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| Edith Cowan University School of Science |  |

Module 1

Introduction to Object-Oriented Programming C++

**Related Objectives:**

* Learn about the task of programming
* Examine programming fundamentals
* Explore procedural programming
* Be introduced to object-oriented programming
* Get started in the C++ programming environement

**Learning Outcomes:**

* Getting started with Microsoft Visual Studio
* Use the C++ Program Development Environment
* Develop simple C++ Applications

**Activities:**

* Guided Activity:
  + Code a simple ‘Hello World’ application
* Self-Guided Activity:
  + Modify the code to become ‘Hello, you are born on <dateOfBirth>’ app
  + Modify the code to contain a Person struct with the attribute dateOfBirth to say ‘Hello’ to

**Task 1 – Hello World**

1. Open Visual Studio and create a new ‘Win32 Console Application’, click next, choose Empty Application and un-check the Secure Development Lifecycle prompt
2. In the Solution Explorer right click on the ‘Source Code’ folder and Go Add > New Item…
3. Select the C++ File (.cpp) and name it HelloWorld.cpp
4. In the editor type in the following code, you should be able to identify the majority of the elements in this code as per the lecture:

#include <iostream>

using namespace std;

int main() {

cout << “Hello World!” << endl;

system(“pause”);

return 0;

}

\*Note - Good whitespace can make your code much more readable and easier to follow the lifecycle of the application.

\*\* system(“pause”) – This stops the application from closing immediately after completing.

1. Compile the application by clicking the green play button at the top, this will allow you to begin debugging.
2. Congratulations, you’ve made your first program!

**Task 2 – Hello, you are born on <dateOfBirth>**

1. Using the same project, go back and modify your code to do the following:
   1. declare dateOfBirth
   2. Output “What is your Date of Birth?”
   3. Input response into dateOfBirth
   4. Output “Hello, you are born on “ dateOfBirth

Answer is located in the Module 1 – Answers.zip on Blackboard and will be covered in the Tutorial.

**Task 3 – Hello using Person struct**

1. Create a Person struct with one variable called dateOfBirth inside
2. Declare a variable of type Person
3. Remove the original dateOfBirth variable from the main() function
4. Store the input from Task 2 in the dateOfBirth variable from the Person object.
5. Output the same information as Task 2

Answer is located in the Module 1 – Answers.zip on Blackboard and will be covered in the Tutorial.