

Speed Game

Juho-Jaakko Oksanen, Ossi Miilukangas, Dlvan Ahmad, TVT18SPO Information Technology, Software Development

Introduction

The purpose of this project was to make an interactive and fun game that is challenging to create on both software and hardware side

Objectives

The objective was to create a game device in a portable and enclosed box that has a battery so it doesn't depend on an external power source.

The device would include three different games and you could switch between them seamlessly through a user interface which you could use with the buttons and LCD screen. The games would also record the players score and display it during game. High scores would be saved and players could go see them later.

The aim for the games was to make them as fun as possible which means they need to be working smoothly and without any issues. With play testing the games should be able to be made flawless.

Software Application Project

ECTS credits: 6

Date of publication: 2018, Autumn

Instructors: Jaakko Kaski

Methods

Arduino Uno & I2C 1602 LCD-Screen with Jamma 60mm arcade buttons are the main parts of the project. On the inside everything is soldered together.

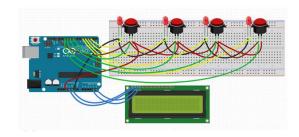


FIGURE 1. Wiring.

Results

The game worked exactly as planned after combining everyone's code together.

After playtesting the games appeared to be a lot of fun and interactive and that the team enjoyed the playtesting part.



FIGURE 2. Finished product.

Conclusions

At 1st the project was not going to take too much time to get ready but after all of the parts arrived, quickly noticed that that project was going to take more time than anticipated.

But as of making this poster the game is ready to be played by anyone who enjoys a quick challenging games.

References

1.I2C 1602 LCD-Screen datasheet Source: https://opencircuit.nl/ProductInfo/1000061/I2C-LCD-interface.pdf