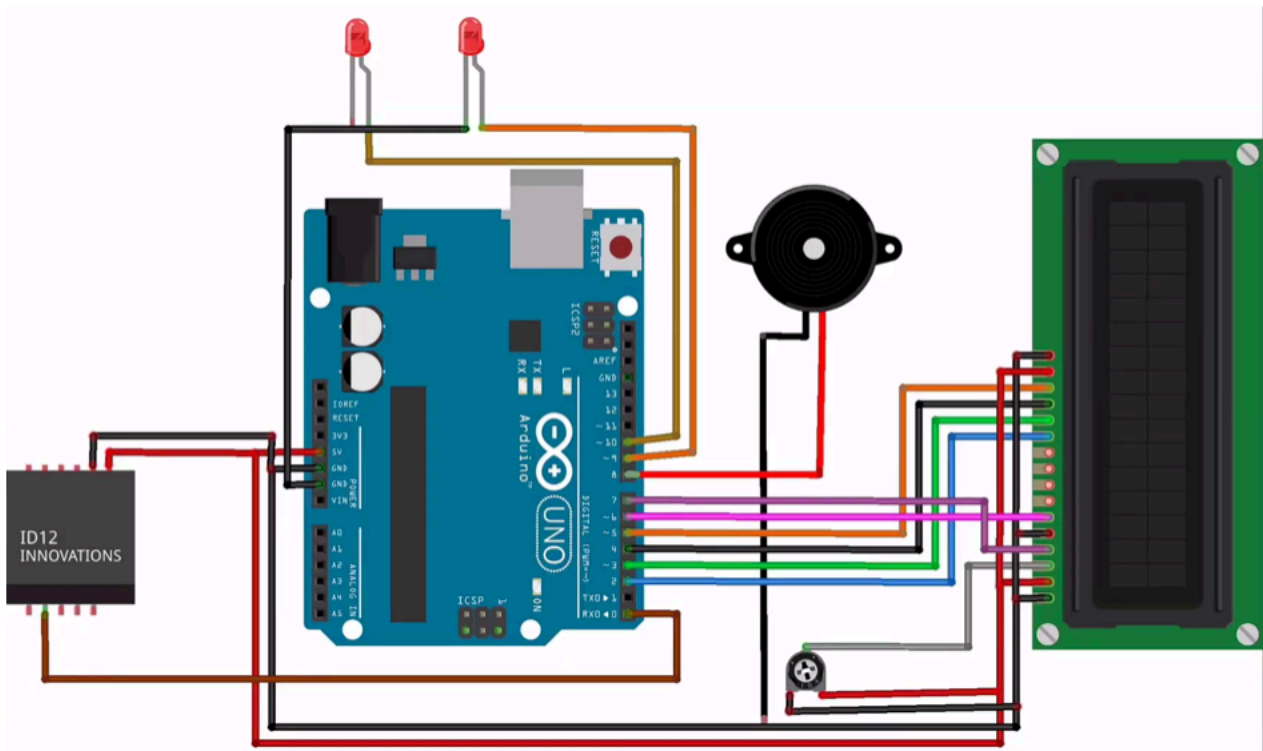


CIRCUIT DESIGN



1. RFID EM-18 Module:

- Function: Enables RFID communication for item identification.
- Purpose: Swift and accurate identification of items placed in the trolley.

2. RFID Cards:

- Function: Provides user authentication.
- Purpose: Ensures secure access to the smart trolley, personalizing the shopping experience.

3. Buzzer:

- Function: Issues alerts and notifications.
- Purpose: Enhances user assistance by providing audible feedback during specific events or actions.

4. PCB Board:

- Function: Acts as the central connectivity hub.
- Purpose: Ensures seamless communication and interaction between various components.

1. Potentiometer:

- Function: Provides user control or input.
- Purpose: Allows users to adjust settings or parameters based on their preferences.

6. Arduino Uno:

- Function: Serves as the central processing unit.
- Purpose: Controls and coordinates the operation of all components, processing data and executing commands.

7. LCD Display:

- Function: Provides a visual interface for real-time information.
- Purpose: Displays relevant information to the user, such as item details, total cost, or system status.

8. LEDs (Light Emitting Diodes):

- Function: Indicate status or provide visual feedback.
- Purpose: Offers visual cues to the user about the system's operation, such as successful RFID identification or low battery status.