College of Engineering, Construction and Living Sciences
Bachelor of Information Technology
IN628: Programming 4
Level 6, Credits 15

# In Class Checkpoint 01: C++/CLI

## Assessment Table

| Assessment Activity | Weighting | Learning Outcomes | Assessment Grading Scheme | Completion Requirements |
|---|---|---|---|---|
| In Class Checkpoints | 15% | 1, 2, 3 | CRA | Cumulative |
| Roguelike | 45% | 1, 2, 3 | CRA | Cumulative |
| Programming Language Exploration | 25% | 1, 2, 3 | CRA | Cumulative |
| Theory Exam | 15% | 3, 4, 5 | CRA | Cumulative |

## Conditions of Assessment

This assessment will need to be completed by Friday, 12 June 2020.

## Pass Criteria

This assessment is criterion-referenced with a cumulative pass mark of 50%.

## Submission Details

You must submit your program files via **GitHub Classroom**. Here is the link to the repository you will be using for your submission – https://classroom.github.com/a/DigbcYgy. For ease of marking, please submit the marking sheet with your name & student id number via **Microsoft Teams** under the **Assignments** tab.

## Authenticity

All parts of your submitted assessment must be completely your work and any references must be cited appropriately.

# Policy on Submissions, Extensions, Resubmissions & Resits

The school's process concerning **Submissions, Extensions, Resubmissions and Resits** complies with Otago Polytechnic policies. Students can view policies on the Otago Polytechnic website located at https://www.op.ac.nz/about-us/governance-and-management/policies.

## Extensions

Please familiarise yourself with the assessment due dates. If you need an extension, please contact your lecturer before the due date. If you require more than a week's extension, a medical certificate or support letter from your manager may be needed.

## Resubmissions

Students may be requested to resubmit an assessment following a rework of part/s of the original assessment. Resubmissions are completed within a short time frame (usually no more than 5 working days) and usually must be completed within the timing of the course to which the assessment relates. Resubmissions will be available to students who have made a genuine attempt at the first assessment opportunity. The maximum grade awarded for resubmission will be C-.

## Learning Outcomes

At the successful completion of this course, students will be able to:

1. Program effectively in an industrially relevant programming language.
2. Implement a wide range of intermediate data structures and algorithms to act as modules of larger programs.
3. Use an appropriate integrated development environment to create robust applications.
4. Demonstrate sound programming and software engineering practices independent of the environment or tools used.
5. Explain the theoretical issues surrounding programming language design and development.

## Assessment Overview

In this practical, you will complete a series of tasks covering today's lecture. This practical is worth 0.5% of the final mark for the Programming 4 course.

## Task 1

Create a **Form** with a **Button** and a **ListBox**. When the **Button** is clicked, write the sequence 0, 2, 4... 20 to the **ListBox**.

## Task 2

Create a **Form** with two **Buttons** and a **Timer**. When a **Button** is clicked, start the **Timer** and for every 100 milliseconds move one **Button** five pixels to the left, and the other **Button** five pixels to the right. When either **Button** hits the edge, that **Button** turns green and the **Timer** stops.

## Submission

- Create a new branch named 01-checkpoint within your practicals GitHub repository
- Create a new pull request and assign Grayson-Orr to review your submission
- Deadline: Wednesday, 4 March at 5pm

**Note:** Please don't merge your own pull request.