

Lunar Lander – planning

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1. The start screen

In the start screen the background consists of an array with stars which have random position, size and alfa value. There is a big text with the name of the game - “Lunar Lander”, and of course a start button.

2. The actual game

Once you click the start button on the strat page you go to the screen of the actual game. There are displayed the elements of the game: a moon, planets and a space ship.

The moon is always at the bottom of the canvas and takes the whole width. It is the point that the space ship aims to reach.

The planets are moving from the right to the left of the canvas. They are is an array. They are always four and have a random position, size and color. So, every time the player restarts the game the planets will be displayed differently.

The spaceship starts moving down once you click the start button from the start screen. The closer it gets to the moon the faster it is falling because of the gravity. The space ship can move up using the “up arrow” key. The X position of the spaceship is never changing. If the spaceship hits a planet the game is over and the player loses. Also, if the space ship reaches the moon with velocity larger that 7 the game is over and the player loses again. In order to finish the game successfully the player has to avoid all the planets and to land on the moon carefully.

The canvas can be resized. All the elements will still be centered.

3. The result screen

There are two result screens. One is for when the player fails to finish the game successfully. It has a red background and a text saying: “Huston, we have a problem.”. Under the text a start button is displayed. The other result screen appears when the player finishes the game successfully. It is with a green background and a text saying: “You landed on the moon successfully ;)”. There is a start button on this screen as well.