**Case Study 1**

Step 1 – Understand the problem

Assuming this is a staffed POS system, the users will be the staff working at the café. The POS system should be able to keep track of the menu items, prices, and quantity of items selected. Once the transaction is complete, via 2 different payment methods – Cash or Card – the system will be able to print a receipt that itemises the items ordered.

Features:

* Menu of all items that will be sold at the café
* Price tracking for each item
* Ability to keep track of quantities and calculate the price of a single item and multiple items
* Able to keep track of the entire selection
* Calculate discounts for (e.g. 5% discount for students)
* Ability to print a receipt showing subtotal, tax (10%), etc

Inputs and Outputs:

* System shows the menu showing all items
* User selects item
* Does selection already contain x item?
* What payment method will be used
* A receipt to be printed at the end of the transaction

Possible assumptions

* In today’s day and age, possible the café will only accept card payments
* The menu may need to be updated
* The menu is split into categories (Food and Drink)
* The POS system could be self-serve vs being used by a member of staff
  + If self-serve, can items out of stock be struck from the menu
* Are multiple sizes of items required?

