**Algorithm for LUAS Ticket System**

1. Customer is presented with the LUAS line map and asked to select a destination zone.
2. Customer between the options of a single or return ticket, for a child or adult.
3. Customer choses multiple tickets or to proceed.
4. Display fare amount due and payment options.
5. a. Calculate amount paid through coins or notes. If over amount due is entered dispense change. If appropriate change is not available in the ticket machine dispense as close as possible amount. b. If card is detected prompt customer to enter their pin number. If pin entered matches card pin request the fare amount from customer’s back account.
6. When payment is finalised print tickets. If card was method of payment eject card, play sound file and prompt user to take their card.