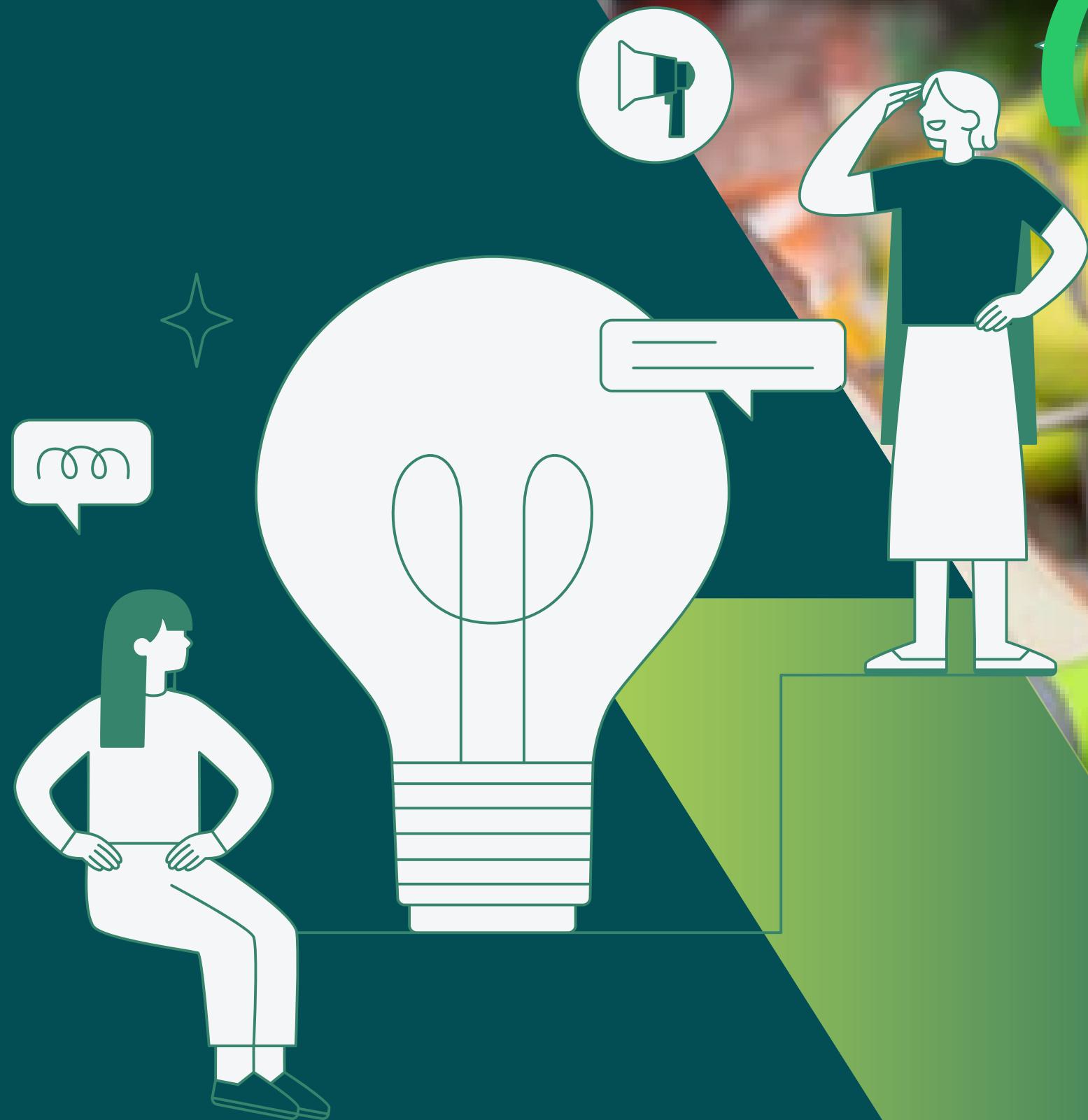


SMART TROLLEY (E-CART)



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WHAT IS A SMART TROLLEY(E-CART)?

- The SMART TROLLEY acts as a virtual shopping assistant, assisting customers in navigating the store and offering extra product details. Additionally, it meets individual requirements by accommodating personal wheelie trolleys.

ABOUT.

The SMART TROLLEY, a smart trolley designed for consumers who shop in-store is a solution for more efficient shopping.

More and more supermarkets are going out of business because of online shopping and they need a solution that will make customers want to shop in-store yet again hence we came up with an idea to innovate on an already existing product that has not gotten enough recognition yet.

The SMART TROLLEY has a lower base that allows customers to easily put or remove personal shopping bags. Its Operating System will be made easy to operate for older people to not have trouble using it since they are mostly the ones who shop in-store.
The target audience is the young adults to older adults.

COLOUR PALETTE.

The Colour Palette used in these slides is as follows:

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APPLICATIONS



The SMART TROLLEY can be applied in small, medium and large supermarket stores. It also can be adapted for other retailers such as clothing stores or shopping centres.

Components of the SMART TOLLEY.

- Atmega 328 controller
- IR sensor
- Ultrasonic Sensor
- Motor Drivers
- DC Motors
- Robot Chassis
- Regulatory circuitry
- PCB Board
- Resistors
- Capacitors
- Transistors
- Cables and Connectors

INNOVATIVE FEATURES TO BE INCORPORATED

1. Inventory management

- The trolley could keep track of the items placed inside, allowing shoppers to view their current inventory.
- Alerts could notify users when they forget to pick up an item from their shopping list.



2. Interactive Display:

- A touchscreen display on the trolley could provide personalized recommendations, recipes, or nutritional information for products
- Shoppers could explore promotions, product details, and related items

INNOVATIVE FEATURES TO BE INCORPORATED

3.Language Translation:

- For international travellers or non-native speakers, the trolley could offer real-time language translation.
- It would enhance communication and understanding during the shopping experience.

4. Navigation Assistance:

- The trolley could guide shoppers to specific aisles or products using built-in maps or augmented reality.
- It would help users find items efficiently, especially in large supermarkets.

INNOVATIVE FEATURES TO BE INCORPORATED

5. Barcode Scanning and Price Comparison:

- Shoppers could scan barcodes using the trolley's integrated scanner to check prices and product details
- The trolley could compare prices across different brands for efficient shopping



INNOVATIVE FEATURES TO BE INCORPORATED

7. Personalized offers and discounts:

- The trolley will be able analyze shopping patterns and offer personalized discounts or coupons,
- Users would receive relevant promotions based on their preferences

8. Health Tracking

- Integrated sensors could monitor heart rate, steps, or calories burned during shopping
- Shoppers could receive health-related insights or recommendations

INNOVATIVE FEATURES TO BE INCORPORATED

9. Wireless Charging Station:

- The trolley could include wireless charging pads for smartphones or other devices.
- Shoppers could charge their gadgets while shopping.

10. Social Interaction

- The trolley could connect with other shoppers' trolleys for group shopping or shared lists.
- Users could send messages or share recommendations with friends or family.





Have a question?

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thank
you