

Scorpioner Game

Console Game

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telerik Academy

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Team Members

* Playfield and moving of objects
* Moving of Scorpi in the playfield
* Checking if Scorpi crashed or drown
* Checking if Scorpi is in his final spot
* Key interface of menu, high score option editing
* New game and show High scores after game end

1. **Joro97 ( Георги Къров )**

* High score show processing
* Sorting the high scores in descending order

1. **mivancheva ( Маргарита Иванчева )**

* time iteration
* points iteration and formation
* lives count
* writing the data to an external txt file
* reading name of player after game end
* exception handling

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* Sound Effects

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4. **sinabow ( Петър Синабов )**

Project Explanation

**Goal of the game**

A small tiny scorpion and its brother and sisters are far from their home. They want to return to papa and mama Scorpi in the forest, but unfortunately, it cannot do it by itself. Luckily it has you to help it. In order to return, it has to pass through many obstacles. In the first part of the trace they have to successfully avoid all the traffic in the big city. In order to do that Scorpi and siblings can move in all four directions – up, down, left, and right. You will carefully navigate them, without being hit by any of the moving cars. If this happen, one will return from its starting point, and no one wants that, right?

Away from the lights of the big city, Scorpi and siblings finds itself in front of another big obstacle – the river. It’s good that you are there with them! Here they have to do exactly the opposite from what they did in the city. They have to be extremely careful and ride the moving trees and turtles, but be aware! There are turtles that dive periodically and you must not let Scorpi and siblings stay when they dive.

When Scorpi or siblings are on the last tree, you must make them jump to the bridges end not fall into the water. When all of the little scorpions are on the bridges you have successfully helped the scorpion family.

After all this stressful experience Scorpi will be finally at home, but, there is one small detail. All those moves around the trace should be done under the pressure of time, so be careful, while you navigate it.

Finally, when the game ends you will be put on the wall of fame, where your points will stored, together with your name. If you are so good in the job, you did, you will be able to hit the first place and proclaim yourself for the king of Volunteers Helping Small Tiny Scorpions To Return Home.

**Source Code Logic**

There is class Forms(x,y,char[,], speed, color), with which the (moving) objects are initialized & printed in the console. Each object have speed – the steps the object makes for every loop or for Scorpi - key direction pressed.

The checking if Scorpi is hit by car is made with the method PrintVenichle(when Scorpi coordinates equals the currently printing car then is crash, and Scorpi return to initial position).

The checking if Scorpi ride or have drowned in the rivers is made in the PrintVenichle and Draw Cars methods. The idea is that if the y of Scorpi is equal to the current printing row of trees or turtle in const Stringbuider(with len = console window) we put the current char of tree/turtle, (e.g. we make a mirror of the console row (bc is hard to read chars in the console at specific pos) where is Scorpi, then in Draw cars – PrintTrees/Turtle we check what in the x of Scorpi is in the string – if space – then is drown, if whole Scorpi is in chars != of spaces then Scorpi is over tree/turtle, and his x is +- whit the speed of the object he rides – so he can move with the speed of the object.

After that with the same idea, for the rows with the final slots we check if Scorpi is in the river (spaces) or if he is in the bridges (not blank chars). If is the last then Scorpi became white, and stay in the bridge, and new Scorpi is ready in the beginning of playfield.

We print all Scorpis in the bridges with the help of bool[], if the slot is not empty then we print white Scorpi. Also if some bridge is not empty, another Scorpi can’t enter that bridge.

The keys P and Q when pressed enter in while true loop, and if again P is pressed the loop break and game continue, if is Q we are waiting for N – no quit or Y – yes, quit, if no, break of loop, if yes bool quitGame is = true and break of loop, then in the main while loop we check the bool var, if is true – break of main while loop.

Main Menu

The main menu consists of four different options:

* New Game – when the user choses this option, a new game will instantly begin
* View High Scores – “The wall of fame” – all the entries in the external txt file are taken, sorted in descending order, and printed the first 13. Once the user is within this option, he can either quit the whole game, or return to the main menu
* Point Table – this is the place where all the logic about how the final points are formed
* 10 points for each step taken
* 50 points for each one of the little Scorpis that arrives at home safely
* 1000 points when all the family members are finally together.

Once the user is within this option, he can either quit the whole game, or return to the main menu

* Exit – the user exits the game

Git Repository

<https://github.com/djenitoo/Frogger_Game>

Presentation Link

<http://prezi.com/nqmlu7dl5fyf/?utm_campaign=share&utm_medium=copy>