Object Oriented Programming

Week 02 Constructor - Detructor

Cảm ơn thầy Trần Duy Quang đã cung cấp template cho môn học



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Notes

Create a single solution/folder to store your source code in a week.

Then, create a project/sub-folder to store your source code of each assignment.

The source code in an assignment should have at least 3 files:

- A header file (.h): struct definition, function prototypes/definition.
- A source file (.cpp): function implementation.
- Another source file (.cpp): named YourID_Ex01.cpp, main function. Replace 01 by id of an assignment.

Make sure your source code was built correctly. Use many test cases to check your code before submitting to Moodle.

2 Content

In this lab, we will review the following topics:

• How do constructors and destructors work in C++?

3 Assignments

A: YY: 01 H: YY: 10

For each class below, implement at least 5 constructors and a destructor.

After that, write a function, named output() / print() / display() to show the information of a object in the console screen.

Finally, in the main function, create a series of objects and call the ouput function.

- 1. Fraction: numerator, denominator
- 2. Point2D: x, y
- 3. Triangle: Point2D A, B, C
- 4. Circle: Point2D center and radius
- 5. MyDate: day, month, year
- 6. MyTime: hour, minute, second
- 7. ColorPixel: red, green, blue channels
- 8. MyIntArray: int*a, int n
- 9. Student: int id, char* fullname, char* address, double gpa
- 10. Lecturer: int id, string fullname, string degree (BSc, MSc, PhD....), number of taken courses