

# Seneca College

Applied Arts & Technology  
SCHOOL OF COMPUTER STUDIES

JAC444

Submission date:29-05-2022

Date:20-05-2022

## Workshop 1

### Workshop Header (to be included with every file)

/\*\*\*\*\*

**Workshop #**

**Course:**<subject type> - Semester

**Last Name:**<student last name>

**First Name:**<student first name>

**ID:**<student ID>

**Section:**<section name>

*This assignment represents my own work in accordance with Seneca Academic Policy.*

*Signature*

**Date:**<submission date>

\*\*\*\*\*/

### Code Submission Criteria:

Please note that you should have:

- Appropriate indentation.
- Proper file structure
- Follow java naming convention
- Document all the classes properly
- Do Not have any debug/ useless code and/ or files in the assignment

### Deliverables and Important Notes:

**All these deliverables are to be uploaded on the blackboard once done.**

- You are supposed to create video of your running solution for each task along with demo. It should include voice over explaining the logic and code. You can use diagram like flow charts to aid your explanation. **(30%)**

- Screen Video captured file should state your last name and id, like Ali\_123456.mp4 (or whatever the extension of the file is)

- A word/ text file which will reflect on learning of your concepts and exploration (not part of topic discussed) in this workshop. Also include the instructions on how to run your code. **(30%)**

# Seneca College

Applied Arts & Technology  
SCHOOL OF COMPUTER STUDIES

**JAC444**

**Submission date:29-05-2022**

**Date:20-05-2022**

- Should state your Full name and Id on the top of the file and save the file with your last name and id, like Ali\_123456.txt
- Submission of working code. The output presentation and formatting carry marks and you have the luxury to present the output in your own way (e.g., headers and footers, properly aligned, indented output with no grammatical errors) **(40%)**
- Make sure you follow the “Code Submission Criteria” mentioned above.
- You should zip your whole working project to a file named after your Last Name followed by the first 3 digits of your student ID. For example, **Ali123.zip**. If the zip file is too large to upload on BB, you can upload the video portion on Jac444-NZZ team under Discussion/files/workshop submission/w01
- Your marks will be deducted according to what is missing from the above-mentioned submission details.
- Late submissions would result in additional 25% penalties for each day or part of it.
- Remember that you are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments but follow the citation rules

## Citation

- If the file contains work that is not yours (you found it online or somebody provided it to you), write exactly which part of the assignment is given to you as help, who gave it to you, or which source you received it from. By doing this you will only lose the mark for the parts you got help for, and the person helping you will be clear of any wrongdoing.
  - Add the citation to the file in which you have the borrowed code
  - In the 'lastname\_Reflection.txt', add exactly what is added to which file and from where (or whom).
- If you have helped someone with your code. Let them know of these regulations and in your 'reflect.txt', write exactly which part of your code was copied and who was the recipient of this code.
  - By doing this you will be clear of any wrongdoing if the recipient of the code does not honor these regulations.

The cited code > 50% of over all code will be marked 0. The cited code < 25% of overall code will not be panelized. Without citation all parties whose code is same will receive 0.

# Seneca College

---

Applied Arts & Technology  
SCHOOL OF COMPUTER STUDIES

JAC444

Submission date:29-05-2022

Date:20-05-2022

## Academic Policies:

*Most of the materials posted in this course are protected by copyright. It is a violation of Canada's Copyright Act and [Seneca's Copyright Policy](#) to share, post, and/or upload course material in part or in whole without the permission of the copyright owner. This includes posting materials to third-party file-sharing sites such as assignment-sharing or homework help sites. Course material includes teaching material, assignment questions, tests, and presentations created by faculty, other members of the Seneca community, or other copyright owners.*

*It is also prohibited to reproduce or post to a third-party commercial website work that is either your own work or the work of someone else, including (but not limited to) assignments, tests, exams, group work projects, etc. This explicit or implied intent to help others may constitute a violation of [Seneca's Academic Integrity Policy](#) and potentially involve such violations as cheating, plagiarism, contract cheating, etc.*

*These prohibitions remain in effect both during a student's enrollment at the college as well as withdrawal or graduation from Seneca.*

## Tasks

1. (Credit Calculator) Create an application that calculates the credit spent by customers of clothing store and notify the customer if they exceeded the credit limit on a charged account. For each customer, the following facts are available:
  - a) account number
  - b) account type (N (New),E (Existing))
  - b) balance at the beginning of the month
  - c) total of all items charged by the customer this month
  - d) total of all credits applied to the customer's account this month
  - e) Bonus credit of \$100 if new account
  - f) allowed credit limit.

The program should

- Input all these facts (decide on the appropriate type),
- Calculate the new balance = beginning balance + charges – credits + bonus (if new account)
- Display the new balance and determine whether the new balance exceeds the customer's credit limit.
- For those customers whose credit limit is exceeded, the program should display the message "Credit limit exceeded".

# Seneca College

Applied Arts & Technology  
SCHOOL OF COMPUTER STUDIES

---

## JAC444

**Submission date:29-05-2022**

**Date:20-05-2022**

You should follow the conventions. Your program should have required get and set methods, appropriate modifiers and constants if required. The program should ask all the relevant details from user. Your program should start with simple menu e.g.

1. Calculate Balance
2. Display Details
3. Exit

It is up to you how you want to present the output. Main class should be separate from the CreditCalculator class. Menu method can be in main class.

2. This task is required to create Dice game (Save the Ship). The objective of the game is to reach score of 100 by rolling dice multiple times. The rules of the program are:
  - You are allowed to roll two dices. You score starts with 0
  - If you get sequence of numbers (e.g., 5 and 6) in your roll you earn 10 points which is added to the total score and following message should be displayed "Captain sails the ship"
  - If the numbers rolled are not in sequence, you lose 5 points from the total and the following message should be displayed "Ship is in trouble"
  - If you roll same number in both dices, you get 50 points added to your total and following message should be displayed "Captain saved the ship"
  - If you get 10 as sum of the dice numbers (regardless of previous rules) you lose 50 points from total and following message should be displayed "Ship is going down"
  - The player gets 5 rolls. If the player scores 100 points the Players wins and following message is displayed "The ship reached the harbor", else player loses and following message is displayed "Ship hit rock bottom"

Your program acts as a single player. Main class should be separate and used to initiate game.

Example Output

### Test case 1

**Player score=0**

You rolled 5 and 6

You got 10 points

# Seneca College

---

Applied Arts & Technology  
SCHOOL OF COMPUTER STUDIES

**JAC444**

**Submission date:29-05-2022**

**Date:20-05-2022**

Score: 10

"Captain sails the ship"

**Test case 2**

You rolled 4 and 6

You lost 5 points

Score : 5

"Ship Is in trouble"

**Test Case 3**

You rolled 1 and 1

You scored 50 points

Score : 55

"Captain has saved the ship"

**Test Case 4**

You rolled 5 and 5

You lost 50 points

Score : 5

"Ship is going down"