

Lava Fall

About the game

Lava Fall is a game that challenges the player to escape from a lava cave. In order to do that the player needs to pass the broken floor obstacles and the floating asteroids. She/he can do that by either floating in between or changing gravity.

The game's purpose is to collect as many coins and diamonds as possible. Each of them have a different number of points associated with it:

- Red Diamond=10 points
- Blue Diamond=7 points
- Blue Coin=3 points
- Red Coin = 2 points
- Gold Coin = 1 point

There are three characters in the game: a bear, a fox and a monkey. Pick the wanted character from the main menu's button: **Choose Character**.

If the player wants the score to be saved associated with their name, it needs to be entered before she/he starts playing each time by going to the main menu and pressing the button: **Player's name**. Press enter to return to the main menu and have the name saved. You can view all the scores in the csv file created.

These details (character, name) will be saved only for one round of the game. After picking these return to the main menu and then press the button **Play** to begin the game. When the player arrives at the red flag she/he win the game.

Basic rules

USE THE UP AND DOWN CONTROLS TO REVERSE GRAVITY AND/OR FLOAT IN BETWEEN. REMEMBER THE FLOOR AND CELLING ARE BROKEN BY THE HOT LAVA AT TIMES, DON'T TOUCH IT OUT THE LITTLE ANIMAL WILL BE ON FIRE. THERE ARE ALSO THE ASTEROIDS WHICH NEED TO BE TAKEN CARE OFF. DON'T GET AROUND THEM, THE LITTLE ANIMAL WILL COLLIDE AND DIE. COLLECT AS MANY POINTS AS POSSIBLE AND ENJOY THE GAME!

Technical details

The game was realized in processing by using Python as a programming language. It has only one really long stage. The stage was done by creating the theoretical design in an excel sheet, further converted in a csv file, and then by using a python converter and reading information from the csv file the graphics were plugged in the game. Each object had a class of its own. A generic creature class was created from which the hero class inherited some features.

Some of the most important functions are the changing gravity function (the character can switch gravity by pressing the key up and get back to normal by pressing the key down), the collision function that includes collision with lava, the rocks and with the winning flag.