Assignment1: helloWorld

Due: August 24th, 2021 (Tuesday, in class; the only in-class program)

All programs must run correctly for them to be considered as accepted submissions. (Per each missing- or unaccepted- submission, your grade will be lowered by one letter grade); The last day to upload the assignments is December 17th.

Objective

This lab is to make you familiar with Visual Studio, including creating projects, adding source files, compiling, and running.

Code : helloWorld.cpp
Input : none
Output : none

Resources

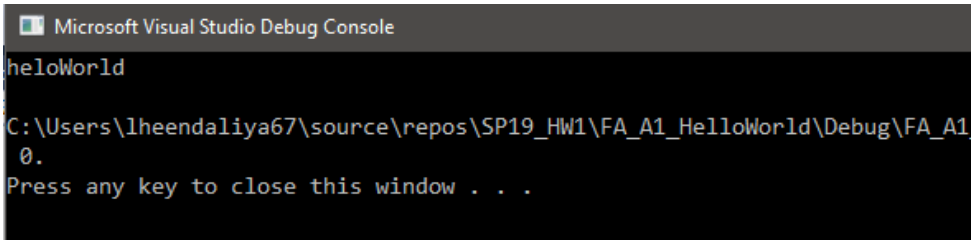
The following files should be available in the WCR (WorldClassRoom):

- How to install Visual Studio on your personal computer (pdf):
- How to write your first program (mp4):
- Programming Style Guide (pdf):

Assignment: helloWorld

Write the program provided at the end of this assignment in a Visual Studio C++ project. Then compile and run. After making sure you have typed it correctly (i.e., no errors and standards are followed), submit your program through WCR.

Sample output

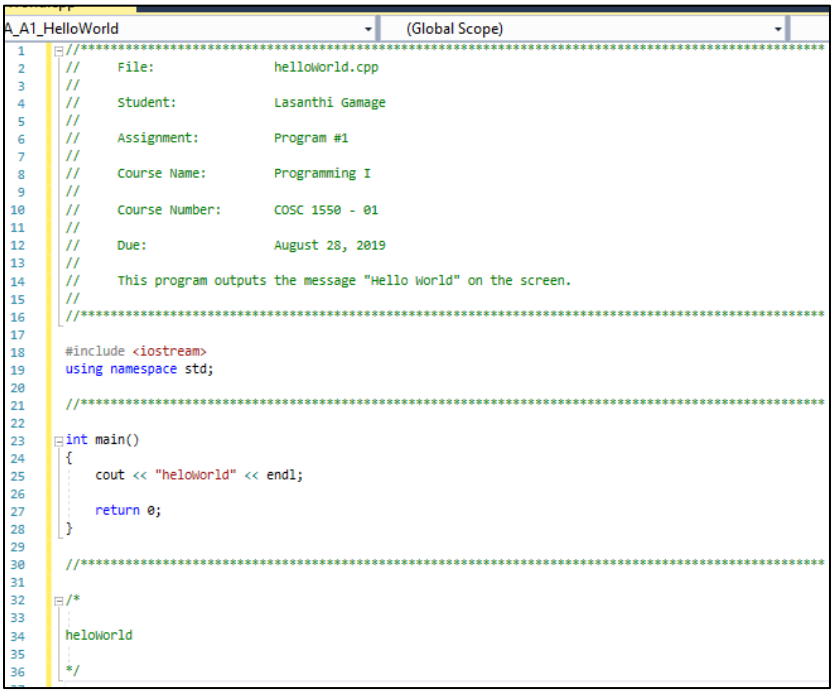


The program

Formatting guideline:

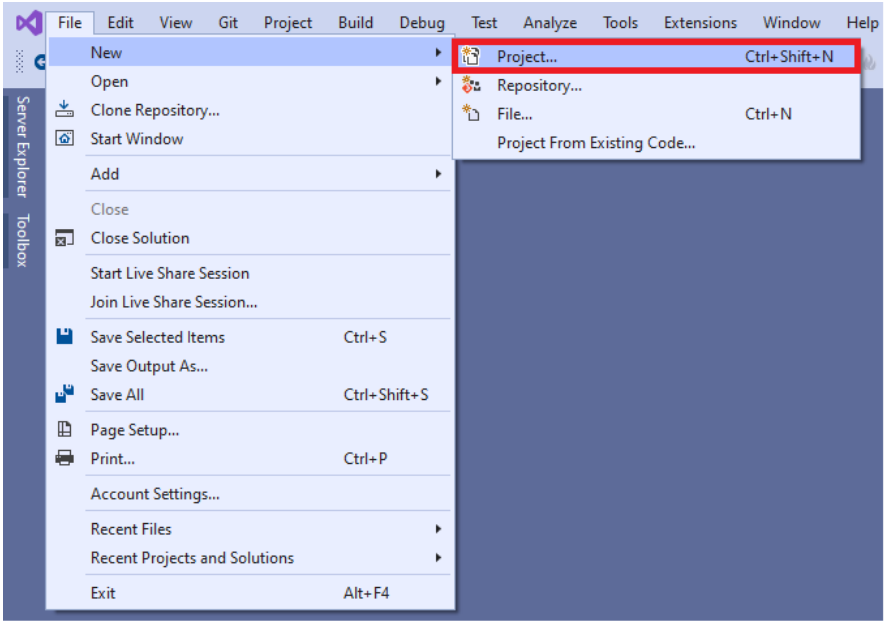
- Formatting should be the same as the given program, including spaces, empty lines and etc.
- Line 1: two forward slashes followed by 100 starts (called commented star line).
- Line 1- 16: all starts with two forward slashes (they are all comments)
- Line 1 – 16: there are 5 spaces before the first letter.

- Line 1- 16: there are 15 spaces before the "h" in helloWorld.cpp and rest of the information should be aligned with the "h".
- Line 32- 36: COPY and PASTE the output into the .cpp file between /* and */. You should not tamper with these lines.

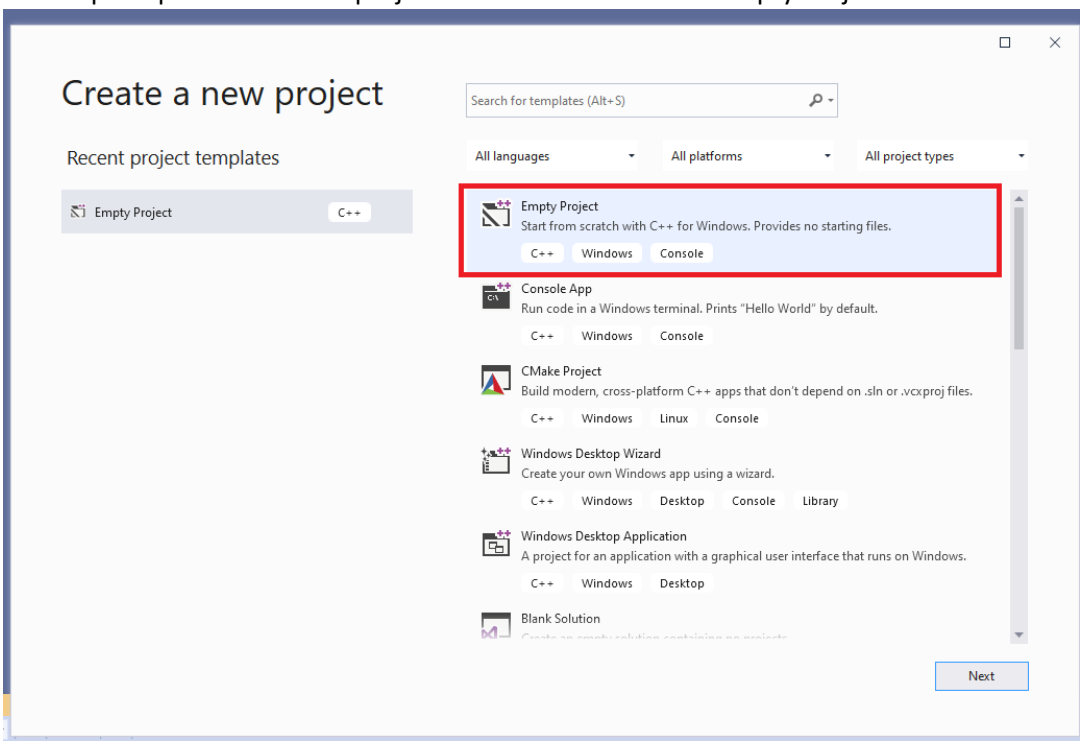


Procedure

1. Open Visual Studio:
    a. In your start menu, find Visual Studio 2019 and click it.
2. create a new project.
    a. **File→ New → Project**; then the new Project window will appear.



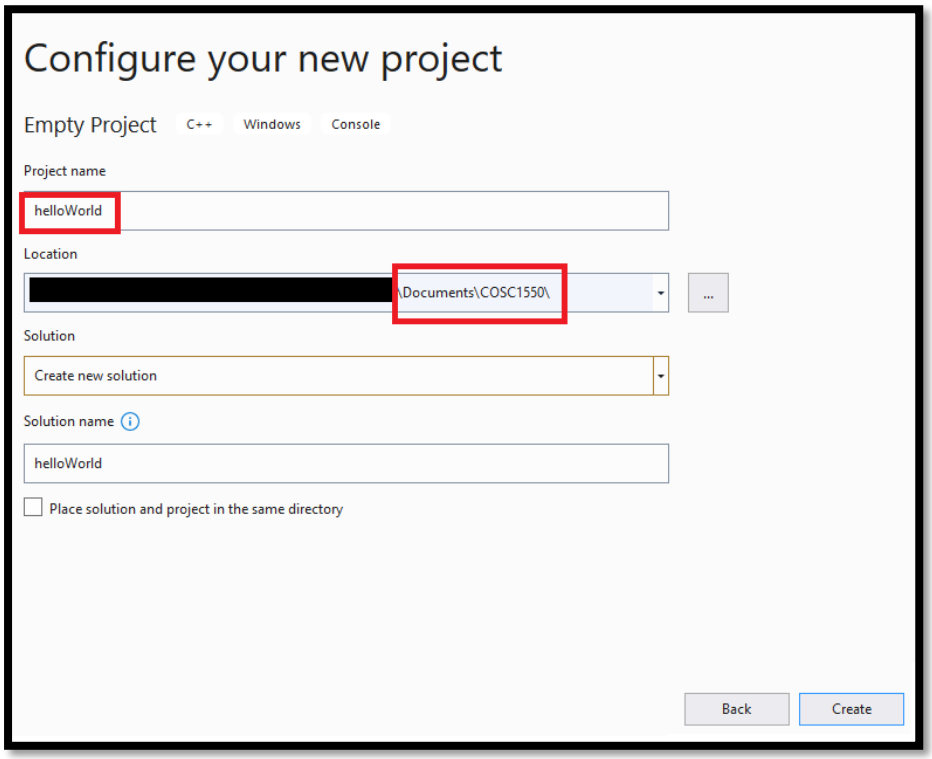
b. It will open up "Create a new project" window and click on "Empty Project."



c. Enter an appropriate name for the project, **helloWorld** for this assignment.

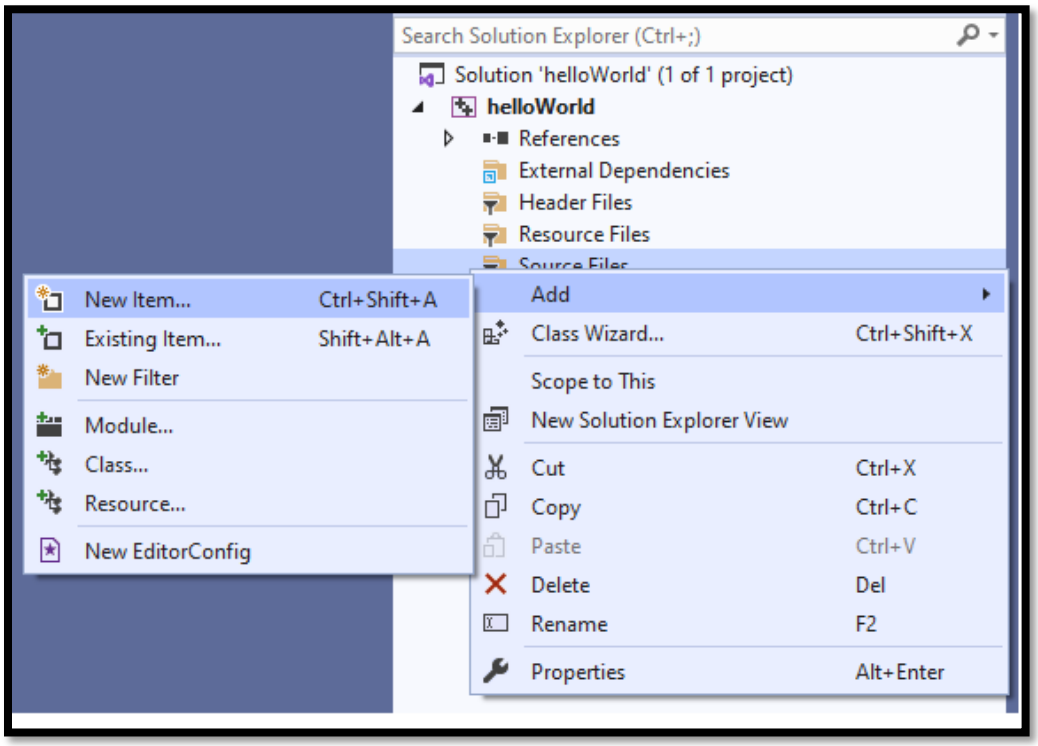
d. Browse an appropriate location (Remember the location; you need it when submitting your program for grading).

   i. Browse and go to the ***Documents*** folder.

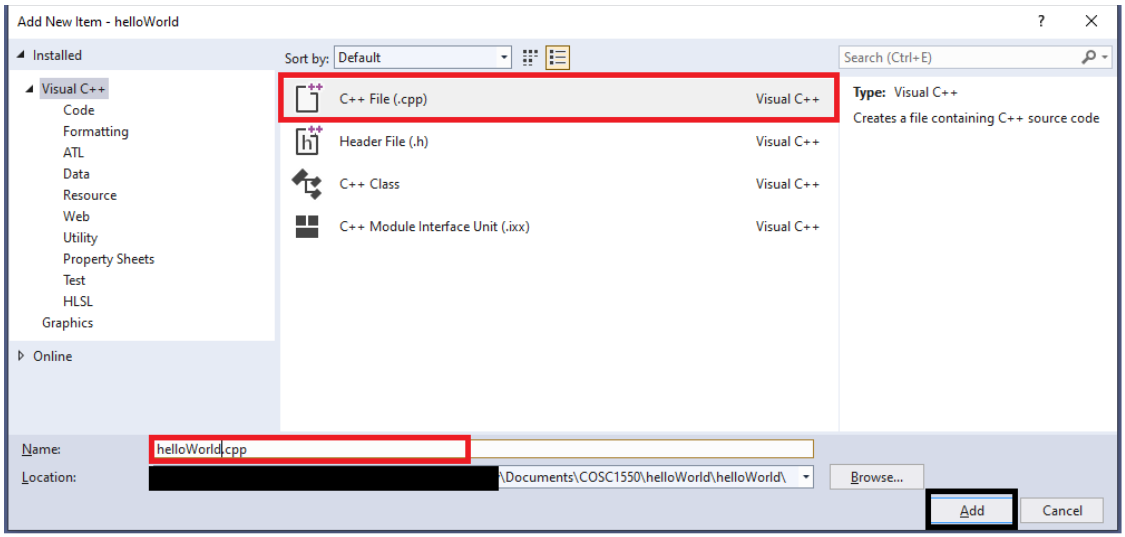


ii. Create a new folder and name it ***COSC1550*** *(you would just open this folder to save your future assignments)*.
iii. Double click or hit the "Select Folder" button to go into the folder.
iv. Create another folder and name it ***A1_helloWorld*** *(for future assignments, you would use a different name here)*.
v. Go into the folder (Double click or hit the "Select Folder" button)
vi. Select Folder. (the popup window should disappear now)
vii. Then click on "**Create**" button

3. Add a new item (a C++ file) to the project.
    a. From the solution explorer on the right-hand side of the screen, right-click on "***Source Files***" and **Add →New Item**…; The Add New Item window will appear.

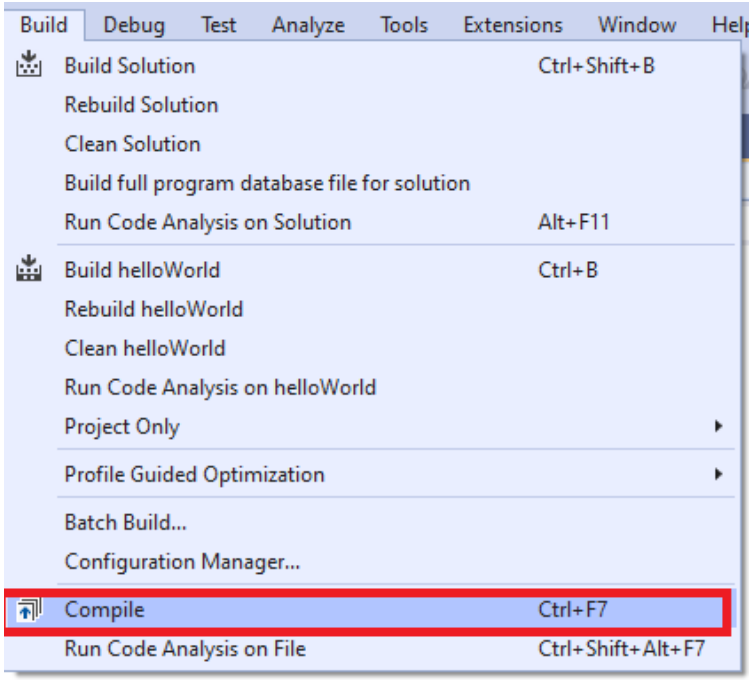


    b. Change the name of the file to **helloworld.cpp** *(for future assignments, you would use a different name here).*; make sure you have one and only one .cpp in the name. (do not change the location, it has the correct location set under step 2)
    c. Double click on C++ File (.cpp) or "**Add**" button

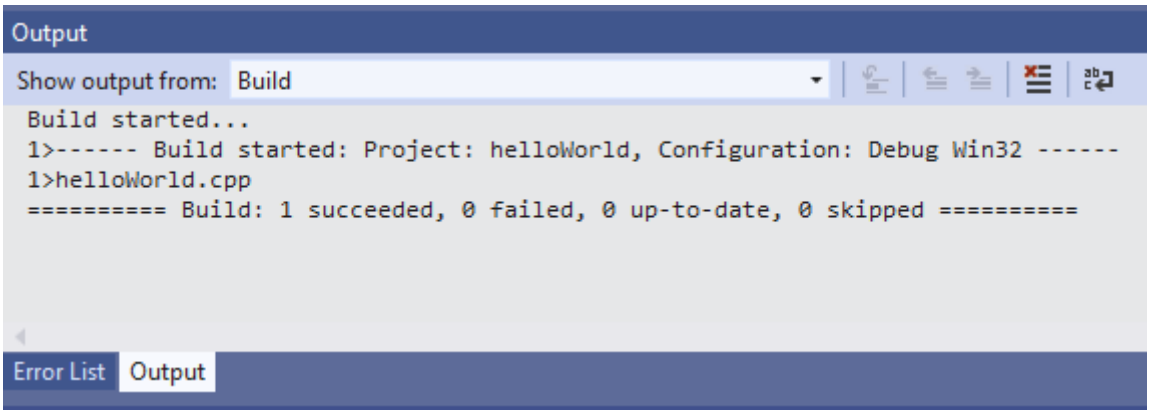


4. Write the program.
    a. Type the program: for this assignment, write (i.e., type) a program that fulfills the requirement on page 1.
    b. The green-colored code called the comment block can be downloaded from WCR, under Files. Download the file, open with Notepad, and copy and paste into your .cpp file; Make sure to update the information accordingly.

5. Compile program.
    a. click on "Build -> compile.

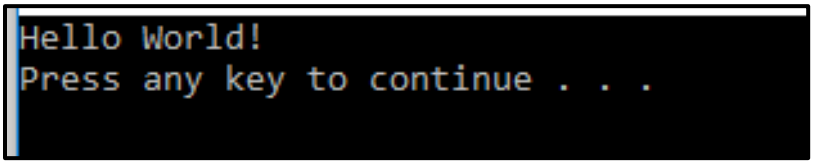


If the compilation were successful, you would see the following message in the *output* panel.



If the compilation were unsuccessful, you would see a number followed by *failed*. If so, go to step 4 and check your typing, and do step 5.

6. Execute program.
    a. Click on "Debug -> Start Without Debugging"; A correct program should pop up a (black) window with the message "Hello World" as follows:



7. If the console does not stay; How to keep the console window open in Visual C++?

Note that this requires the Console (/SUBSYSTEM:CONSOLE) linker option, which you can enable as follows:

a. Open up your project, and go to Solution Explorer.
b. Right-click on your project name.
c. Choose "Properties" from the context menu.
d. Choose Configuration Properties>Linker>System.
e. For the "Subsystem" property in the right-hand pane, click the drop-down box in the right-hand column.
f. Choose "Console (/SUBSYSTEM:CONSOLE)"
g. Click Apply, wait for it to finish doing whatever it does, then click OK.

Things to consider earning the full credits

Your program will be graded on:

1. The program must be submitted by the due date.
2. The program must run correctly and give an output similar to the sample output.

3. You must adhere to the Department style guide.

4. Suggestions based on some common mistakes students make in similar assignments

☐ Use the comment block given in worldclassroom and fill it with the correct information (refer to pg 7 Programming Standards).

- ☐ Align the comment block information
- ☐ Fill in the description in the comment block.
- ☐ Use the correct due date – given in the assignment.
- ☐ Section numbers: Section 03
- ☐ Use white space before and after operators; << is an operator. **(refer to pg 7 Programming Standards).**
- ☐ Use white space between sections/blocks of code. (e.g., before *#include <iostream>*, before the line *int main()*, before return statement.**(refer pg 7 Programming Standards).**
- ☐ Use four (4) spaces for indentation. **(refer to pg 3 Programming Standards).**
- ☐ No character goes beyond 103 (star line should be the longest)
- ☐ Have curly braces on their own lines. **(refer to pg 3 Programming Standards).**
  - ☐ **Preserve the formatting of the *output messages (i.e., the messages you see on the console),* which improves the readability.**

How to submit

Go to Worldclassroom -> COSC 1550 FA 2021 -> Assignments -> Submit Assignment -> Choose File
(If you follow the instructions in this document, the file should be under ***Documents → COSC1550 A1_helloWorld -->A1_helloWorld → helloWorld.cpp)***