



Smart Coin Bank

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Project Description

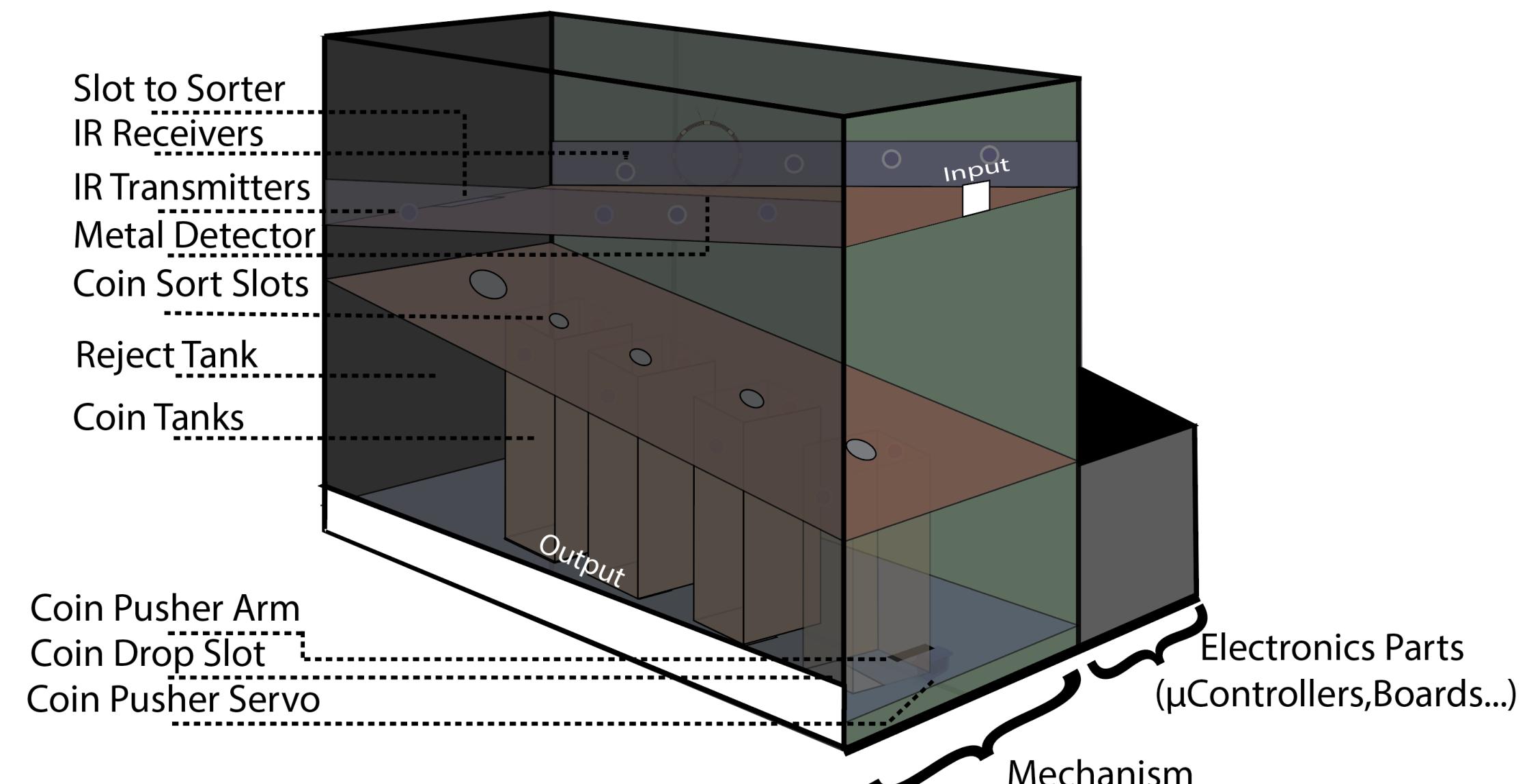


Figure 1: System Model

- We developed a smart innovative device which can detect, store and withdraw real Turkish coins .
- Smart Coin Bank is designed for practical coin collection and detection.
- It is constructed with Arduino and additional features are also made using IoT.

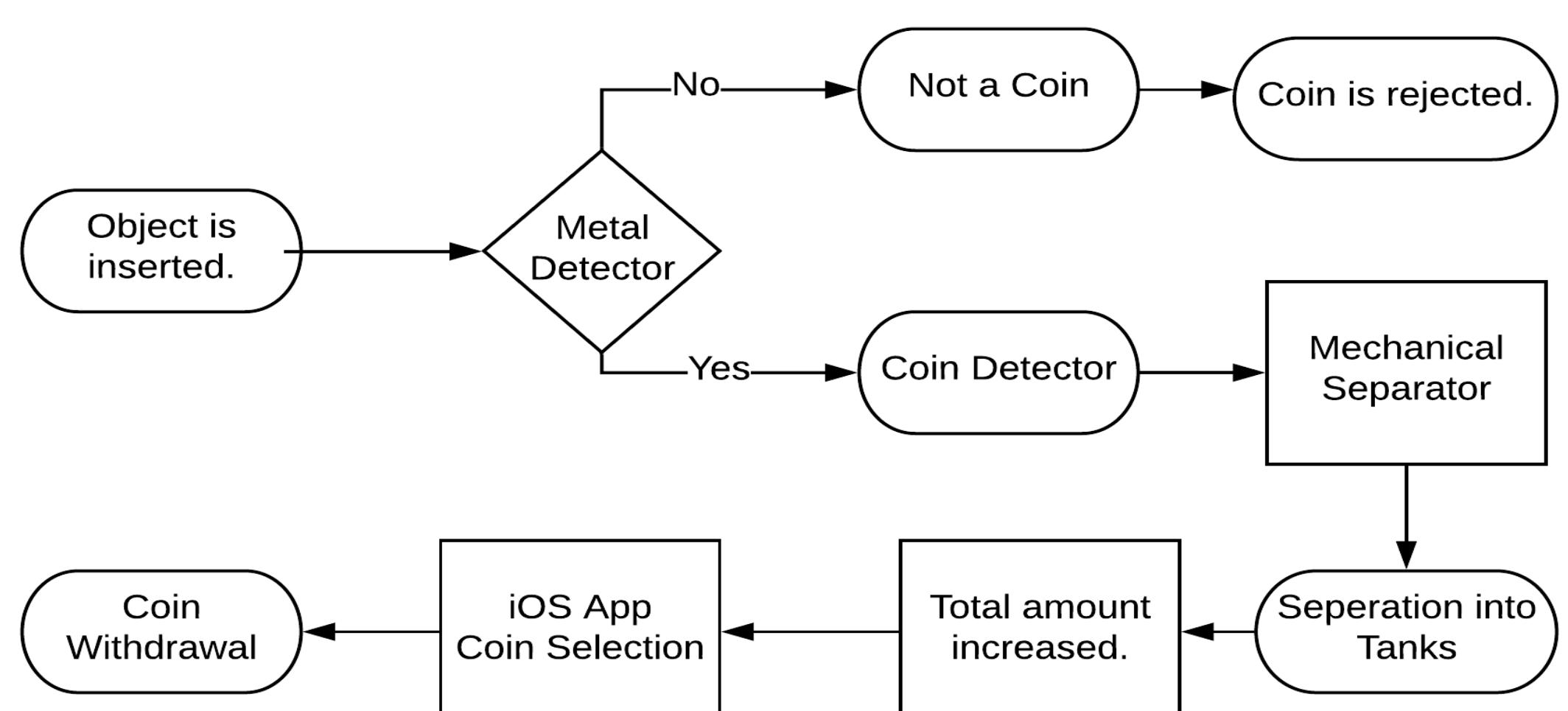


Figure 2: Process of the Smart Coin Bank

Software Design

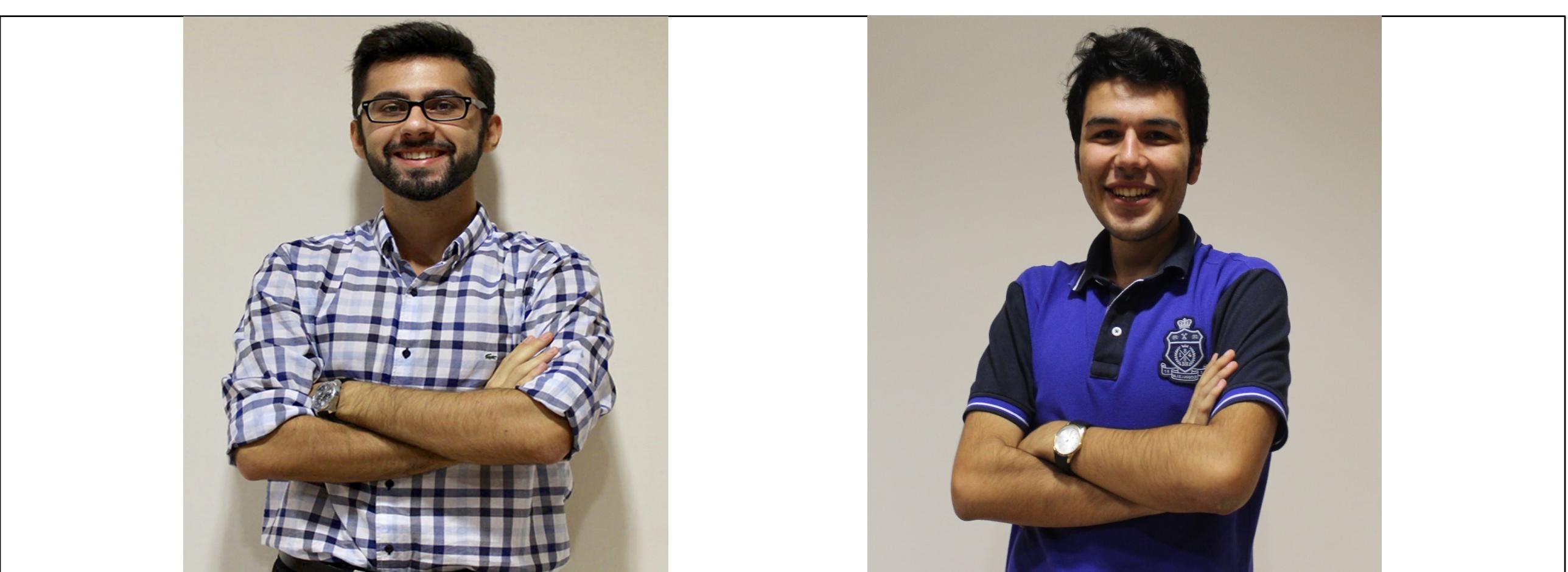
- Arduino Mega is generally used for IR circuits and data transmission. For the metal detection, Arduino Uno's timer is utilized .



Figure 3: Logo & iOS Application

- Smart Coin Bank is capable of doing different types of analyses:
 - Detecting the exact value of the coin.
 - Finding out whether the input is a metal or not.
 - Sorting the coins based on their values.
 - Withdrawing the coins by using the user's smartphone App.
- The bank is connected to Wi-Fi. The user can use the app to withdraw the money in any place without distance problem.

Group Members' Photo



Features

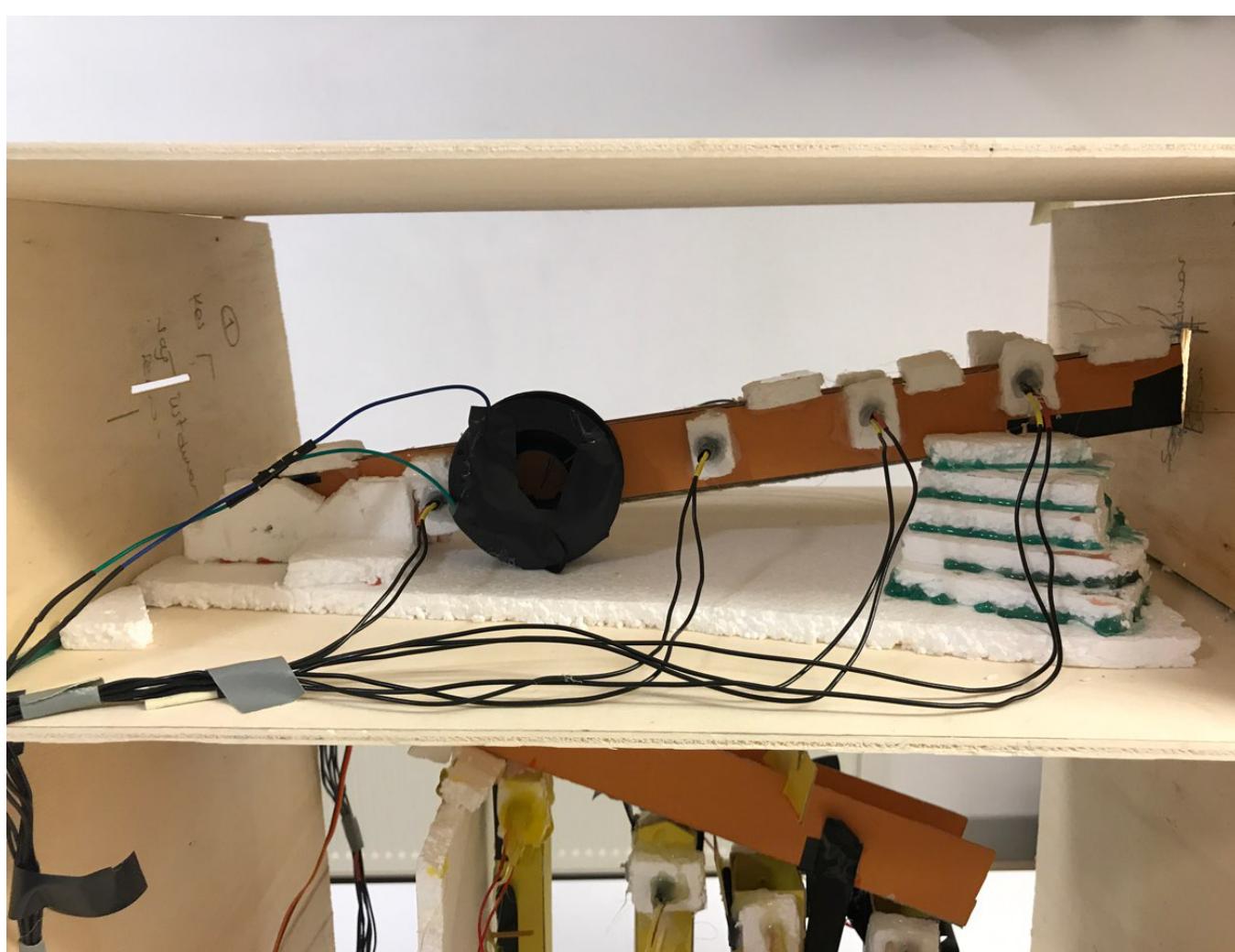


Figure 4: Some features are:
a. Coin & Metal Detection b. Coin Sorting c. Coin Withdrawal

Hardware Design

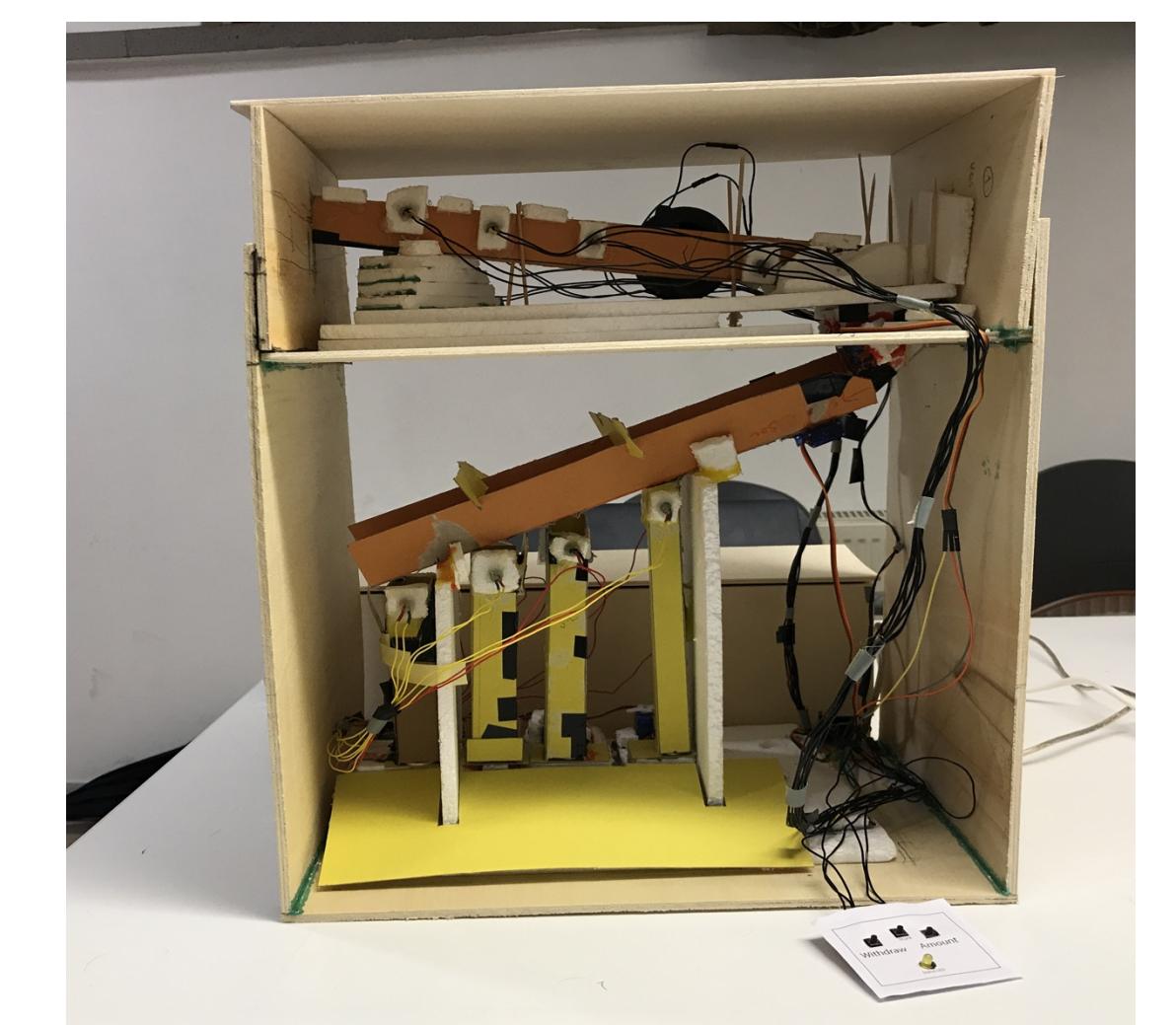


Figure 5: The System

- The aim of the project is to construct a smart storage device that can separate different types of coins and withdraw these real coins when it is needed.
- We soldered in order to avoid connection related problems.
- In the final design, we combined all features into the prototype.

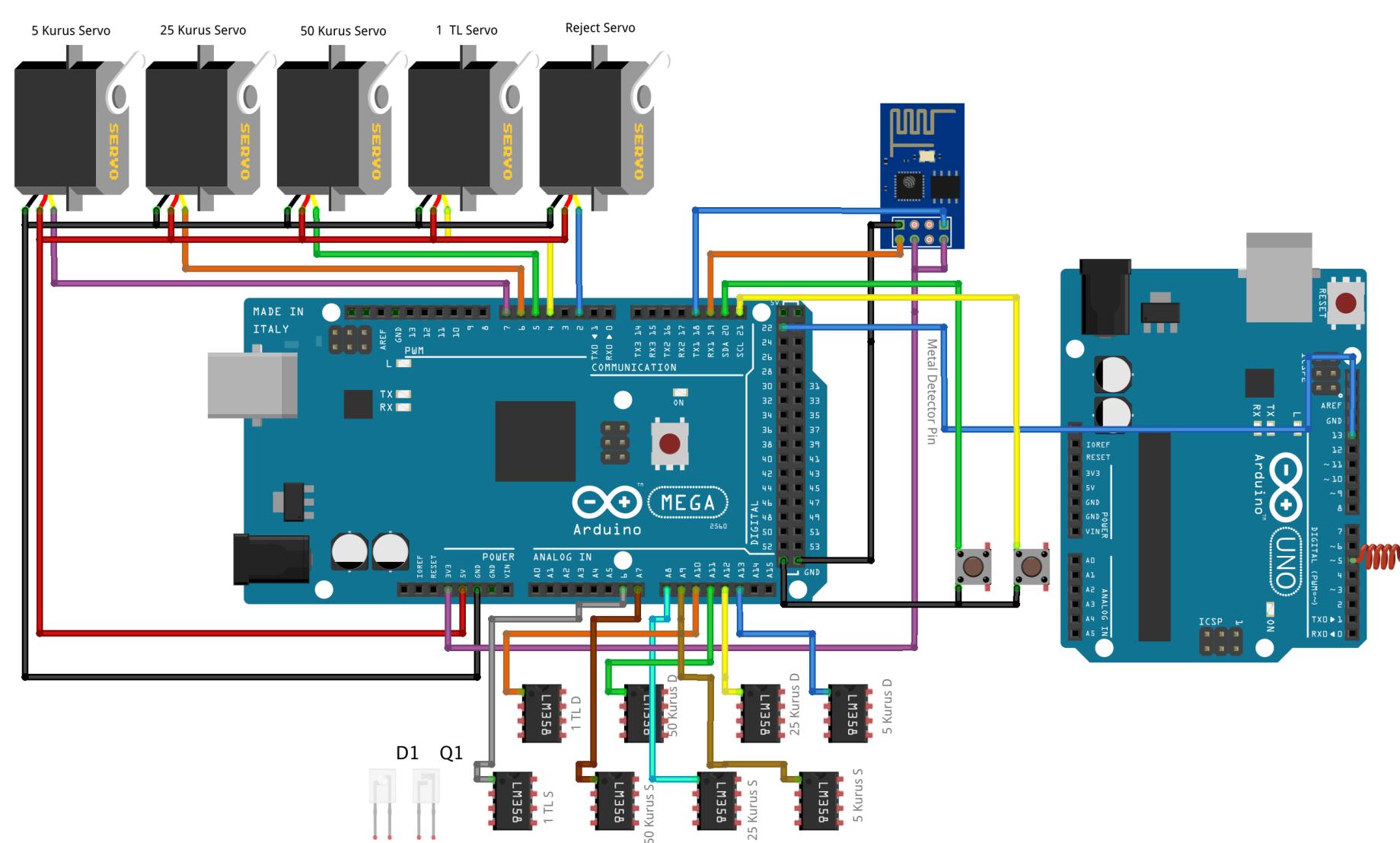


Figure 6: Schematic

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