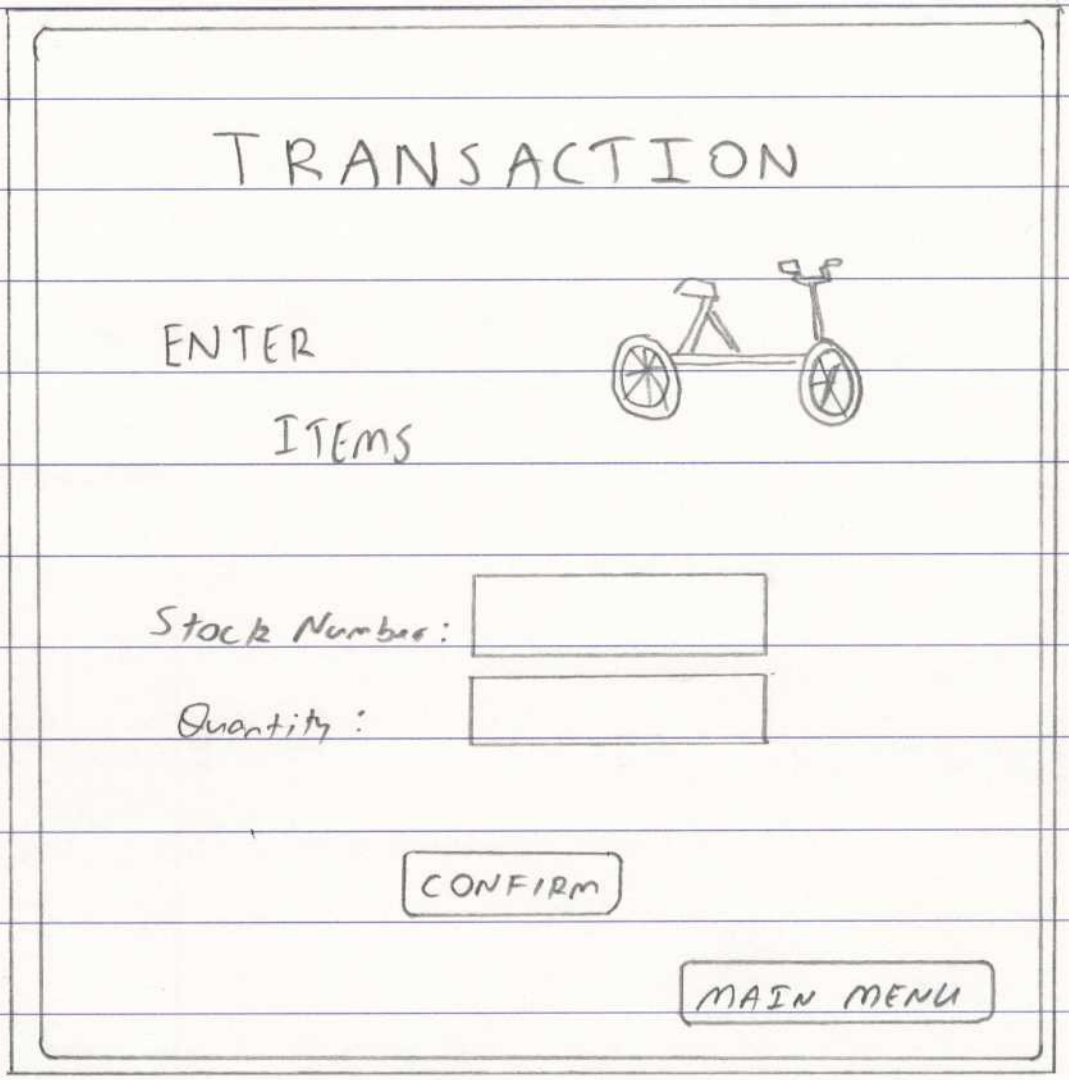
BOARD OF STUDIES
NEW SOUTH WALES

Centre Number: ..... Student Number: .....

a) i)



ii)

Input	Process	Output
Stock Number	Update Quantity	Updated Inventory file
~~Item~~ Description	Check if Quantity	Error message if
Quantity On Hand	less than three	quantity less than 3
Unit Price		for an item

iii)

```
BEGIN MAINPROGRAM inventory_maintenance
    open transaction file          ' opens files
    open inventory file
    WHILE more transactions        ' continues till no more
        get transaction.stocknumber
        FOR inventory.stocknumber = 1 TO EOF(199)
            IF inventory.stocknumber = transaction.stocknumber THEN
                inventory.quantity = inventory.quantity +
transaction.quantity
                IF inventory.quantity < 3 THEN
                    display "Quantity less than 3"
                ENDIF                  ' error message
            ELSE
                notfound = notfound + 1    ' add up not found
                IF notfound = eof(199) THEN
                    display "Match not found"
                ENDIF                  ' error message
            ENDIF
        NEXT inventory.stocknumber
    END WHILE
```

close transaction file 'close and save files

close inventory file

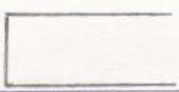
END MAINPROGRAM inventory - maintenance

b) Two types of documentation are the user manual, produced during the building of the software solution, and the data flow diagrams, produced during the planning of the solution.

Firstly, in the solution planning, the systems analyst produces a data flow diagram to represent the system and its external entities. It is produced in this stage so it can be used during the building of the solution by the programmer. A data flow diagram shows what processes and dataflow is required for the complete success of the software solution developed. In it, the following symbols are used:

Represents a process;

Represents data flow to/from a process or external entity or a data store;



Represents a data store;

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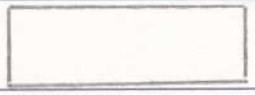

Represents an external entity.

Secondly, a user manual is produced during the building stage of the software solution. Throughout building the software solution, different features will be incorporated into the final solution. As this is done, the user manual should be updated accordingly so it provides an accurate description of the solution. Ideas that were presented in the program specifications may not go ahead due to some unforeseen problems. So these wouldn't be included in the user manual. The programmers involved in the building of the solution would know how each program specification is completed, so would provide the most accurate descriptions in the user manual.