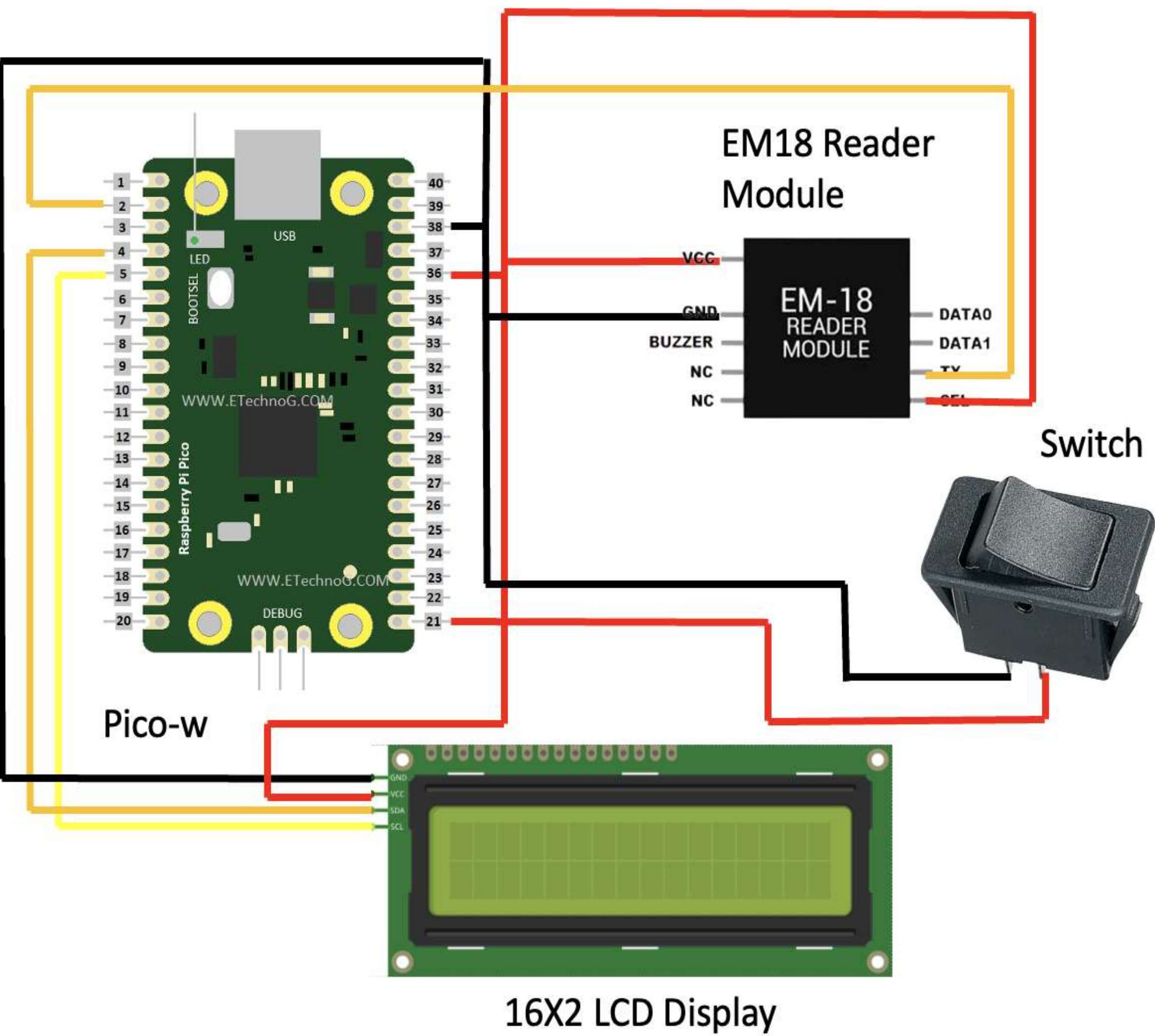




# Fashion Mate: Embedded Outfit Recommender for Fashion Enthusiasts

Design an integrated system utilizing the Pico W board, EM-18 reader module, RFID cards, and an LCD display to create a secure access control system for a workspace. Implement Pushbullet integration to send real-time mobile notifications upon successful or unauthorized access attempts. Additionally, integrate a machine learning component to offer personalized outfit recommendations



## Circuit

**METHODS:** To commence, power up the system for initialization. Subsequently, utilize the EM18 reader module to scan an RFID card, facilitating the addition of a product. Upon successful addition, receive a notification presenting the current bill and suggest additional products through an ML-model sent to your mobile device. If a product needs removal, perform a rescan of the RFID card. To conclude, upon system shutdown, receive the final bill summary..

16X2 LCD DISPLAY

EM18 Reader Module

Pico-W

RFID Cards

## Components

## TEAM :

- Dasari Sai Samrat
- Gudivada Rohanlal
- Nadimpalli Ujwal Srimanth
- Neeli Uday Kumar
- Sagiraju Harinadha Raju

## Co-Ordinator/Mentor:

- Dr. VISHNU S

**SUMMARY:**The project integrates UART for mobile alerts and employs RFID scanning for swift operation. Additionally, it incorporates an unsupervised machine learning algorithm to suggest outfits based on selected products. Upon each addition or deletion of a product, the 16x2 LCD showcases the updated bill, while notifications containing both the updated bill and outfit recommendations are dispatched to the mobile device. This entire process is implemented within the THONNY IDE.