Shopping Companion

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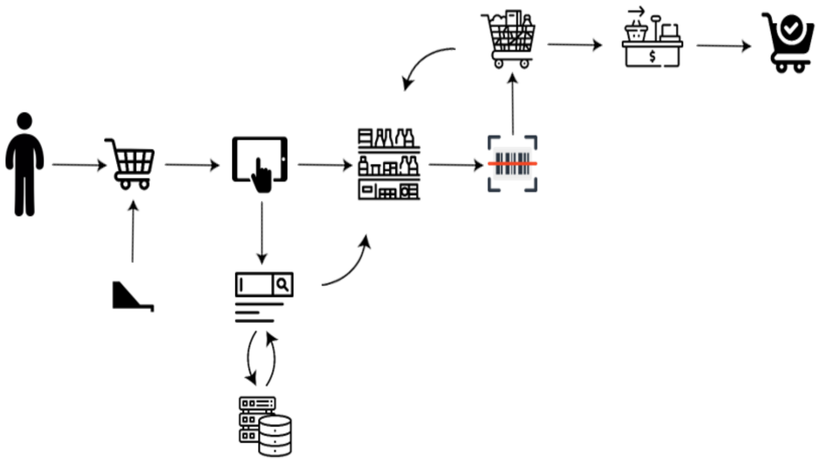
PROBLEM STATMENT

Nowadays, shopping at supermarkets is getting longer than needed. Checkout lines are taking up most of our time and searching for a specific product is also getting more challenging as supermarkets grow. That is why we want to develop a shopping companion that solves both problems by making the customers shop faster.

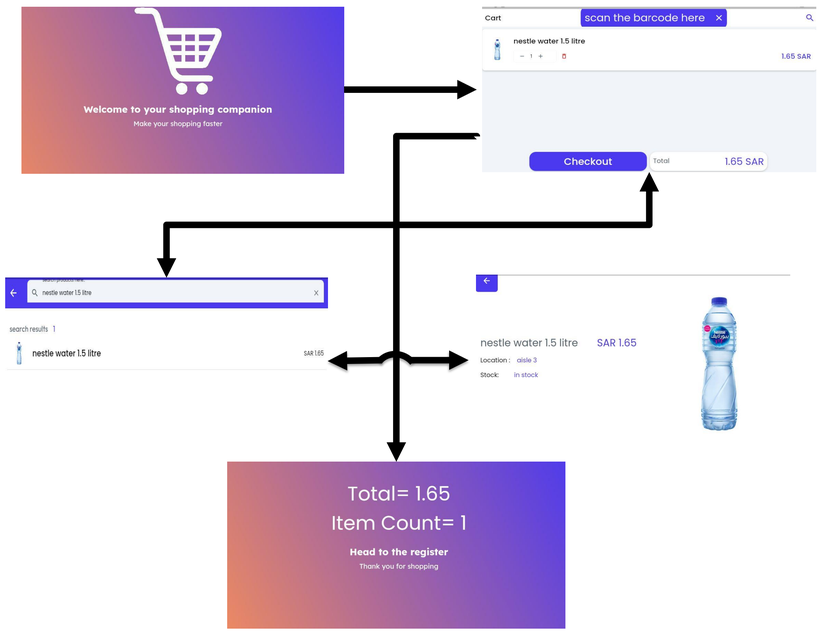
TARGET SPECIFICATION

- Two steps to checkout
- Two steps to connect the device
- Three steps to locate a product using the search feature
- Device dimensions are 18.5cm x 11cm x 11cm
- Device weight 4 Kgs

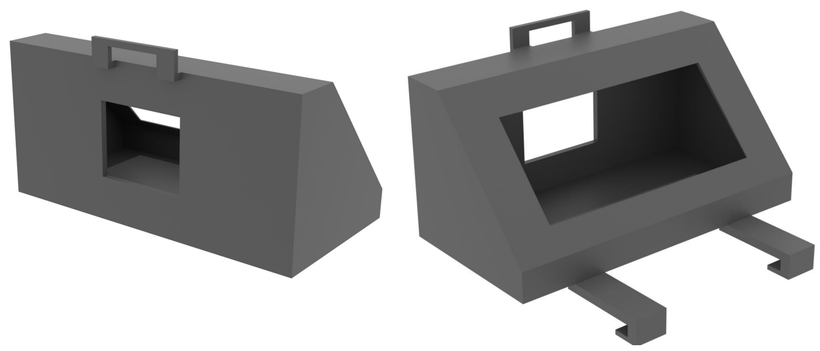
SYSTEM FUNCTIONALITY



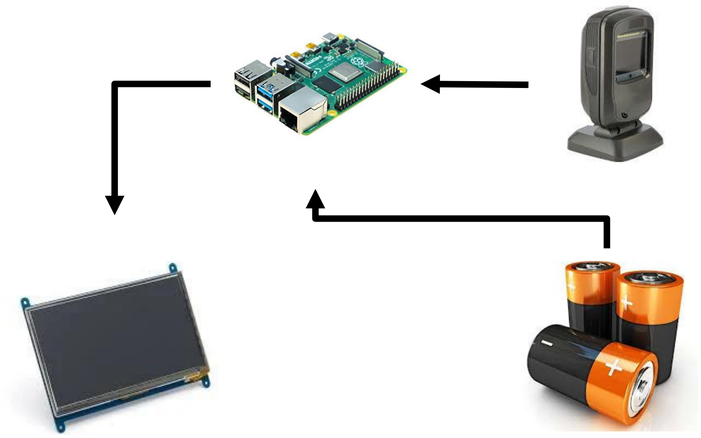
SOFTWARE



PHYSICAL SHPAE



HARDWARE



VALIDATION

- The specifications associated with the software (steps to checkout & locate a product) has been met and are demonstrated in the software prototype design part.
- The weight specification has been achieved and exceeded exceptions by more than 60% reduction.
- The size target specification was met according to the prototype dimensions that was provided.
- The steps needed to connect the device was tested by placing the device on an actual cart and performing a real-life test to eliminate any difficulties.

CONCLUSION

Our goal is to improve the shopping experience at supermarkets for customers by reducing the time spent checking out, and the time needed to look for products.

We achieved this by designing a portable smart shopping companion that act as an augment to regular shopping carts. It will the customer scan and track products, also grant them an easy and fast checkout experience.