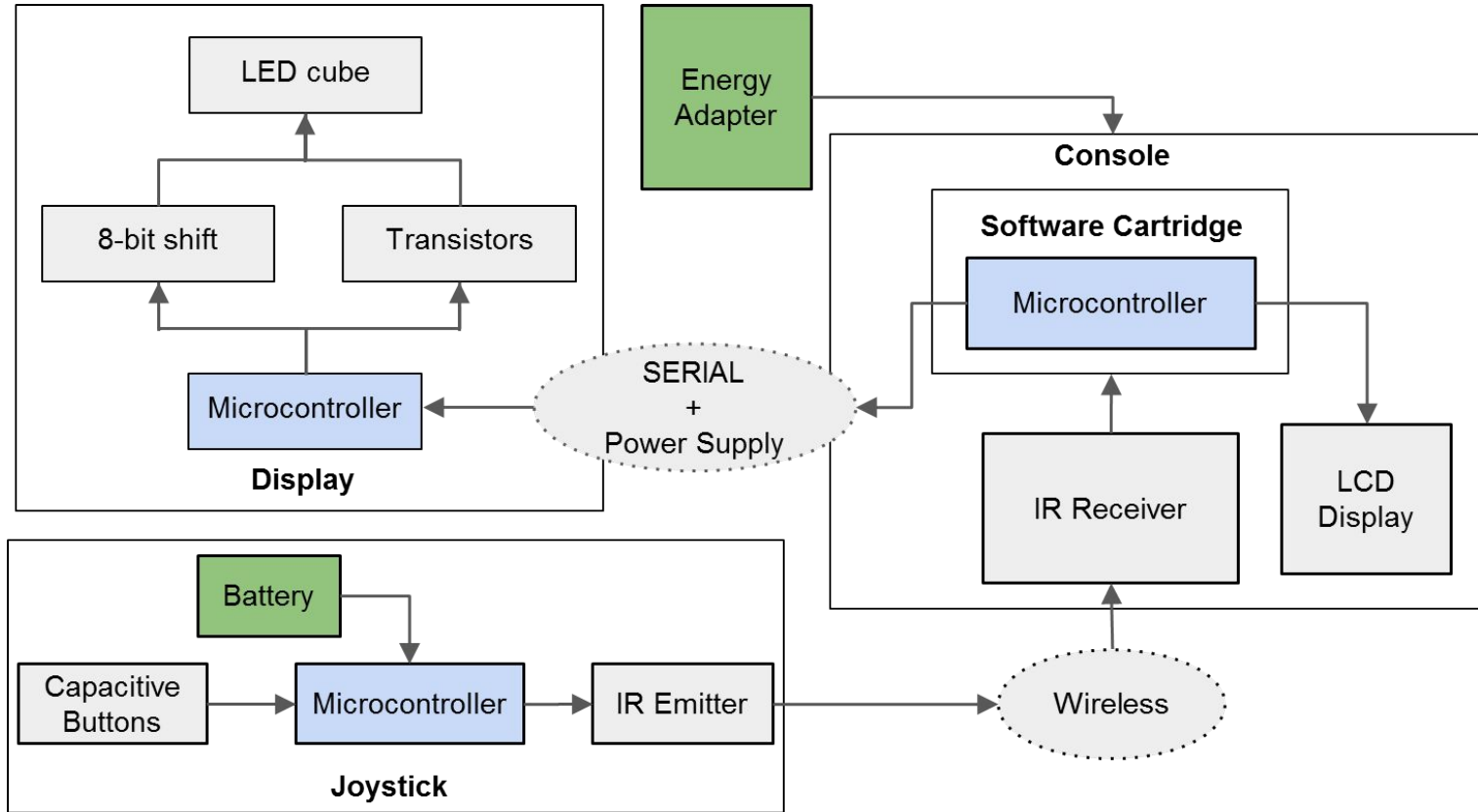TETRIS®
3D

Felipe Barbalho Rocha
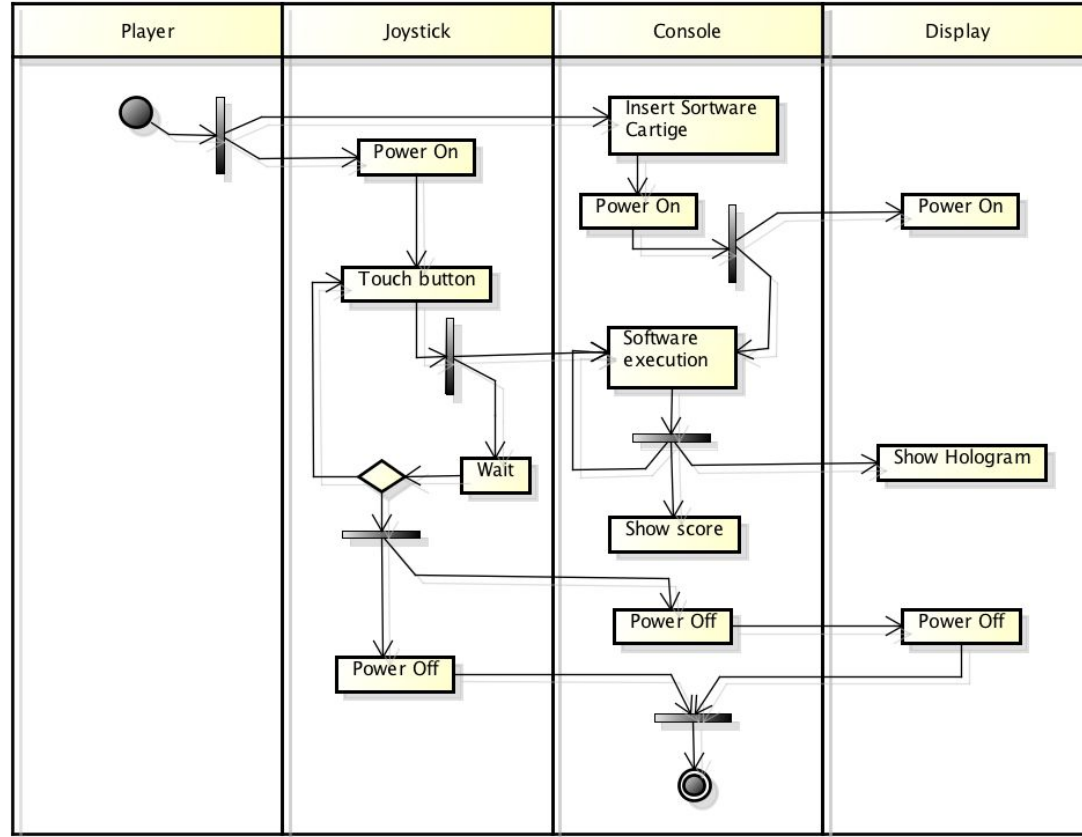Raul Silveira Silva

Outline

- Modeling:
  - Block Diagram;
  - Activities Diagram;
  - Use Case Diagram.
- Schematics;
- Current status;
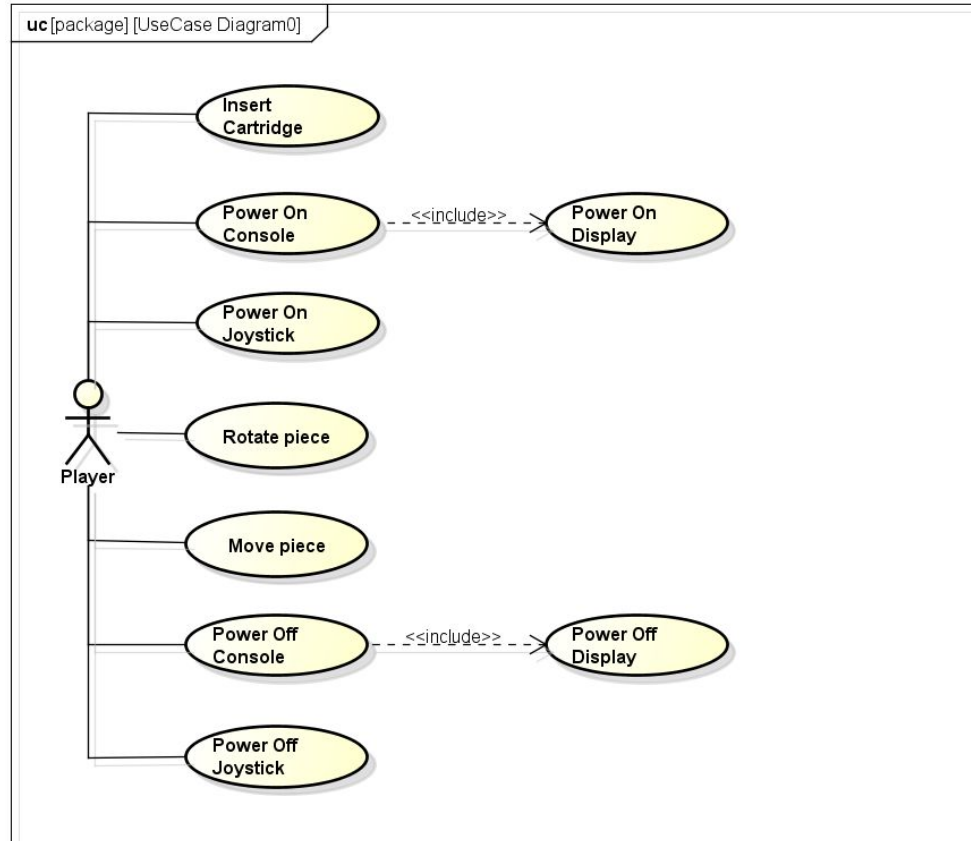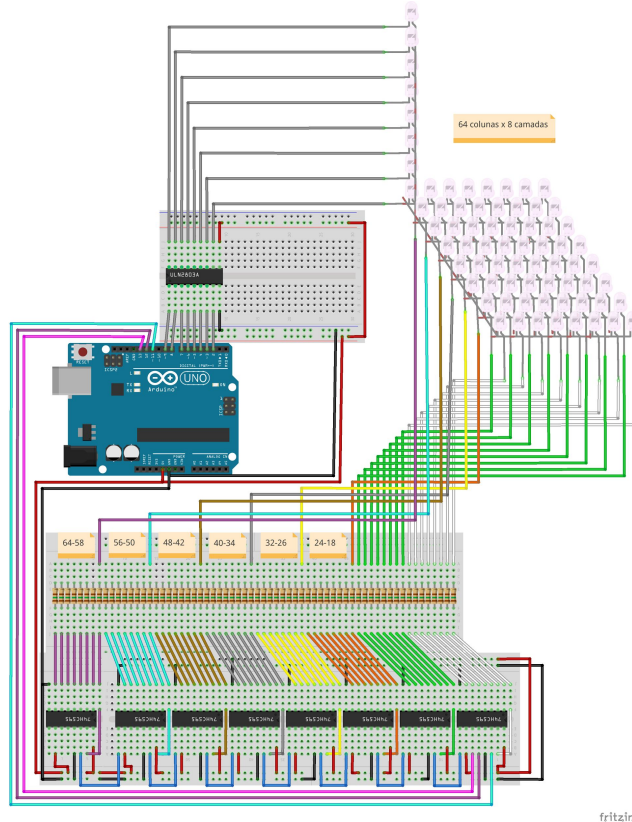- Difficulties;
- Workarounds;
- Changes.

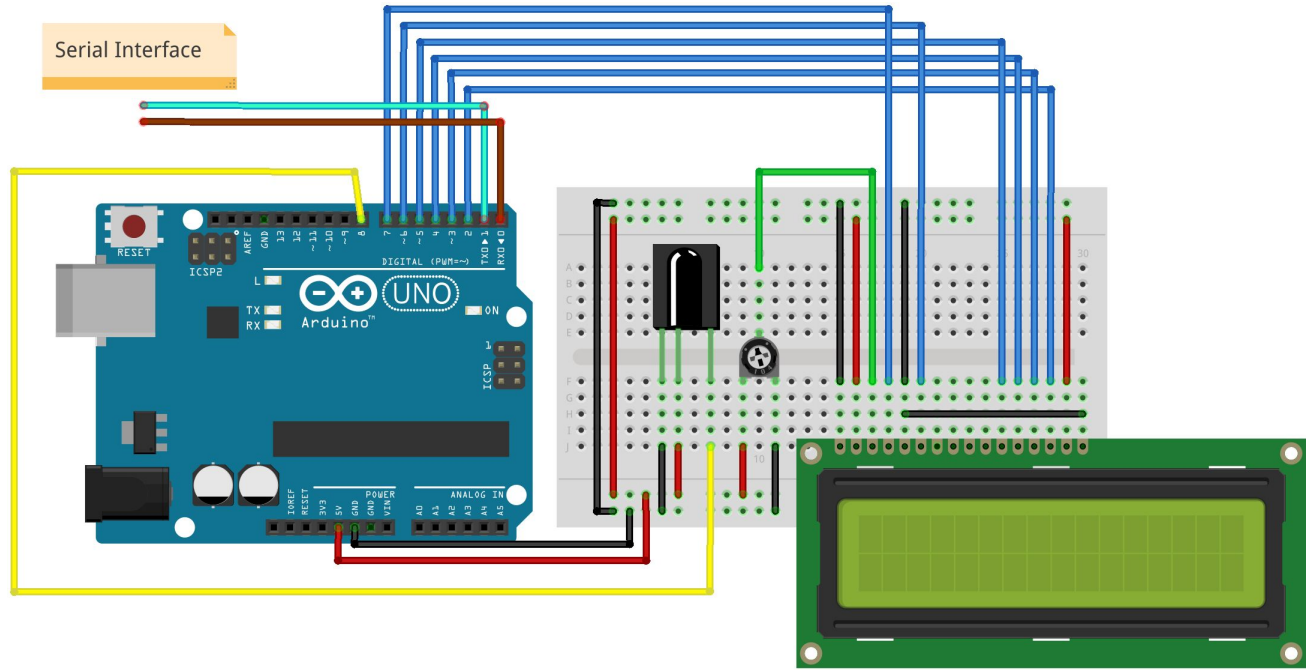# Block diagram

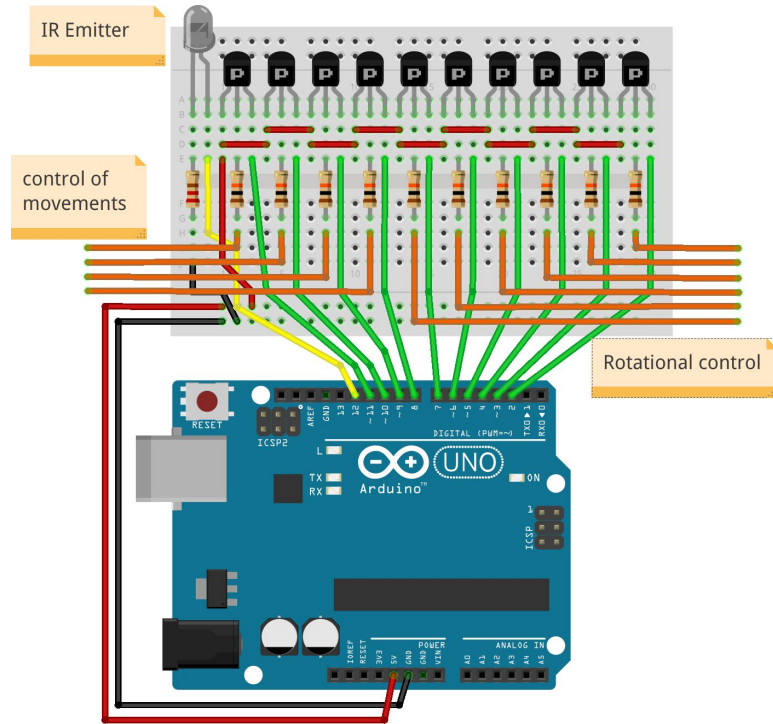
3

Activities diagram

Use case diagram

Display Schematic

64 colunas x 8 camadas

64-58 56-50 48-42 40-34 32-26 24-18

Console Schematic

Serial Interface

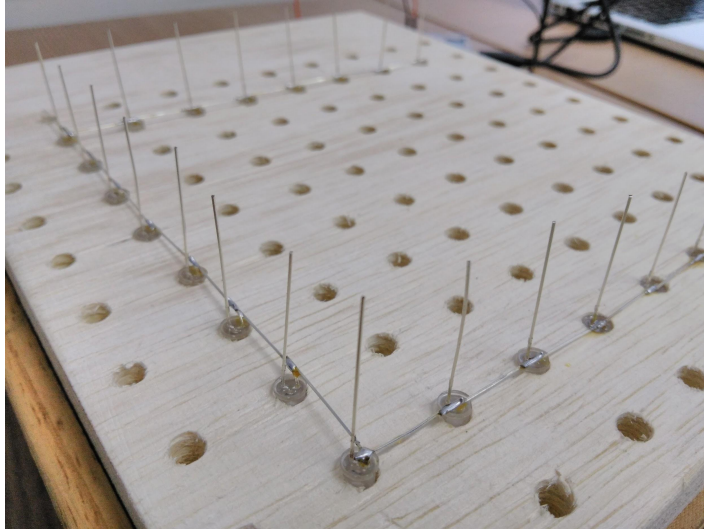# Joystick Schematic

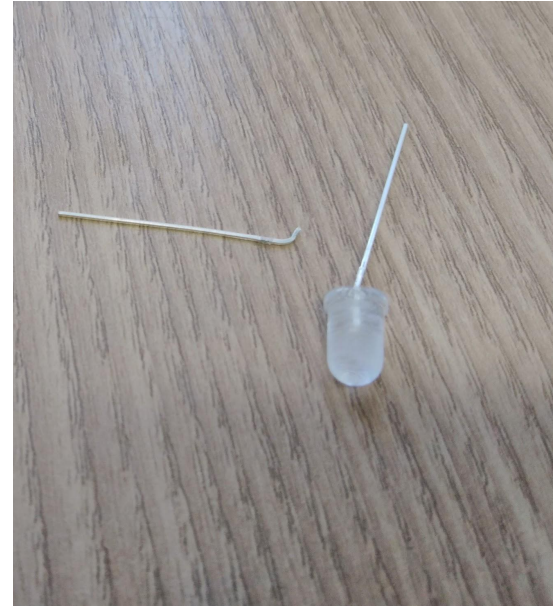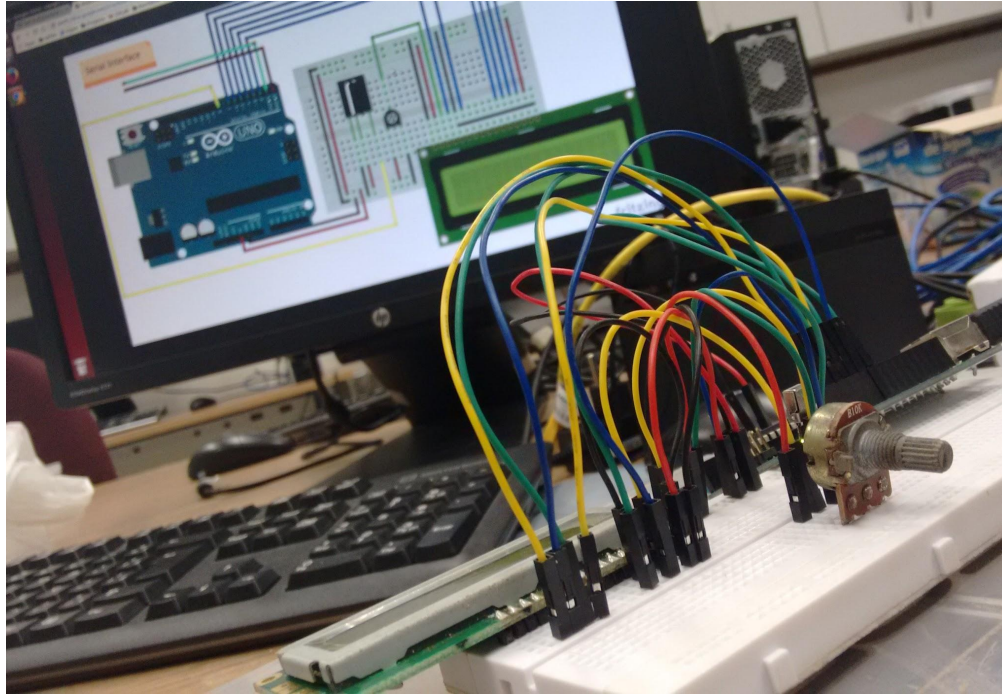IR Emitter

control of movements

Rotational control

fritzing

Current Status
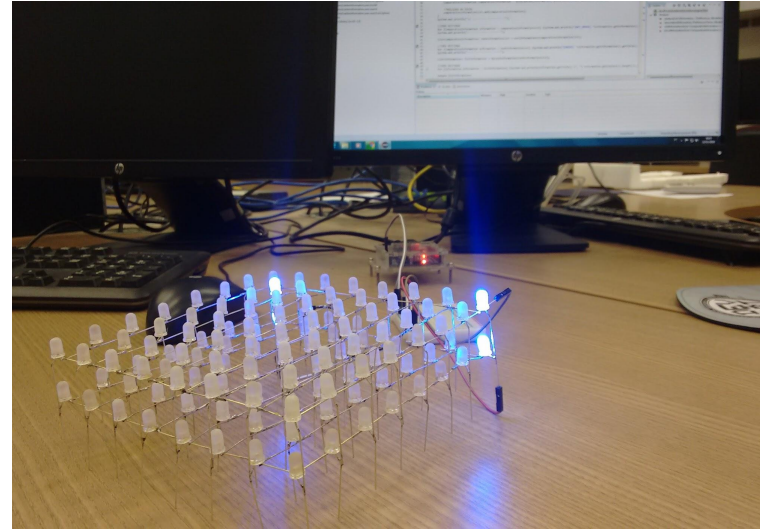
Current Status

Main difficulties

- Sanding and soldering 512 LEDs;
- Design the communication between the Joystick and the Console;
- Design the code of the game.

Workarounds

- Template for soldering the cube layers;
- A "fake" grinding machine to accelerate the sanding;
- RF module if the IR emitter doesn't work;
- We are still designing the game code.

Changes in the original project

Currently we didn't make changes on the original project, but some problems are occurring and maybe we need to change some components or part of the system architecture.

- Maybe we need to change the communication way between the Joystick and the Console;
- Maybe we need to change the Arduino UNO of the Console for the Arduino Mega.

Felipe Barbalho Rocha
Raul Silveira Silva