University of Westminster
School of Electronics and Computer Science

4COSC005/W Programming Principles 2 – Coursework/Test - Arrays – Hotel Program

Module leader	Artie Basukoski
Unit	Coding Assignment with in-class test (Coursework/Test item 1)
Weighting:	50% of the module
Qualifying mark	You must get an average of 40% in assessments 1 and 2.
Description	Hotel Programs – two implementations of Hotel (Array of Strings, Array of Objects)
Learning Outcomes Covered in this Assignment:	LO1, LO3.
Handed Out:	13th Feb 2017
Due Date	Code due on Blackboard coursework upload Monday 13th March 2017 10am. In-class test during your Theory Tutorial Session week commencing 13th March 2017.
Expected deliverables	Java program code upload as text files, plus in-class test answers.
Method of Submission:	Blackboard + In-class test
Type of Feedback and Due Date:	Your in-class test mark (worth 80%) and java code mark (worth 20%) should appear on Blackboard Gradecentre within 3 weeks of the test. Individual written feedback will be available via the Blackboard Gradecentre. If you would like extra feedback please speak to the tutor where you did your in-class test. **All marks will remain provisional until formally agreed by an Assessment Board.**

Assessment regulations

Refer to section 4 of the "How you study" guide for undergraduate students for a clarification of how you are assessed, penalties and late submissions, what constitutes plagiarism etc.

Penalty for Late Submission

If you submit your coursework late but within 24 hours or one working day of the specified deadline, 10 marks will be deducted from the final mark, as a penalty for late submission, except for work which obtains a mark in the range 40 – 49%, in which case the mark will be capped at the pass mark (40%). If you submit your coursework more than 24 hours or more than one working day after the specified deadline you will be given a mark of zero for the work in question unless a claim of Mitigating Circumstances has been submitted and accepted as valid.

It is recognised that on occasion, illness or a personal crisis can mean that you fail to submit a piece of work on time. In such cases you must inform the Campus Office in writing on a mitigating circumstances form, giving the reason for your late or non-submission. You must provide relevant documentary evidence with the form. This information will be reported to the relevant Assessment Board that will decide whether the mark of zero shall stand. For more detailed information regarding University Assessment Regulations, please refer to the following website:**http://www.westminster.ac.uk/study/current-students/resources/academic-regulations**

All coursework code on this module is submitted via Blackboard. It may be automatically scanned through a text matching system (designed to check for possible plagiarism).

- You DO NOT need to attach a copy of the CA1 form;

To submit your assignment:

- Log on to Blackboard at http://learning.westminster.ac.uk; and follow the instructions below.

If you are unable to submit your work on Blackboard due to a finance hold you must email your work to ecs-registry@westminster.ac.uk by the same deadline, putting on the subject line the module code, assessment number, and your name. This shows that you have completed your work by the deadline. After the finance hold is lifted you must then submit the same work as normal on Blackboard, otherwise it will not be marked and you will get a fail for that part of the assessment.

Hotel Program - Coursework and In-Class Test

You are to be assessed on how well you know arrays and array manipulation code. **Most of the marks will come from your in-class test result.** Only some marks will come from getting the Hotel program working, so **concentrate on understanding the main array code rather than getting additional program extras to work**.

Hotel Program.

1. Design a program for a hotel with 10 rooms using code which is similar to the code given in your notes. Start by checking that the code works.

Once the basic code runs, then put the code that 'Views All rooms' and 'Adds customer to room', into separate procedures, and test it works.

Then add a menu system, which allow the user to choose what they want to select. Enter an 'A' to add a customer to a room, and a 'V' to view all rooms. (To do a menu see the 'arith' program in the notes about 'Ifs' from last semester – or see the 'arith' program code which is towards the start of the code examples [link is on the videos web page]) When an 'A' is pressed it should do the Add procedure, a 'V' should do the View procedure.

One by one, add extra procedures to do each of the following. The user should be able to choose from the menu what the program does.

E: Display Empty rooms,
D: Delete customer from room,
F: Find room from customer name,
S: Store program data in to file,
L: Load program data from file.
O: View rooms Ordered alphabetically by name.

2. Create a second version of the program using hotel room *array of objects*.

Note: Both solutions should be java console applications (not windows).

Submission Instructions:

Java Program code to be submitted as a single text file by the date shown above on Blackboard 4COSC005 'Submit Coursework' link. For this submission you should copy and paste **both** programs into ONE long text file, type the filename at the top of each piece of pasted code, and at the very top of the text file type your name and Unix account number. Call this large saved file by your ID number

(e.g. . w123456.txt) and ensure it is saved as plain text (not .doc or .zip). Do not change your code after it has been submitted.

Tutorial in-class test.

There will be a short in-class test in the theory tutorial session following the submission of the coursework. We need to know that you fully understand the code you use, and have not just stumbled on a solution, or copied it from elsewhere. For the test you will be assessed on how well you know arrays, array manipulation code, and methods, so look at the examples in the notes as well as understanding your hotel program.

Do not attempt to go to the wrong tutorial group without the tutor's permission. If you miss the test there will be no other opportunity to redo the work in a later week unless you have approved mitigating circumstances. Sign-in on the class list during the test.

Marking Criteria

80% of the marks will come from the in-class test result. If you score 3/10 or less in the in-class test then your code solution mark will be limited to a maximum of 50% as the test will have proved you did not really understand the code.

20% of the marks will come from your 'Hotel' code solution.

Code marking:
40% A basic solution of the array of strings solution with basic menu and basic procedures.
+10% A reasonable attempt at 4 options for the Hotel program for standard array solution.
+20% Basic array of objects version.
+ 10% V A E F options work in the array of objects version.
+10% if ALL options work in your basic array version (V A E D F S L O)

Warning: Even small parts of your code must not be copied from, or suggested by, someone else.
Pass grade: A basic code solution and 40% in the in-class test.
Distinction grade (>=70%).