

TCS3344 – Advanced Programming Jan - May 2024

Assignment 1 Brief and Marking Schemes

This assignment contributes **100%** of the total coursework mark. Please refer to the following assignment marking rubrics.

THE FOLLOWING LEARNING OUTCOMES WILL BE ASSESSED:

Skills

- Apply appropriate OOP techniques in developing solutions to problems.
- Develop a computer program by applying OOP techniques in data source-based applications.

General Instructions

Use the following format for the preparation of the *assignment submission*.

- Commentaries are required in the code.
- Spacing and indentation are required.
- Source code and all related sources (source code, executable file and resource file)

WARNING

- Assignments submitted after the due date will be considered late.
- Assignments submitted not later due date will not be entertained.
- SEGI University takes allegations of plagiarism very seriously. Submissions involving plagiarism will be marked but given zero marks. Plagiarism is the attempt to pass off the work of another as your own. Information taken from the work of others should be acknowledged by reference to obviate the charge of copying.
- Collusion is an academic irregularity within the SEGI University assessment regulations. Any student found colluding in the production of any assessment will be subject to an investigation with the imposition of any penalty deemed appropriate. Students must ensure they are familiar with the definition of collusion.

I. Assignment Requirements

Introduction

Body Mass Index (BMI) is a commonly used measure to assess whether a person has a healthy body weight for a given height.

It's important to remember that BMI is a useful screening tool, but it does have limitations. It doesn't consider factors like muscle mass, bone density, and distribution of fat, which can be important indicators of health. Therefore, it's always a good idea to consult with a healthcare provider who can provide a more comprehensive assessment of your health.

Additionally, focusing on overall health, including factors like diet, exercise, mental well-being, and regular check-ups, is crucial for maintaining a healthy lifestyle regardless of your BMI.

In this assignment you are going to create a **GUI application** for the following topic:

- **BMI** desktop application.
- Implement **Object-oriented** concept in the application.

Tasks

Your application should contain the following functionalities:

- a) Implemented **array list** to store **personal profile as objects** for users in BMI application.
- b) **Personal profile** stored in array list should allow users to **create, read, update, and delete** these personal records.
- c) Design your application using **tabbed pane container** with proper UI components in your application.
- d) Generate a **summary report** for user including the **personal information** as well as **suggestions** on weight to achieve a better BMI.

Submission Requirements

Upon submission, please submit the following items:

- All **source code** files of the program. A compressed folder of the project and a separate jar file should be submitted to Blackboard.
- And executable file in the jar format.

Note

Plagiarized work will result in a 'FAIL GRADE' Major Computer Software List – NetBeans

Minor Computer Software List – GIMP, Ink Scape, or any necessary tools.

Assignment Project Quiz Exam Essay Help
WeChat: cestbon-688
Email: accoder-overseas@163.com

II. Assessment Marking Criteria

Topic/Area of concern	80 – 100 marks (A)	65 -79 marks (B, B+)	50 - 64 marks (C, C+)	40 -49 marks (D)	0 – 39 marks (F)	Grade/ Comment
Multimedia Creation						
Layout design with Tabbed Pane implementation and other proper UI components.	Excellent layout and UI design with Tabbed pane implementation with friendly navigation features and alternative event handling on functionality. Proper images are added.	Good layout and UI design with Tabbed pane implementation. In addition, it contains proper event handling that makes the navigation work smoothly. Proper images are added.	Proper layout and UI design with Tabbed pane implementation.	Limited layout and UI design.	Bad layout and UI design.	/20
Proper data structure (object and array list for objects) with CRUD functions	Excellence CRUD functionalities with validation and verification. Proper consideration and well-designed object class.	Good CRUD functionalities with validations on object	Proper CRUD functionalities with proper object designed	Few CRUD functionalities as well as object designed.	Little or no CRUD functionalities as well as object designed.	/40
Report with proper information and recommendation.	Excellence report system and difference type of graphical chart or diagram. Contain proper suggestion.	Good report system and proper graphical chart or diagram support. Contain proper suggestion.	Proper report system and BMI and suggestion.	Limited reporting features such as BMI.	Little or no reporting feature	/20
Presentation	Excellent presentation and rich information provided about the application.	Well-presented all necessary information and easy to understand.	Proper presentation with all necessary information about the application.	Presented only with little information about the application.	No presentation or provided limited information.	/10
Good Programming Practices	Proper comment, spacing and naming conventions support	Full comment, spacing and naming conventions support	Limited comment, spacing and naming convention support	Limited spacing and naming convention support	No comment, spacing and naming convention	/10
FINAL TOTAL:						/100