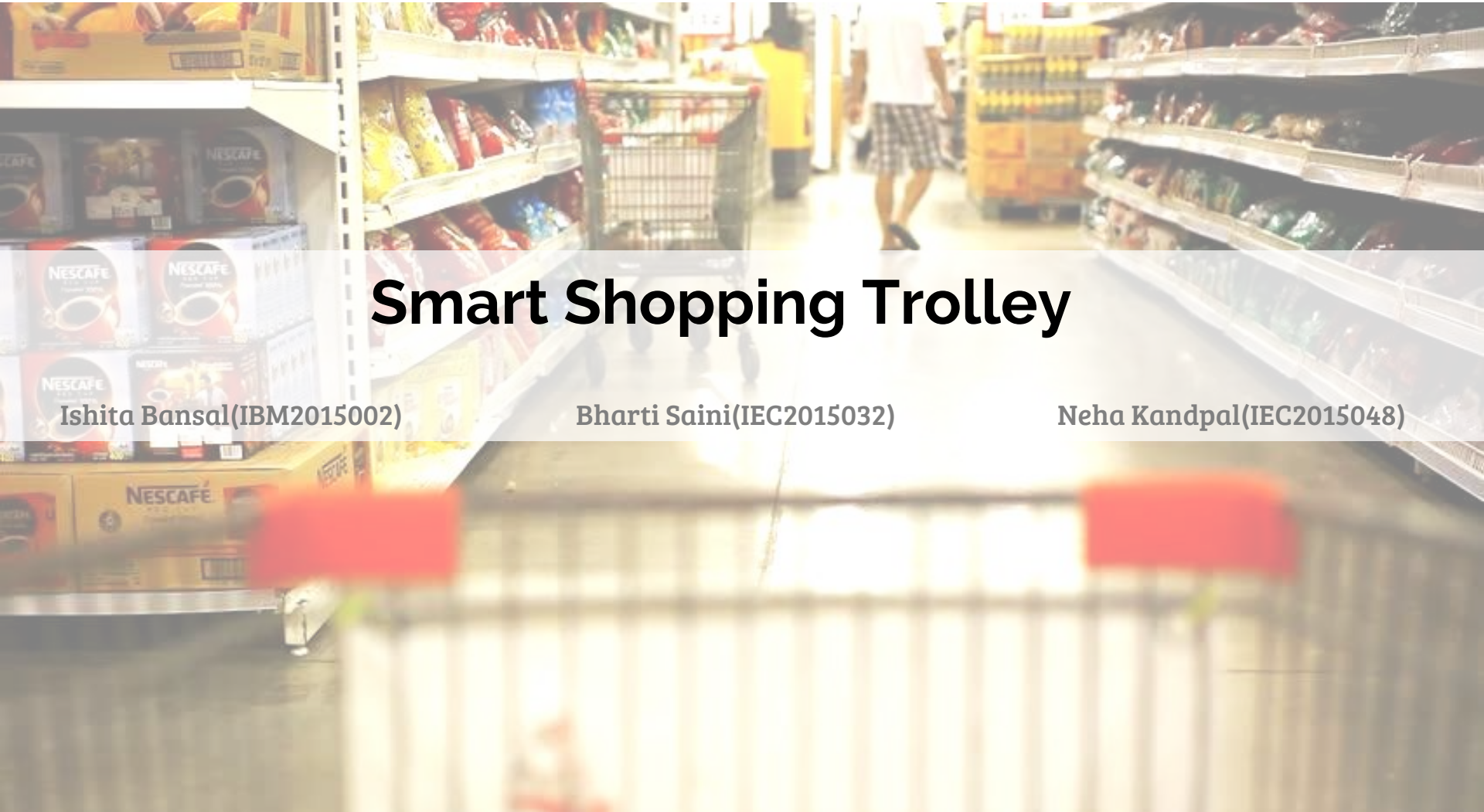

Smart Shopping Trolley

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OBJECTIVE

To reduce and eliminate time taken in billing counter in super markets by designing an Intelligent Shopping Trolley which uses QRcode scanners to allow users to self-checkout and increase productivity time.

PRESENT SHOPPING MARKET SCENARIO

- Shopping trolley necessary tool for shopping in supermarkets or grocery stores.
- Shopping trolleys may not be kept at the right place after being used.
- Inconvenient for customers to search for desired products in a supermarket and wait in queues.

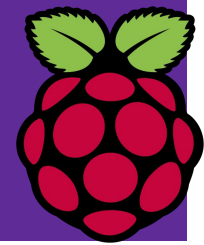
Key features of our projects

Reduce the chaos in the shopping mall .

Saves the time to stand in Queue

Shows the total amount of products bought

Easy for customer to shop under budget



Key features

Reduces manpower required in billing section.
This can reduce the expenses incurred by the management.
Users can be aware of the total bill amount during the time of purchase.
Reduces time spent at bill

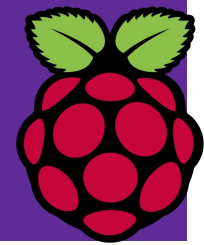
Smart trolley

Hardware required

1. Raspberry pi 3
2. Webcam
3. Display
4. PIR Sensor
5. Customised Trolley

Software Required

1. SQLITE
2. Python
3. Gpio zero



QR code

Scanned QR code

Webcam

Scanned file sent to raspberry pi

Database server

Raspberry Pi

Send data to server

Check if the product in or out

PIR Sensors

Display the total amount

Display

Fig 2 : Schematic Diagram of Smart Shopping Trolley

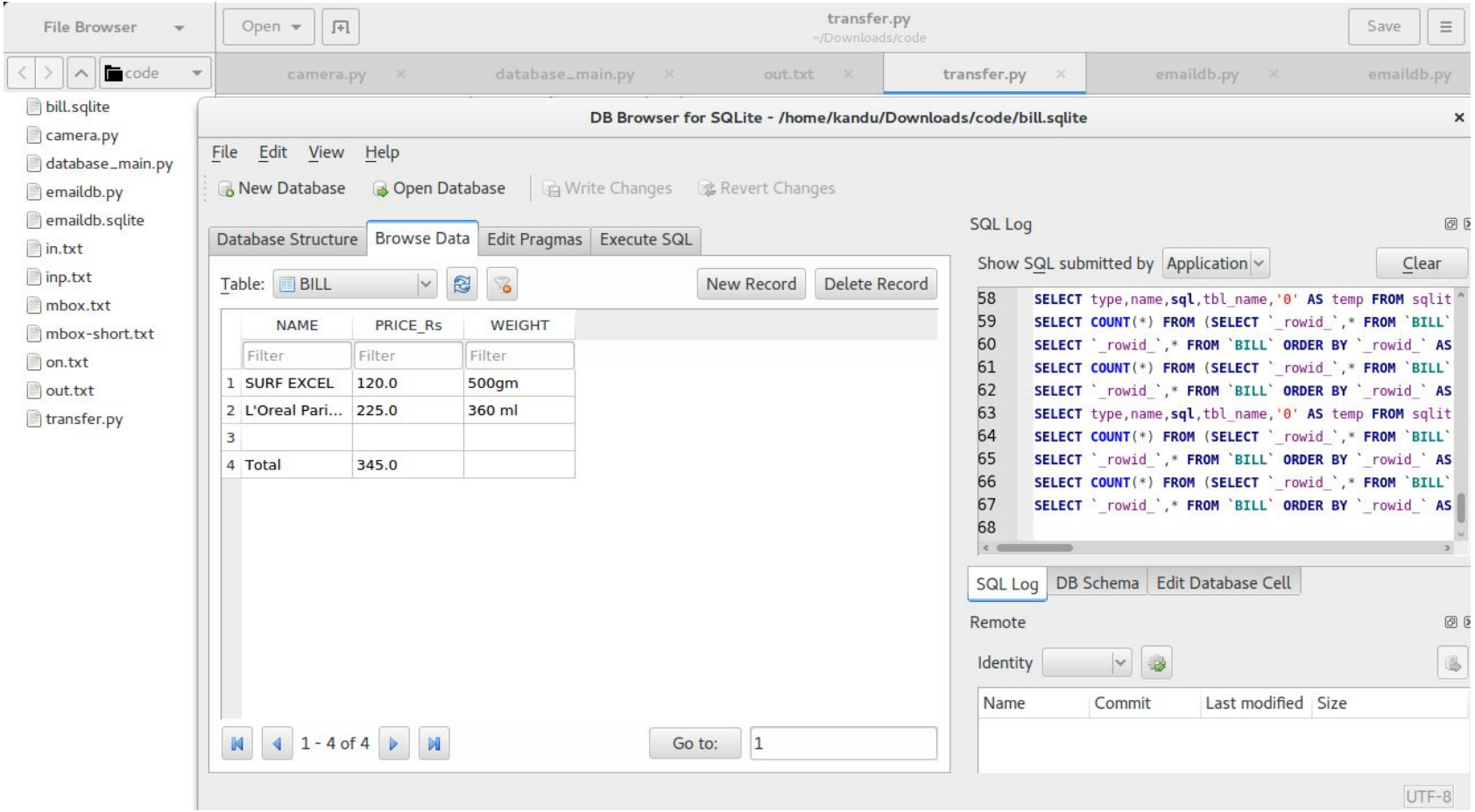


Fig no. 3 :- Database produced bill of the scanned products

Goal of Our project

Connecting Raspberry pi to the main server.

Work upon sensors to enable adding and removing items from the cart.

Updating the database.

Increase the safety measures to avoid theft.

Goal for Future

Adding more features so as to ensure security and safety measures.
Implementing the trolley with the simultaneous help of PIR sensor .
Making the trolley more smart by making it autonomous.

T

HANK YOU