

Introduction To Programming: Independent Investigative Effort 7

(See Canvas→Assignments for due dates and marks. Late submissions incur a 10% penalty on the full mark for each working date late; submission cut-off is 5 working days late. Marks turnaround time is approx. 10 working days after submissions close.)

Having trouble with watching recordings, usernames, passwords, access, etc.? Please call the [RMIT IT Service and Support Centre](#) for quick help on 03-9925 8888 and remember to ask for a reference number and pass it on to your instructor.

Need extensions or special consideration? Please [apply for special consideration online](#).

Please follow/complete all steps below in the given sequence:

1. Please check your [official RMIT Student email account](#) for important course communication.

2.a. [Watch any unwatched recordings](#) of the **Weekly Live Lecture** and do all missed tutorials before going further. Gaps in programming concepts will lead to difficulties. If you need further help, please also watch your Group's chat recordings.

2.b. If you need help in addition to what has been shown in the compulsory weekly live lecture, you are also expected to speak to your **group tutor via [discussion forums](#)** and attend/watch their live sessions. Please note that group tutors cannot debug your assessment code on your behalf as debugging is a part of every programming assessment.

3. Check any available feedback of your previous submissions and if you have any unresolved questions or if you need further feedback, post the relevant parts of your submitted work in a new post under Canvas→Discussions→[Independent Investigative Effort](#) and ask from your instructor. E.g. you can ask “*Gayana showed _____ but I did mine like _____, so which is the better approach and why?*”, etc. Please note that the university requires teaching to be conducted in an equitable manner so please only use email for matters such as special consideration.

4. How did you go during the past week? Please give feedback to Gayana so he can improve your learning experience, before it's too late, during this study period itself!

5. This week's programming task will cover some concepts required by Assignment 2 and 3. **You should aim to get the help of your tutors and make further revisions.**

Coding exercise steps (Hint: Need help? Ask your tutor via Canvas→Discussions→"IIE07"):

Follow Canvas→[Modules](#)→[Week 7](#) first. Ensure that you have followed and adapted the concepts from final solution shown at 19:53 (as shown on the shared screen's clock) from the 12/Oct/2020 IIE06 solution. Next, make a copy of your IIE06 and rename it to IIE07. Note: Your work must not be about the student manager.

a. In this week's IIE, modify [your own adaptation](#) of the above IIE06 student manager (which has to be different to the student manager) so that it has a console-based interface as well as a GTerm-based user interface within the same program (all within one class for now).

The constructor must now take an `int` parameter named `userInterfaceMode` which when assigned an argument of:

0: Allows the same functionality (adding and displaying of records) from IIE06 to be performed exclusively via the console (using Scanner for inputs and System.out for outputs)

1: Allows the same functionality (adding and displaying of records) from IIE06 to be performed exclusively via the GTerm. You can reuse most of the GTerm code from your adaptation of IIE06.

b. Now add the functionality of editing and removing records, for both interfaces. The concepts necessary for these have been covered in previous IIEs.

c. Ensure that you create and use methods in justifiable ways (refer to justification requirements from Assignment 2). You will likely need to some create methods that accept parameters and ones that return values (sometimes both).

Note: In Assignment 2, there must be only one interface (GTerm). It is expected that students realise that there would be a better way to implement the ability to switch between different types of user interfaces and the concepts relevant to this will be covered when we cover multi-class programming in IIE08 (relevant to Assignment 3).

Submission Checklist for Step 5:

a. Ensure steps above have been followed in sequence.

b. Ensure that there are no red dots (compilation errors) in your code. Code with red dots are not valid Java and cannot be marked.

c. If you have not made a final submission for your Assignment 2, make a progress/dummy submission for Assignment 2 by submitting **your .java file to Canvas→Assignments→Assignment 2**. Do the same for Assignment 3 as well. Remember, you can overwrite this submission any time when you have a proper submission for your assignment.

d. Take screenshots of the code and the running program (as you did for IIE01) and **only embed screenshots** in a post **under Canvas→Discussions→Independent Investigative Exercise 7**. Please do not attach the images or post your answers in any other format as this would make the submission invalid. The mark for this week's work will be given based on this submission.

e. Ensure that your files are correct. If they are not, you can edit/delete your post and retry.