

CS 150 – Lab

Logging on:

1) Log on to the computer using your PU net ID and password.

Connecting to Winter:

Winter is the computer science server where all your work will be stored. Remember, after you log off of these computers, anything you stored on there will be deleted. You must store your programs to your directory on the CS server (Winter).

2) Connect to (Winter):

- a. Open 'My Network Places' on the desktop.
- b. Double click on 'Add Network Place'.
- c. In the text box type: [\\Winter.cs.pacificu.edu\StudentSpace](http://Winter.cs.pacificu.edu/StudentSpace). Click 'next'.
- d. You will be prompted to type a name and password. Type your PU net ID as your name and your student ID as your password. Click 'next'.
- e. You will be prompted to name this network place. Type 'Winter' in the text box. Click 'finish'.

This will open up the StudentSpace folder, which should contain a folder named the same as your PU net ID. This is your personal folder that you can use to store your programs or anything else you want.

Changing your Password:

To change your password, write down on piece of paper:

- Your name.
- Your student ID.
- Your new password.

Be sure to write the new password clearly!!

Hand them to me by the end of class and the password will be changed by next week.

Starting CodeWarrior:

3) Open CodeWarrior by clicking the Start menu, selecting Programs, then MetroWerks CodeWarrior, then CodeWarrior IDE.

CodeWarrior will start with no windows open.

CodeWarrior is the development environment that you will use for writing and running all your programs.

Today, we are just going to create a new C++ program and run it. You are also going to copy your work to the CS150-(section #) drop box. This is where you will put all your completed programs that you need to hand in.

Creating a new project:

To create a new project, **select 'file' from the CodeWarrior menu, then select 'new'.**

This opens a dialog box with several options.

4) Select the 'set' or 'browse' button.

This opens a dialog box.

5) Click on the drop down box at the top and select 'My Network Places' then double click 'Winter', then double click the folder with your PU net ID on it.

6) In the text box type 'xxxxx-lab1' replacing the x's with your last name.

7) Click the save button.

8) From the list in the list box, select 'Win32 C++' Stationary. Click 'ok'.

Another dialog box opens.

9) Click on the + sign next to the 'C++ Win32 Console App'.

Another list comes up.

10) Click on 'App using default libraries', then click 'ok'.

A project is created for you and displayed in a small window. Don't be overwhelmed by it all! We are only concerned with a small part of the project.

11) Click on the + sign by the folder called 'source'.

The list expands.

12) Double click on the file called 'hello.cpp'.

The file opens up in a new window. This is your first C++ program!

Examining the program:

The first few lines at the top are just comments. You can ignore these for now. When you start writing your own programs you should write your name and the date as comments in your program. You should also write down the functionality of your program in a paragraph or two.

The next line includes the libraries that we are using in the program.

The third line defines our 'main' function. Notice that open and close curly brackets follow the 'main' line.

The following line specifies that we are using the standard namespace for objects.

Don't worry too much about these lines for now. Just know that all your programs must have them.

The important part for us is the stuff between these brackets.

The first line we come across after this contains 'cout <<'. This indicates that we want to write out to the standard output (the screen). The text between double quotes (") is what is written on the screen after running the program.

The last line contains 'return 0' which just tells the program to exit normally.

Compiling the program:

13) To compile the program, click on 'project' from the menu, then 'compile'. You can also hit ctrl-F7 or click on the appropriate toolbar button.

The program will then compile. You will see a window indicating that the program is being compiled, and if you don't get any other messages, then the compilation is successful.

Running the program:

Now that we have compiled the program, we can run it.

14) To run the program, click ‘project’ from the menu, then click ‘run’. You can also hit ctrl-F5.

What happens next?

A new window should open with the text ‘Hello World, this is CodeWarrior!’ written in it.

Congratulations! You have run your first C++ program.

15) Press any key to close the window.

Closing the project:

16) You close the project by either clicking on the x in the top right hand corner of the window, or by selecting ‘file’, ‘close’ from the menu.

Exiting CodeWarrior:

17) Exit CodeWarrior by clicking on the x on the top right hand corner of the screen, or by selecting ‘file’, ‘exit’ from the CodeWarrior menu.

Opening your project:

18) To open your project, start up CodeWarrior like you did in step 3.

19) Click on ‘File’ from the menu, then ‘Open’.

20) Click on the drop down box and select ‘My Network Places’. Double click on (Winter), then double click your folder.

21) Double click the folder called ‘xxxx-Lab1’. Where xxxx is replaced by your name.

You will see a list of files.

22) Select the one called 'xxxx-Lab1.mcp'. Click 'Open'.

This will open your project.

23) Double click on the file called 'hello.cpp' to open the C++ file.

Modifying the program:

We are now going to modify the program so that it writes 'Hello, my name is xxxx' to the screen, instead of writing 'This is a test'.

24) Select the text between double quotes and replace it with 'Hello, my name is xxxx'.

Don't forget to leave the double quotes as they are!

To test the program, you need to compile it again and run it. Refer to steps 13 and 14 to see how this is done.

Saving the project:

Now that you have modified the program, you need to save it.

25) Click on the C++ file to make sure that it is selected.

26) Select 'File' from the CodeWarrior menu, then select 'Save'.

Remember to always save your work!

Handing in your finished project:

27) Exit CodeWarrior.

28) From the desktop, double click on 'My Network Places'. Double click 'Winter', then double click your folder.

Don't close that window!

29) Double click on 'My Network Places', and double click on 'Winter'. This should open a new window.

30) Locate the folder called 'CS150-(section #) Lab'.

31) Now go back to the other window and drag the folder called 'xxxx-Lab1' and place it in the folder called 'CS150-(section #) Lab'.

This is how you will hand in all your lab programming assignments, so remember to always name your files with your last name, plus the lab number.