
COSC 1173, Fall 2005

Java Programming Laboratory, Lab 2

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In this lab, we will use NetBeans to develop a very easy project.¹

Conventions From now on, when we say “click” or “select”, we mean “move the mouse’s prompt to a designate item and click the left button of the mouse”. Likewise, when we “right click”, we mean “..... click the right button of the mouse”. Ask the instructor if there is any jargon you don’t understand.

1. As in lab 1, format the second disk you’ve prepared, use your last name followed by “2” as the *label* of your disk, and write your name on the disk and mark it as disk 2. Afterwards, put it back to the driver.

2. Launch NetBeans 4.1. If you can’t find the icon from the desktop, click:

> > > .

3. Click button from the window in the upper right. If you can’t find it, find and click > from the menu bar.

4. When the New Project dialog window shows up, set the category and project by selecting and , respectively. Then, click for the next screen.

5.
 - Change project name in the text-box to: .
 - Change Project location to: , where C: is some folder in drive C:. You may use the default one but **make sure** you know where to find folder **CS1Projects**. You will be asked to copy some folder in **CS1Projects** to A: drive. Use to select a proper location you want and create folder **CS1Projects**. (You can’t select drive A: directly.)
 - **Uncheck** the check-box of **Create Main Class**, and let the check-box of **Set as Main Project** remain checked.

You should have observed that the text in the text-box of Project Folder has been adjusted automatically.

6. Now, you have created a project of our choice. You should see project **CS1Lab2** listed in the dialog window in upper left. There are three tags in the window: **Projects**, **Files**, and **RunTimes**.
 - Click button.

6.
 - Select the **Projects** tag and *right click* and select . If there are more than one projects shown in the list, you can leave them alone or right click on the unwanted project and then select (we recommend you to do so).

¹NetBeans is a free Java Integrated Development Environment (IDE), which is an integrated program to let you edit, compile, built java library, package, and so on. In this lab, we will use NetBeans 4.1 to develop an easy project. If you want to install it on your own computer, you can download the package from “<http://www.netbeans.org/downloads/>”. Select “NetBeans IDE 4.1” if you already have your J2SE (java compiler) installed, otherwise select “NetBeans IDE 4.1 with J2SE 1.4.2.09 Bundle”. You are encouraged to install NetBeans IDE 4.1 on your own computer. It’s free, before they change their mind.

- Select the **Files** tag. Then, right click `CS1Lab2`, and then `New` > `Java class`.
- Enter `lab2` to the text-box of **Class Name**. Meanwhile, examine the content of the text-box of **Created File** for knowing which and where is the file you are about to create. Then, click `Finish`.

Examine what have been created under `CS1Lab2/src`. In fact, the above procedure can also be done under **Projects** tag.

7. Now a template java program should have shown up in the editor window. Examine the program. Every text between `/*` and `*/` or lines starting with `//` are comments for human readers. Remove or modify those comments. Claim your copyright somewhere in your comment lines. Edit the following java program in the editor window.

Note: Change `XXXX` to your name.

```
public class lab2 {
    public static void main(String[] args) {
        System.out.println("Hello! World!!");
        System.out.println("XXXX is using NetBeans;");
        System.out.println("it's very cool!");
    }
}
```

Observe how the editor changes the color of the words in your program. Also, observe the *method* list that pops up when you finish some key words.

8. To compile the program, from the menu bar select `Build` > `Build Main Project` or simply press the hot-key `F11` on the keyboard. Read the message shown in the **Output-test (jar)** window located at the bottom of the main window. If there is any error message, try to understand them and locate the problem. If you see `BUILD SUCCESSFUL (total time: .. seconds)`, that means you have successfully build the project.
9. To run the program, from the menu bar select `Run` > `Run Main Project` or simply press the hot-key `F6` on the keyboard. The output of the program will be shown in the **Output-test (jar)** window too.
10. If everything goes well, *minimize* the IDE. Under XP (or whatever your OS) check folder `CS1Projects` to see what are there. Try to find file `lab2.class`. Where is it.
11. Can you compile and run `lab2.java` using `javac` and `java` commands in the command mode window? (This is what we did in Lab 1.)
12. Create folder `CS1Projects` in drive **A:** (with your disk2 inserted) and copy the entire folder of `CS1Lab2` to `A:\CS1Projects`.
13. **Important !! Important !! Important !!** If you are using your own computer, skip this step if you want to leave the project on your computer. Otherwise, you should delete your works since you don't want someone else to steal your projects.
 - (a) Go back to NetBeans IDE window and select the **Projects** tag located in the upper left of the window. Then, right click on `CS1Lab2` and select `Close Project`. You should see the project disappeared. Close this running NetBeans IDE.
 - (b) **Don't forget this step:** Locate and delete folder `CS1Lab2` from drive **C:**. You may keep the folder `CS1Projects` in **C:**.
14. Submit disk2 to the instructor.