

## **DE2 project: Keypad simulation**

Repository for the purposes of the BPC-DE2 course.

### **Team members**

Pastusek Vaclav, Michal Krystof [https://github.com/venca611/DE2\\_project](https://github.com/venca611/DE2_project)

### **Project objectives**

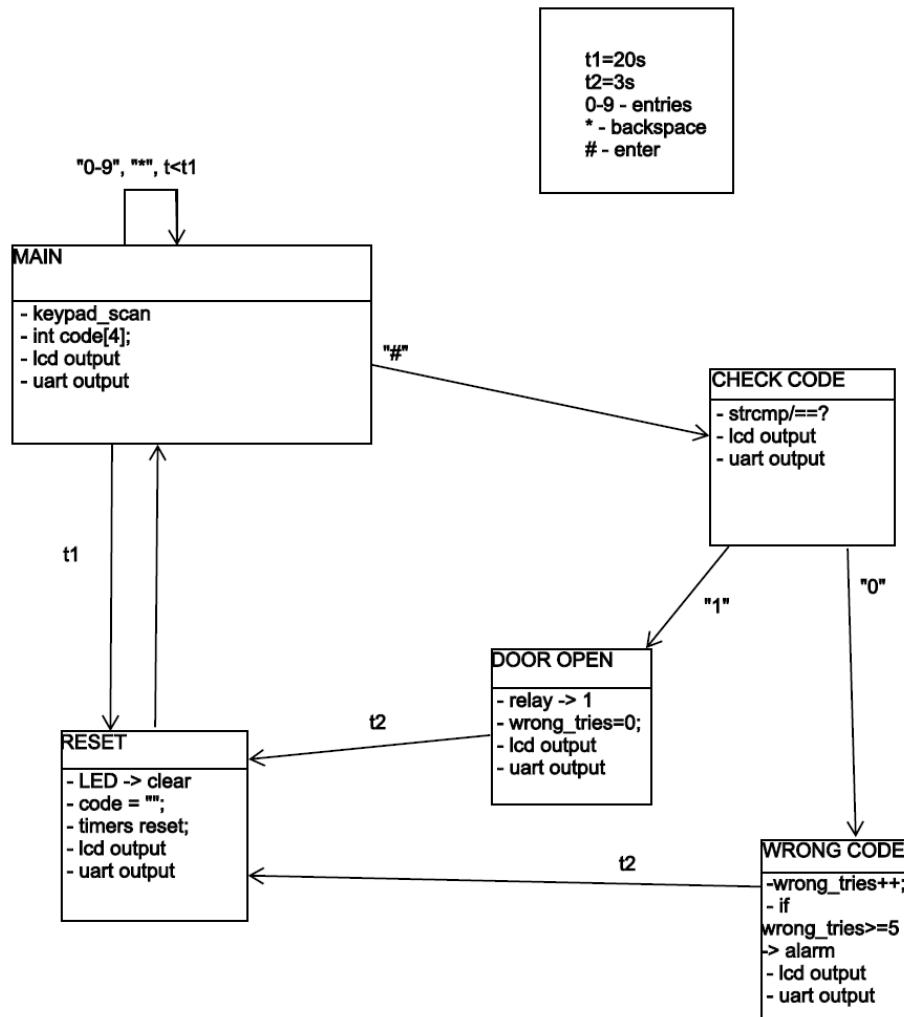
The objective of this project was for us to learn to work with a 4x3 keypad in combination with a lcd Hd44780 and an Arduino Atmega328p microcontroller.

### **Hardware description**

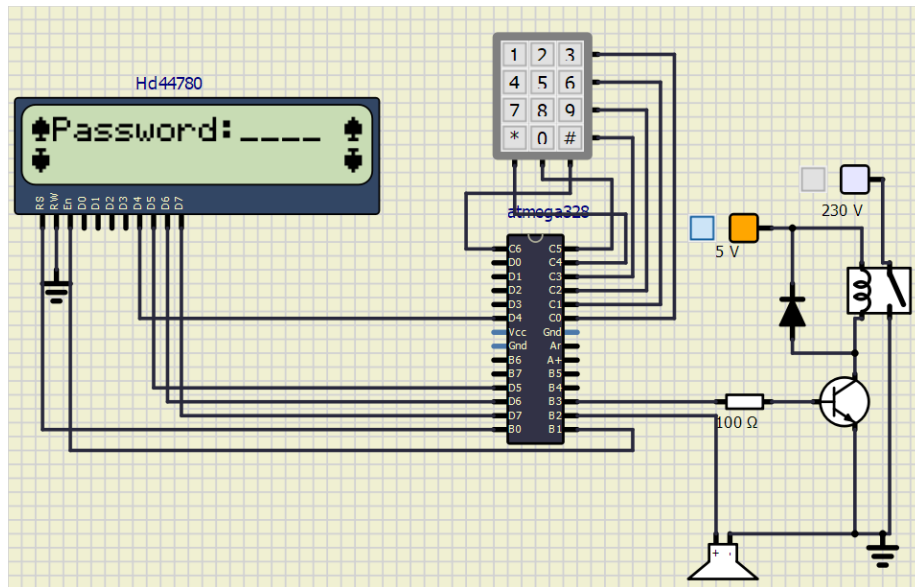
- ATmega328P
- LCD Hd44780
- 4x3 keypad

### **Code description and simulations**

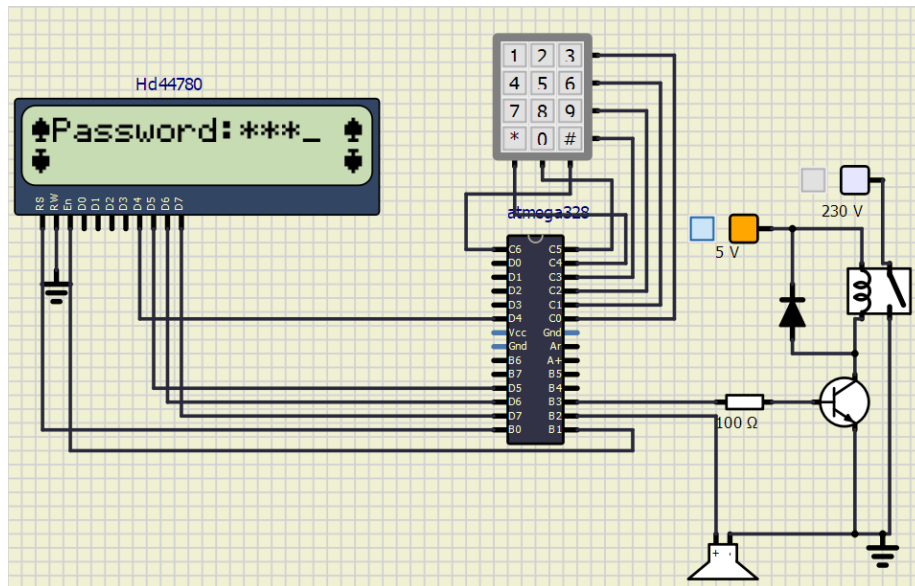
- State diagram



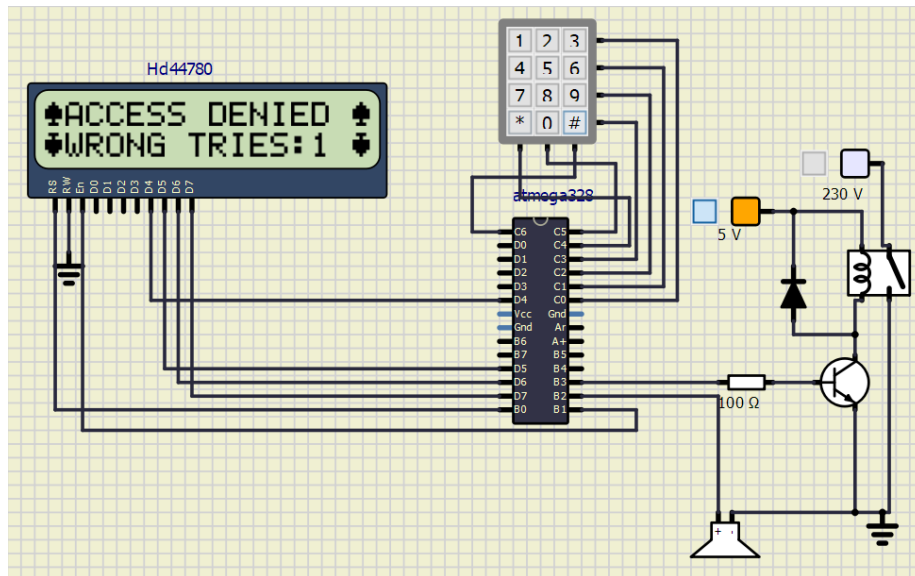
- Default state



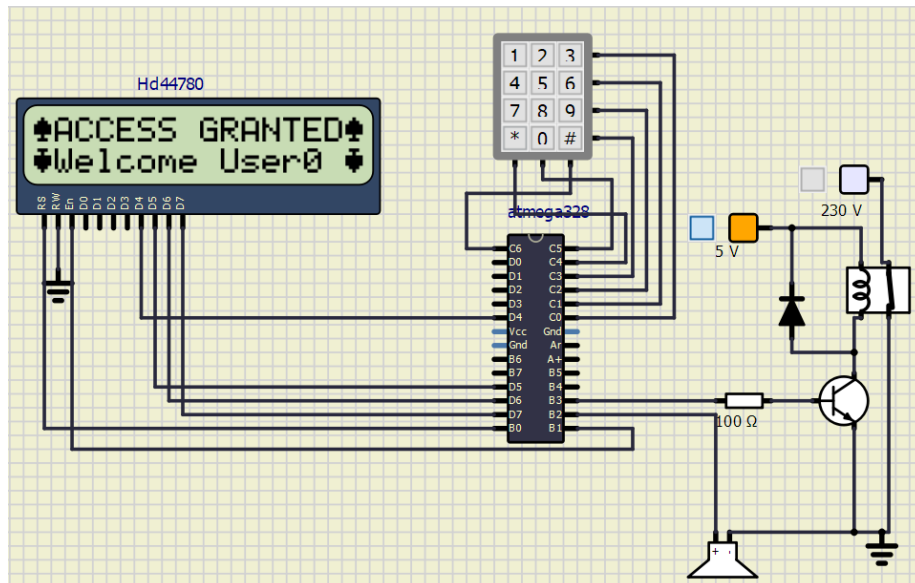
- Partially written code



- Access denied



- Access granted



## Simulation video

- <https://www.youtube.com/watch?v=zcGoftOVmLc> - Keypad demo (YouTube)

## References

- <https://github.com/tomas-fryza/Digital-electronics-2>