Project **Platformer videogame in browser**

PROJECT CLOSING REPORT VERSION 0.01

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**1 Description of the project**

In this project the aim was to create a more complex system (in this case, a videogame) that will run smoothly on a web page without any delays or other problems. It included advanced usage of canvas and async. programming. Some literature and internet research were included.

**2 Results of the project**

**2.1 description of the system**

The system works simple. A user opens the web page in a browser as usual and gives an input. The input is momentarily analyzed on the server and the game responds to it.

The game itself is based on multiple canvases, one is used for the background, another – for the foreground and one more is used for the text. The main one – foreground is constantly updated and redrawn based on the data it is given about the state and position of objects. This data changes as the game is played (f.e. user pressed “D” and the player moves right. His position is changed and the canvas is redrawn, but with the player model now being moved to the right). The data for the first draw of the foreground is taken from a prepared JSON file, that has the level layout in it.

**2.2 description of the hardware**

To complete this project, it only required a working laptop and a coffee maker, to keep the personnel at its best efficiency.

**2.3 description of the software**

While working on this project I used Visual Studio Code as my notepad, GitBash as a VCS, Node to launch local server and test the async functions, EXCEL and Microsoft Word for keeping records

**3 General evaluation of the progression project**

The detailed work is described in the project time sheets.

The project went all according to the plan, leaving some additional space for any unexpected situations (such as fixing uncaught bugs or working on documentation). The only two issues were 1) at the beginning, when it was hard to find a proper information source and 2) when after refactoring was done, the system stopped working as it is meant to, and few days were spent on fixing it.

**4 The experience of used tools and methods.**

The hardware and software I worked with were well known by me, so it was easy to work. However, there still was space for some features, that I discovered as I worked on the project.

As for the methods, the 3/1 schedule was quite rough, but efficient.

It was my first time of applying async programming to a real project. It was uneasy, but very useful as the game would be almost impossible to create without it. Even tho it required me to use additional software (starting a local node server every time I test my program, to be specific).

**5 Personal experience and learning**

It was an interesting, challenging project. The biggest one I’ve done so far in JS. The experience is quite unique. There were moments when I followed some guidelines or advices, moments when I had to come up with solutions, that were perfectly clear and reasonable, and the moments, when even I did not understand, what did I think of and coded, but it worked. I learned a lot about JS and game development, as I had not only to code the game, but also to imagine and draw it.

**6 Self-evaluation**

I see this project as a success. All the requirements were met and even some additional tasks, set by me at the beginning, were completed.