**ELECTRONIC SHOPPING TROLLEY IN SUPER MARKETS**

**AIM:**

The main aim of this project is to design an automatic trolley system in super market.

**PURPOSE:**

The purpose of this project is to reduce the manual work by this automatic trolley system in billing. This helps the customers as well as the shopkeepers in a useful way.

**TROLLEY SECTION:**

**LCD DISPLAY**

**POWER** **SUPPLY**

**MICRO**

**CONTROLLER**

**(AT89S52)**

**RFID READER**

**KEYPAD**

**MAX 232**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

Now a day's every system is automated in order to face new challenges. In the present days Automated systems have less manual operations, flexibility, reliability and accurate. Due to this demand every field prefers automated control systems. Especially in the field of electronics automated systems are giving good performance.

In this project we use RFID tags, that tag contains information like actual cost, discount, manufacturing date, expiry date of the product. Whenever the person keeps the products in the trolley, the products has individual tags, these tags are read by the RFID reader which is attached to the trolley and it will be given to the microcontroller. Here the billing is done by summing the individual product cost. The products can be removed using the pre intimation using the keys. So the total products cost can be calculated. That information will be displayed in LCD. Thus it becomes easy to bill the amount in super markets.

**SOFTWARE TOOLS:**

1. Embedded C
2. Keil IDE
3. ISP

**HARDWARE COMPONENTS:**

1. Micro Controller(AT89S52)
2. Power Supply
3. RFID Reader.
4. MAX 232
5. LCD
6. Keypad

**RESULT:**

Hence we have designed and implemented an automatic trolley system for easy billing in super markets.