game even more interesting and interactive for the users.