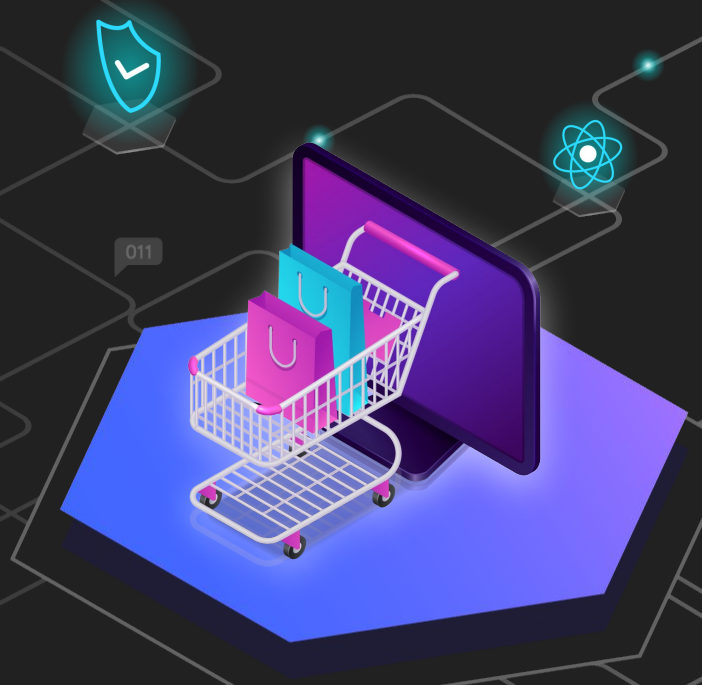
# SMART SHOPPING CART




Presented by:

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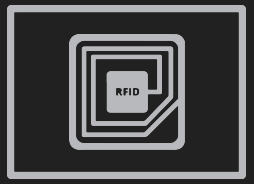
# AGENDA


General Overview




Methodology and Working

Why this topic?

Outcomes

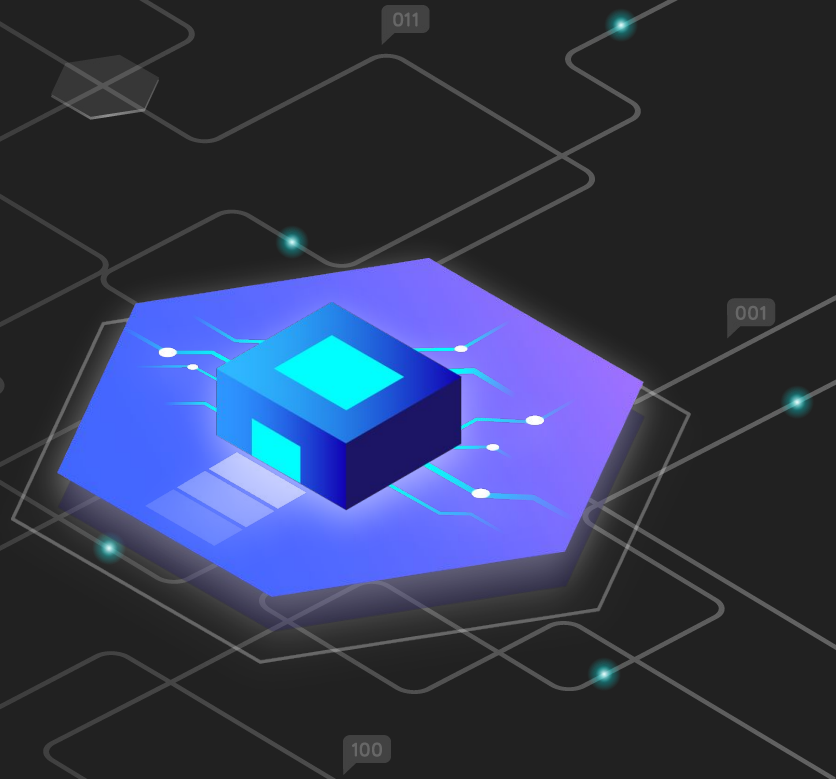
Problem Statement

Future scope

# GENERAL OVERVIEW

Shopping for essentials or in general is time consuming as it involves decision making.
To make this experience more fruitful, IoT is the best way to approach the problem:

- Scanning the product and billing
- Weight sensors and buzzer to avoid mistake/dishonesty



# WHY THIS TOPIC?

- Collecting databases in order to keep stock ready according to the demand
- To reduce manual work
- Avoid crowd gathering
- Get faster, easier and efficient service

*Current service provided in retail store*

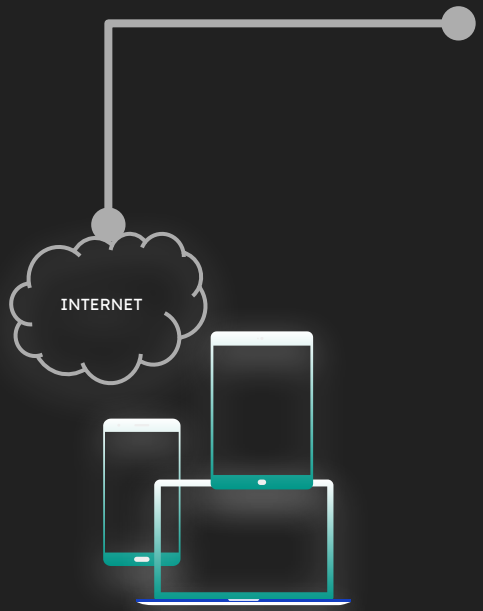
# PROBLEM STATEMENT

To create a self-serviced and automated shopping experience using IoT

# METHODOLOGY AND WORKING

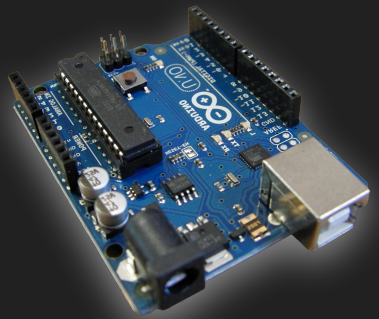
# MAIN ARCHITECTURE OF THE PROPOSED SYSTEM

Centralized Server

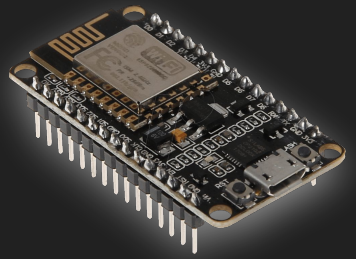



Personal Device

Smart Shopping Cart



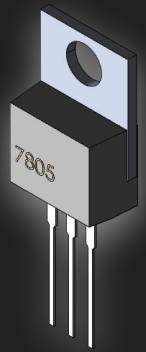
Arduino UNO



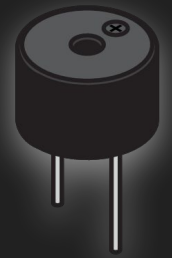
Node MCU - ESP8266

Battery

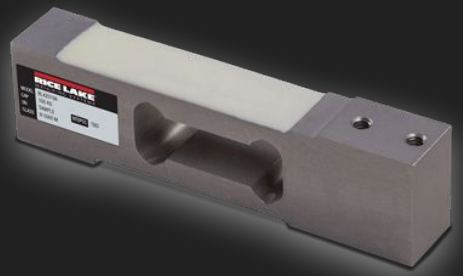
USB Cable



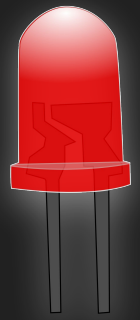

LM7805



Buzzer




Load Cell - HX711



LED Light

Barcode Scanner

ARDUINO™

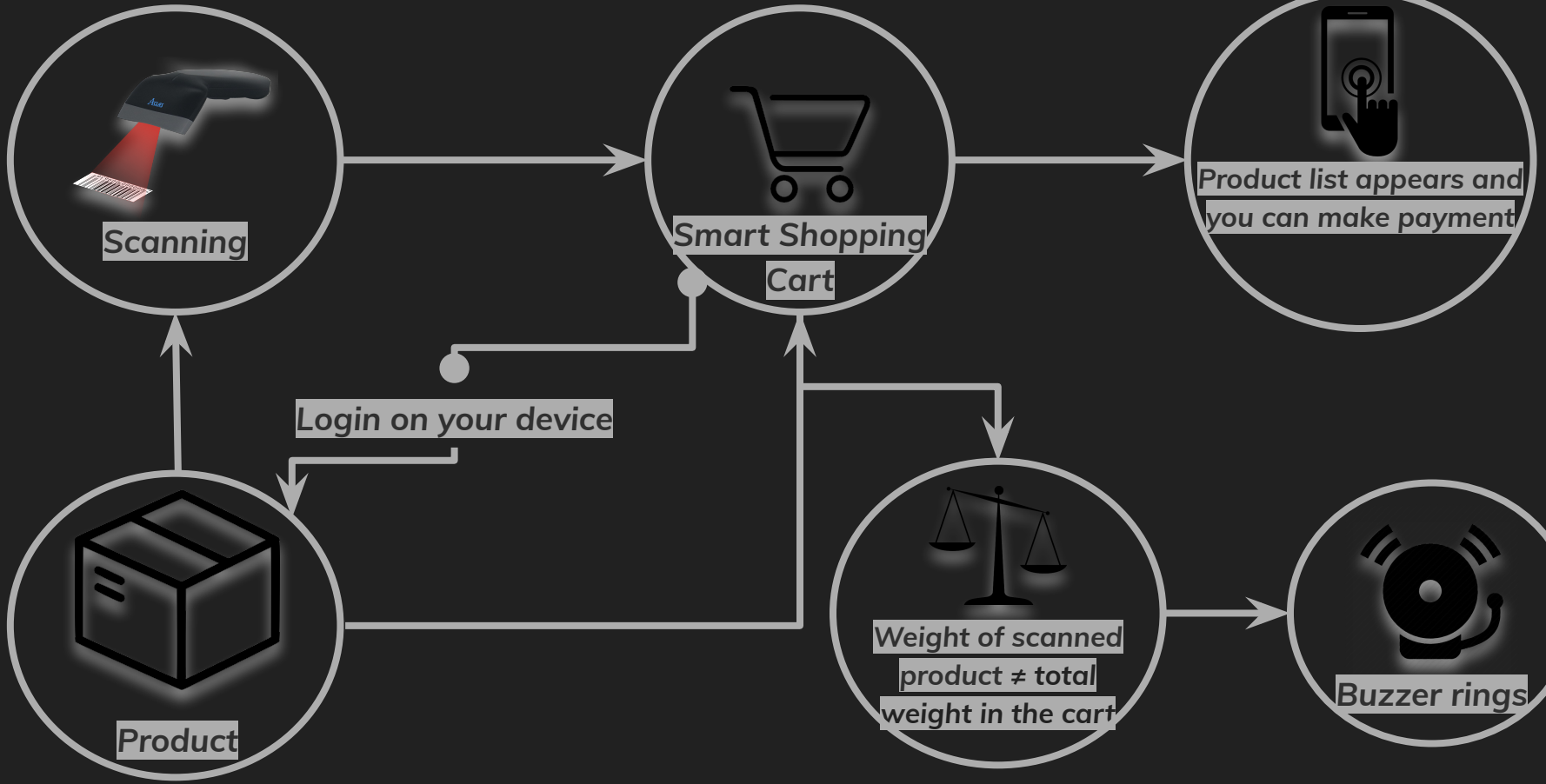
Arduino IDE

Blynk

Blynk

Smart Phone

# AN OVERVIEW OF THE SYSTEM



# PSEUDO CODE

```
In setup ()
    Set Pin Mode for Led and Beeper
    Connect to the Wifi network
    Start the Server
    In loop ()
        Check if client is connected
        If not connected return.
        Otherwise
            ReadWeight()
            Output (weight) //As HTTP response
            Read request if any
            If request is _BEEP=ON‘
            Set Beeper to HIGH
            If request is _BEEP=OFF‘
            Set Beeper to LOW
```

```
In ReadWeight ()
//to read weight from serial input
While (1)
    Do
        For i=0 to 22
            If Serial data available
            then
            Read serial data into an
            array
        End for
        Extract weight value from the
        array of data
End while
```

# OUTCOMES

## BENEFITS:

- Improve the shopping experience for all the customers of the store
- Increase efficiency of the exit process
- Eliminates a long waiting queues at the exit counter
- Reduces labor cost

## FEATURES:

- User interface with LCD monitor for user inputs
- Automated shopping items detection system
- Automated communication system to make payments at counter or via app
- Automated data formatting in case of item deletion or additions and to organization the shopping in a systematic way.

# FUTURE SCOPE

- Fingerprint scanner or face recognition feature can be introduced to make the system more advanced.
- Guiding shoppers to the required items in the facility.
- Partner shopping by sharing the shopping list via the application.
- Keeping record of previous shopping list and providing during the next.
- Loyalty points and offers can be provided to the regular clients

# REFERENCES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# THANK YOU!