CSE 101 TERM PROJECT GROUP 5

NAME OF THE PROJECT : Recall The Matrix

GENERAL PURPOSE OF THE PROJECT

Random numbers, as 8x8 matrix, is generated by the program and player should guess the every step correctly. When the game starts all correct numbers on the matrix is shown for a short time and player tries to memorize them. Input is taken by a remote controller. If player makes an incorrect prediction the whole progress of player is resetted.

PROCESS

At first we provide power to 3 Arduino uno via a battery and computer. After long hours of researches we overcame how to figure out Arduino code as many lines. We connected the Matrix displayer to master Arduino and we tried to understand its logic. As a next step we designed an algorithm for counting the score. Score is calculated up to player's step number and total game time. Then we set up a buzzer for sound system of the game. Buzzer rings when an incorrect prediction inputted and rings when the game is completed as a victory melody. We entegrated all of the software and hardware. For final we tested our project for different situtations and fixed the bugs.

EQUIPMENTS THAT WE USED

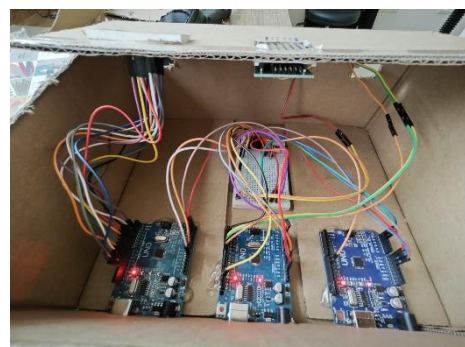3 Arduino Uno

Remote controller

Breadboard

8x8 Matrix display

Battery

Buzzer

Jumper cables

LED display (to show total score)

USB cable

DISTRIBUTION OF TASKS

Hardware of the project : Berkant Çora, Alperen Söylen, Alp Enes Şeker, Bekir Göktepe, Rüya Koçak, Zeynep Sude Turan, Ahmet Emre Kurt, Kerim Alp Özkan, Murat Taş

Report : Zeynep Sude Turan, Rüya Koçak

Software : Kerim Alp Özkan, Ahmet Emre Kurt, Berkant Çora, Alperen Söylen, Rüya Koçak, Zeynep Sude Turan

Providing materials : Berkant Çora, Alperen Söylen, Alp Enes Şeker, Bekir Göktepe, Rüya Koçak, Zeynep Sude Turan, Ahmet Emre Kurt, Kerim Alp Özkan, Murat Taş

Video & Slideshow: Alp Enes Şeker

Presentation : Ahmet Emre Kurt

Note : There is an absent student named Tayyip Soydan.