SupermarKit **(Group3-17)**

After one-semester hard work, our group proudly presents a product named 'SupermarKit'. It is a device which can be integrated on the supermarket trolley to facilitate the supermarket shopping and make it much more convenient and enjoyable. The main purpose of our project is to solve those long queues at the checkout counters. It has four major functions, and they are searching items, scanning prices, weighing as well as self-cashier which all can be simply performed on the trolley. Our device is light, small and compact. It looks very neat and has a friendly user interface. Just click a few buttons; a customer can perform any of the four functions at anytime during his/her shopping. The most important thing is he/her is no longer needed to wait to checkout anymore.

As labeled on the following figure, 'SupermarKit' has a few major components such as a barcode Scanner, a weighing scale, a keypad for input, a LCD and a card reader for payment.

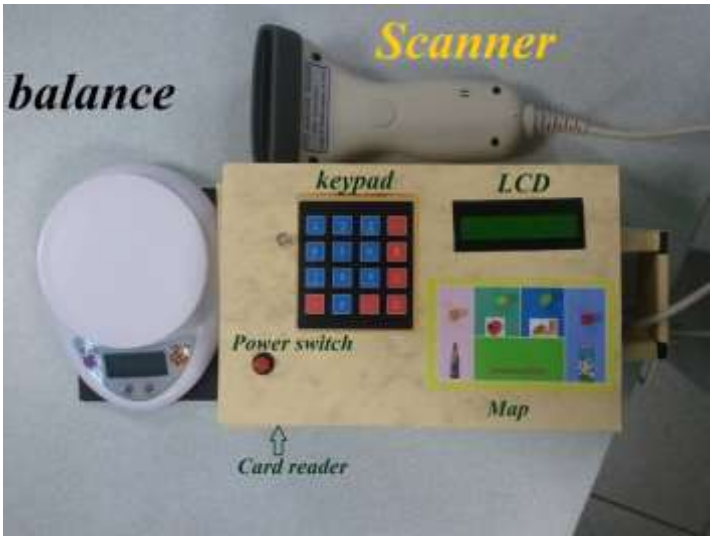

Fig 1.

1. Searching Mode: Customer needs to enter the name of the wanted item. The corresponding LED lights up otherwise error message "Sorry No Such Item" will be showed.
2. Scanning Mode: Customer scans the barcodes by themselves. LCD displays the item's name and price. The price will be added to the total automatically.
3. Weighing Mode: Customer needs to place the item on the weighing scale and choose the correct weighing mode. LCD will display the weight. After entering the corresponding item number, price will be added into the total.
4. Payment Mode: Customer just taps his/her member card at the side of the device. After keying the correct password, the account balance will be updated immediately.

The total cost of this device is about S$180.

Al though we faced all kinds of difficulties throughout this tough period, not only technical problems but also lacking of manpower, perseverance and encouragement from each other carried us through. We really hope that our project can be implemented into the market in the near future.