

ASSESSMENT BRIEF

COURSE: Bachelor of IT				
Unit:	Object Oriented Design and Programming			
Unit Code:	OODP101			
Type of Assessment:	Assessment Task 4 –Extension to Programming Solution to a Problem			
Length/Duration:	N/A			
Course Learning Outcomes addressed:	Systems development and User experience a) To act as an ethical practitioner while demonstrating skills in data analysis, database design, system design, web design and software development & testing. Teamwork and self-management skills b) To take responsibility for their own time management delivering quality required material on time in dynamically changing technological and communication contexts whether as an individual or member of a small team.			
Unit Learning Outcomes addressed:	Upon successful completion of this unit students should be able to: a. Analyse and dissect simple design and programming problems b. Demonstrate basic knowledge of object oriented programming concepts and syntax c. Implement a well-designed modularised solution to small programming problems d. Develop and/or implement testing schedules			
Submission Date:	Week 12			
Assessment Task:	Extension to Programming Solution to a Problem			
Total Mark:	30			
Weighting:	30% of the unit total marks			

Students are advised that any submissions past the due date without an approved extension or without approved extenuating circumstances incurs a 5% penalty per calendar day,

calculated from the total mark

E.g. a task marked out of 40 will incur a 2 mark penalty <u>per calendar day</u>.

More information, please refer to (<u>Documents</u> > Student Policies and Forms > POLICY –

Assessment Policy & Procedures – Login Required)

ASSESSMENT DESCRIPTION:

ABC Institute is offering a unit of Java programming in summer, 2018. They have 5 student enrolled in that particular unit. Unit coordinator is concern about the marking of that unit. There are 4 assessment task to be performed by the students. Before the final exam, marks for the first 3 assessment tasks are as follows:

Assessment Marks

Student	Task 1	Task 2	Task 3	Task 4
	(10)	(20)	(30)	(40)
1	9.5	18.0	25.5	
2	9.0	19.0	20.0	
3	5.0	12.5	18.0	
4	8.5	16.0	22.0	
5	7.0	11.0	25.0	

- 1. You will be given the Student data for a Unit (Student ID, Task1: Class Test (10%), Task2: Assignment 1 Marks (20%) and Task3: Final Assignment Marks (30%)) in a text file.
- 2. You will have to create a Student Class with the data members and methods.
- 3. You will then need to store the data from the above using a file in an array of object of the student class.
- 4. You will need to add Task4: Final Exam Marks (40%) data as input.
- 5. Calculate total marks and assign a Grade for individual student.
- 6. Save all data to a different output text file.

OUTPUT FILE HEADER:

STUDENT-ID TASK1 TASK2 TASK3 TASK4 TOTAL GRADE

1

2

3

Your program must not crash. You have several options to prevent crashes:

- a) use try/catch
- b) use regex (regular expressions)
- c) use both

Design & Test & User Documentation:

Submit a Word document (3 pages) containing the following:

- 1. Your program design, you can use flowchart, IPO, pseudocode (not code).
- 2. Your test data and expected results (this means do the maths on paper first) and a test report. You should have at least three test cases
- 3. A user guide, include any assumptions you make (e.g. max marks), any errors/bugs, any suggestions for future improvements

ASSESSMENT SUBMISSION:

- 1. Ensure assignment is submitted to the proper submission link.
- 2. Assignment must be submitted by the date specified in the moodle.

- 3. Create a ZIP file using your ID and Name includes the following (eg. K1234567-Name.zip)
 - Java Code(.java) file for the Main program (eg. K111111.java)
 - Student Class(.java) file for the class program.
 - Both Java Class(.class) File (eg. Main and Class)
 - Input File (.txt)
 - Output File (.txt)
 - Word Document file (.docx)

MARKING GUIDE (RUBRIC):

There's a total of 30 marks available

Requirements	Marks
Design + testing + user documentation	6 marks
Code:	
program runs and works, correct output, does not crash	5 marks
style (e.g. naming standards, tidy)	2 marks
modular (use appropriate methods)	3 marks
2D arrays (not ArrayList, array, use .length, not numbers)	2 marks
conditions	2 marks
comments	2 marks
sort	3 marks
save data to file	3 marks
usability (easy to use, output is tidy)	2 marks
Total	30

GENERAL NOTES FOR ASSIGNMENTS

Assignments should usually incorporate a formal introduction, main points and conclusion, and will be fully referenced including a reference list.

The work must be fully referenced with in-text citations and a reference list at the end. We strongly recommend you to refer to the Academic Learning Skills materials available in the Moodle. For details please click the link http://moodle.kent.edu.au/kentmoodle/course/view.php?id=5 and download the file "Harvard Referencing Workbook". Appropriate academic writing and referencing are inevitable academic skills that you must develop and demonstrate.

We recommend a minimum of **FIVE** references, unless instructed differently by your lecturer. Unless specifically instructed otherwise by your lecturer, any paper with less than FIVE references may be failed. Work that includes sources that are not properly referenced according to the "Harvard Referencing Workbook" will be penalised.

Marks will be deducted for failure to adhere to the word count – as a general rule you may go over or under by 10% than the stated length.

GENERAL NOTES FOR REFERENCING

High quality work must be fully referenced with in-text citations and a reference list at the end. We recommend you work with your Academic Learning Support (ALS) site

(http://moodle.kent.edu.au/kentmoodle/course/view.php?id=5) available in Moodle to ensure that you reference correctly.

References are assessed for their quality. You should draw on quality academic sources, such as books, chapters from edited books, journals etc. Your textbook can be used as a reference, but not the lecturer notes. We want to see evidence that you are capable of conducting your own research. Also, in order to help markers determine students' understanding of the work they cite, all in-text references (not just direct quotes) must include the specific page number/s if shown in the original. Before preparing your assignment or own contribution, please review this 'YouTube' video by clicking on the following link: Plagiarism: How to avoid it

PLAGIARISM: HOW TO AVOID IT

You can search for peer-reviewed journal articles, which you can find in the online journal databases and which can be accessed from the library homepage. Wikipedia, online dictionaries and online encyclopaedias are acceptable as a starting point to gain knowledge about a topic, but should not be overused — these should constitute no more than 10% of your total list of references/sources. Additional information and literature can be used where these are produced by legitimate sources, such as government departments, research institutes such as the NHMRC, or international organisations such as the World Health Organisation (WHO). Legitimate organisations and government departments produce peer reviewed reports and articles and are therefore very useful and mostly very current. The content of the following link explains why it is not acceptable to use non-peer reviewed websites: Why can't I just Google? (Thanks to La Trobe University for this video).