

Creative Software Design, Assignment 14-1

Deadline: 2024-11-29 23:59 (No score for late submission)

- Submit your homework by uploading your zip file to the LMS assignment section. Below is an example.

```
13178_Assignment1-1_2024123456.zip
├─ 1.cc
├─ 2.cc
├─ 3.cc
└─ ...
```

- Your zip file name should follow this format:
13178_Assignment[Assignment-number]_[Student-ID].zip
■ Ex. 13178_Assignment1-1_2024123456.zip
- Source files should be named as **<filename>.cc** *or* **<filename>.cpp**
- **You must submit your solution in the zip file before the deadline.**

1. Preventing Memory Leaks in C++ Exception Handling Using `unique_ptr`

A. Task Overview

Recall that C++ exception handling mechanism can make memory leak if cleaning up for memory is not properly implemented. Use `unique_ptr` to prevent memory leak in the example code at 32nd slide of Week 12 Exception-Handling lecture slides

B. Submission file: one C++ source file (File name: `1.cc` or `1.cpp`)