

INTRODUCTION

HARDWARE

ANALYSIS

CONSTRAINTS

PREPAID WATER METER

**Future
Work**

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INTRODUCTION

A prepaid water meter come with payment system based on IOT technology (Internet Of Things). It controls the water flow based on the customer balance which stored in Firebase, The payment information will be sent to the cloud database using IOT technology with raspberry pi

**Arduino
Mega 2560**

**ESP8266
NodeMCU**

**Raspberry
Pi3 Model
B+**

HARDWARE

many hardware tools are used
to develop this project:

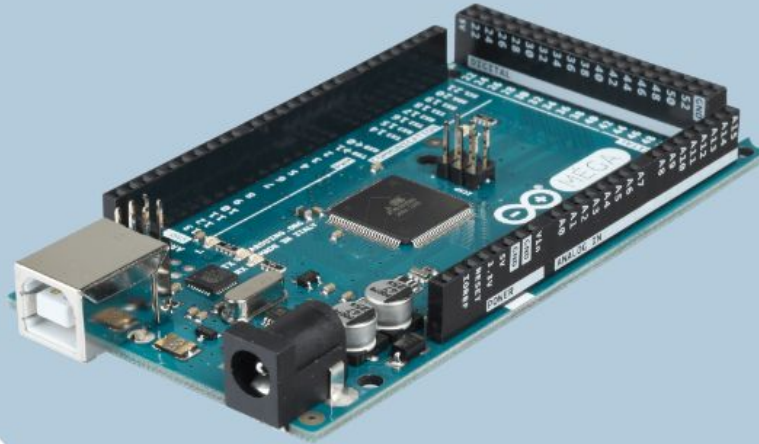
**ESP8266-
01**

**RFID-
RC522**

**Water
Flow
Sensor**

**Solenoid
Valve**

Arduino Mega 2560



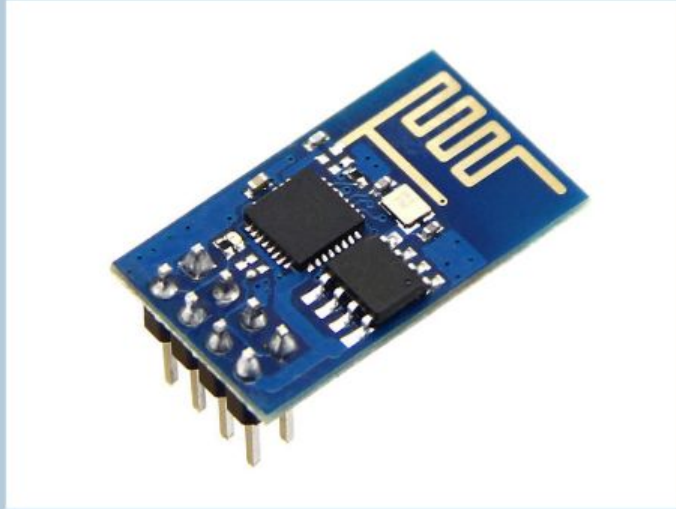
ESP8266 NodeMCU



Raspberry Pi3 Model B+



ESP8266-01



RFID-RC522



Water Flow Sensor



Solenoid Valve



Home

ANALYSIS

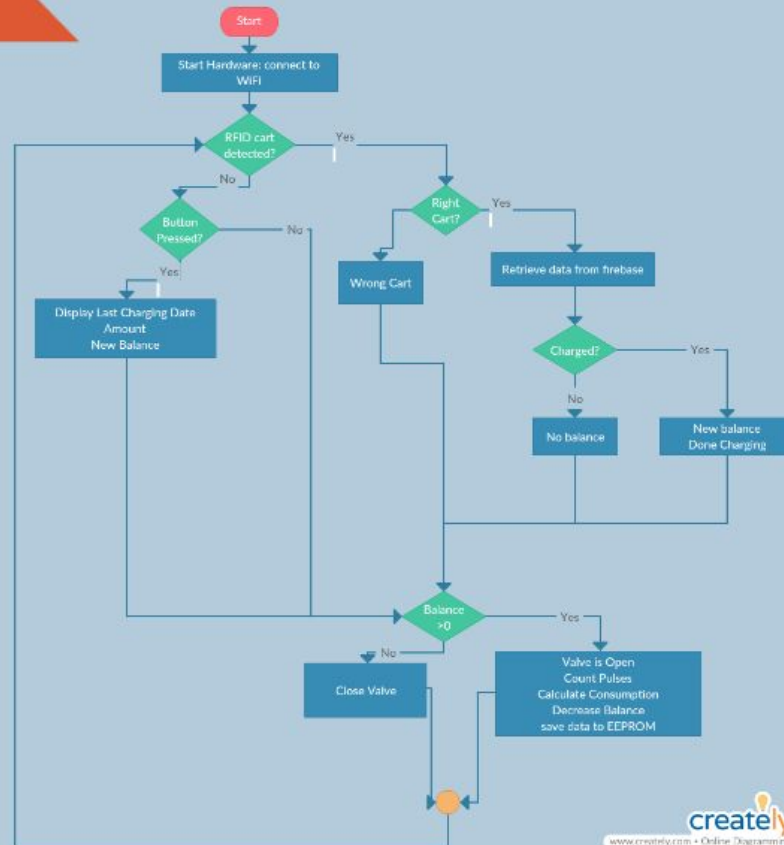
Chrger

Broker

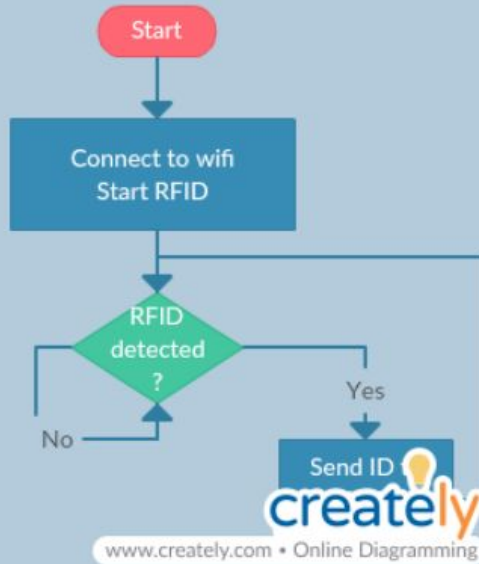
*The system contain
two parts:*

- 1. Home part.*
- 2. Charger part.*

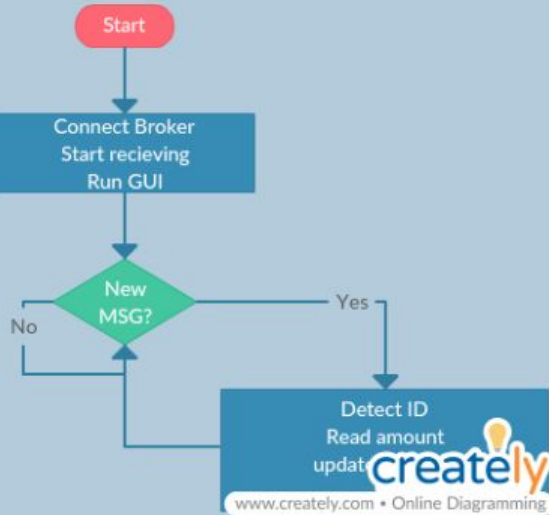
Home



Charging



Broker



CONSTRAINTS

- 1-Unfamiliarity with requires tools at the beginning.
- 2-Handling with electronic tools.
- 3-fitting parts with each-other.

Future Work

- 1-building a mobile app with using iot to get data from water meter
- 2-Improve the system by adding more information to display it
- 3-control the water flow through mobile by controlling the valve.