ICTPRG302

# Apply introductory programming techniques

## Assessment 5 of 6

Case Study & Demonstration

Assessor Guide

SWINBURNE OPEN ED

Version 1

# Assessment Instructions

### Task Overview

Read each question carefully before typing your response in the space provided.

**Important:** Before commencing your work, you must update your *Student name* and *Student number* in the footer from **page 2** onwards.

### Additional Resources and Supporting Documents

To complete this assessment, you will need:

- Learning Material
- Design Document Final
- Application Code

## Assessment Information

### Submission

You are entitled to three (3) attempts to complete this assessment satisfactorily. Incomplete assessments will not be marked and will count as one of your three attempts.

All questions must be responded to correctly to be assessed as satisfactory for this assessment.

Answers must be typed into the space provided and submitted electronically via the Learning Platform. Hand-written assessments will not be accepted unless previously arranged with your assessor.

### Reasonable adjustment

Students may request a reasonable adjustment for assessment tasks.

Reasonable adjustment usually involves varying:

- the processes for conducting the assessment (e.g. allowing additional time)
- the evidence gathering techniques (e.g. oral rather than written questioning, use of a scribe, modifications to equipment)

However, the evidence collected must allow the student to demonstrate all requirements of the unit.

Refer to the Student Handbook or contact your Trainer for further information.

Please consider the environment before printing this assessment.

**Case Study**

Bounce Fitness prides itself on fostering innovation and delivering cutting-edge technological solutions to empower customers in their fitness journeys.

You are an IT Technician at Bounce Fitness. You are responsible for creating applications that reflect the organisation's commitment to excellence and seamless user experiences.

In this assessment, you are required to evaluate and test the application code written in Assessment 4.

## Task 1

For this task you will need to record your screen while you are performing the testing of the application using the IDE features.

**STEPS TO TAKE:**

a. Review your code based on the feedback your assessor provided you for the following two (2) documents in Assessment 4:
   i. Completed Design Document Final from Assessment 4.
   ii. The application code from Assessment 4.
b. Open the developed code in an integrated development environment (IDE). It is recommended that you use Visual Studio Code as the IDE for this task and insert the code (if there were any updates based on the feedback received from your assessor you will need to insert the updated code).
c. Evaluate the variables of the code using IDE features:
   i. Examine the variables of the code to determine their current value
   ii. Debug the code using debugging techniques
   iii. Determine all errors in the variables of the code
   iv. Make all necessary changes to the code to address each error determined
d. Test the application using IDE features. To do this:
   i. Set at least two test cases for the code
   ii. Run each test case to ensure the code is functioning properly
   iii. Determine all errors or issues that arise from each test case
   iv. Make all necessary changes to the code to address each error determined
   v. Run each test to ensure all errors are addressed
   vi. Save and submit your video using the following naming convention:

   **<Student Name>_Video 2_Testing**
e. Use the **Test Report** template to document the actions taken and outcomes of the evaluation and testing of the application.
f. Save and submit your test report using the following naming convention:

   **<Student Name>_Test Report**

**NOTE: You cannot complete Assessment 5 unless you have completed and received feedback for Assessment 4 on your Design Document Final and your application code from your assessment.**

**Assessor instructions**: Students must evaluate and test the application code written in Assessment 4.

The acceptable responses must:

- Be within the specified word limit.

- Reflect the characteristics described in the exemplar answer.
- Include appropriate technical programming language when documenting changes and tests (e.g., using terminology such as 'variables', 'test cases', etc.)
- Use headers and subheaders that clearly and concisely indicate the topic the section covers.
- Whether there were changes required to be implemented on the code or not based on the Assessor's feedback on Assessment 4, the evidence that the student has reviewed the code and corrected it will be evident during the testing.

Benchmark answers, as well as instructions for the assessor, are provided in the **Test Report – Assessor Guide**.

| ASSESSOR OBSERVATION FORM | | | |
|---|---|---|---|
| **During this case study task:** | **YES/NO** | **Date Observed** | **Assessor's comments** |
| **1.** The student opens the developed code in an integrated development environment (IDE).. | ☐ YES<br>☐ NO | | |
| **2.** The student evaluates the variables of the code using IDE features:<br>**In demonstrating this:** | | | |
| a. Examines the variables of the code to determine their current value. | ☐ YES<br>☐ NO | | |
| b. Debugs the code using debugging techniques. | ☐ YES<br>☐ NO | | |
| c. Determines all errors in the variables of the code. | ☐ YES<br>☐ NO | | |
| a. Makes all necessary changes to the code to address each error determined | ☐ YES<br>☐ NO | | |
| **3.** Test the application using IDE features. To do this: | | | |
| a. Set at least two test cases for the code | ☐ YES<br>☐ NO<br>☐ N/A | | |
| b. Run each test case to ensure the code is functioning properly | ☐ YES<br>☐ NO<br>☐ N/A | | |
| c. Determine all errors or issues that arise from each test case | ☐ YES<br>☐ NO<br>☐ N/A | | |

| | |
|---|---|
| d. Make all necessary changes to the code to address each error determined | ☐ YES<br>☐ NO<br>☐ N/A |
| e. Run each test to ensure all errors are addressed | ☐ YES<br>☐ NO<br>☐ N/A |

# Assessment submission checklist

Students must have completed all questions within this assessment before submitting. This includes:

| | | |
|---|---|---|
| 1 | Task 1<br>- Video Recording<br>- Test Report | ☐ |

## Assessment feedback

Assessors are to indicate the assessment outcome as Satisfactory (S) or Not Yet Satisfactory (NYS).

| Assessor comments: | ☐ S | ☐ NYS |
|---|---|---|
| | | |

Congratulations, you have reached the end of Assessment 5!