COMP201: Software Engineering I
Assignment 1.2 (2024/25)
(100% mark for Assignment 1.2 is 5% of COMP201 grade)

Deadline for Assignment 1.2: 2nd of December 2024, 17:00

OBJECTIVE
This assignment is mainly about "design/implementation".
You should be implementing a simulation of part of drinks machine. This simulation will follow the requirements that have been defined in coursework 1 and follow the use cases that you defined. This simulation will not be a full implementation of the original requirement but only implement the keypad input part of the system. For this case, there is no UI code required. You are strongly encouraged to start this work as soon as possible.

The purpose of this exercise is to understand the challenges of implementing a design from requirements and the behaviour modelling required.

Assignment number	1 of 2 (part 2)
Weighting	5%
Assignment Circulated date provided to class	28/10/2024
Deadline Day & Date & Time	2nd of December 2024 at 17:00
Submission Mode	Electronic submission/Canvas
Learning outcome assessed	1. Realise the problems in designing and building significant computer systems 2. Understand the need to design systems that fully meet the requirements of the intended users 3. Be able to apply these principles in practice 4. Be able to demonstrate how to effectively implement an OO design in an O-O language such as Java or Python.
Submission necessary in order to satisfy Module requirements	No
Purpose of assessment	To assess the student's ability to analyse a problem and implement it in code

Marking criteria	See end of document
Late Submission Penalty	Standard UoL Policy

Description of problem
Produce code to support a coffee machine in Java using the existing code as a base. (This has been made available to you as a zip file).

NOTE You only need to fulfil the requirements of this coursework not the whole of the requirement detailed in coursework 1.

Card handling

All the code you will implement is done as part of the file KeyPadHandler.java, you will need to modify just this file. It is very important you do NOT modify the public interface the Java classes.

Look at the comments in the source files for information on what must be done. Everywhere there is a TO DO comment, please complete the code as requested. All the instructions and the mark distribution are specified in the source code.

Marking criteria

This code will be marked using automatic testing using JUnit. The structure and format of the code will **NOT** be marked for this assignment; **however** you are strongly encouraged to format and comment your code correctly.