COSC 1315 Software Installation Directions – Windows 10

This handout shows you how to download and install the software used in COSC 1315. These directions are for a Windows 10 Personal Computer. In short, this installation must be done in three sequential steps. First, you will install the Java / NetBeans Bundle. This will install java on your computer and then the NetBeans Integrated Development Environment (IDE). Second, you will install the Alice programming environment. The Alice programming environment was written in Java, so it has to be installed second. Third, you will install the NetBeans IDE so you can code your Alice world directly in Java. Installation Time: These downloads and installs can be time consuming. Be sure to give yourself more than a few hours.

Software Compatibility: Your version of Alice and the Alice plugin for NetBeans must match what's used in our computer lab if you want to transport projects back and forth between our computer lab and your computer. Alice is downwardly compatible, but not upwardly compatible. Be sure you have installed **Alice 3.5.0 and its accompanying Plugin for NetBeans.** This compatibility problem will not be an issue with your version of NetBeans.

Step 1: Install Java / NetBeans Bundle

Java is an object-oriented programming language. We will be writing all of our Java code in NetBeans. NetBeans is not the only environment for writing Java code, but it is what we will be using for this text.

You should download the NetBeans and Java SDK bundle. This bundle will include everything that you will need to write and run Java programs. Please follow the install directions for installing this software.

1.) Determine whether you have a 32 or 64 bit version of Windows 10:

Click Start and then click the Settings icon. Click System and then About.

Device specifications		
Device name	BobsPC	
Processor	AMD Athlon(tm) II X2 245 Processor 2.90 GHz	
Installed RAM	4.00 GB	
Device ID		
Product ID		
System type	64-bit operating system, x64-based processor	
Pen and touch	No pen or touch input is available for this display	

The 32 bit operating systems should download the x86 version. The 64 bit operating systems should download the x64 version.

- 2.) Go to Oracle downloads, accept the license agreement, download bundle:
 - Download: JDK and NetBeans Bundle
 - Accept the license agreement by clicking the radio button.
 - Download the file for your operating system (32 bit or 64 bit).
 - Once it has finished downloading (see downloads folder), double click it.
 - Follow through the steps for installing the software.

Step 2: Install Alice Programming Environment

Alice provides a 3D environment for manipulating objects using drag and drop code segments. This environment helps to provide visual representations of abstract programming concepts. Please follow the install directions for installing this software.

You must install the NetBeans environment with the Java SDK (*shown above*) **before** installing the Alice environment or you will most likely get a "Java not found" error.

1.) Click this link: <u>http://www.alice.org/get-alice/alice-3/</u> Scroll to the bottom of the page and then

click on the Archived Builds plus sign. Select Alice 3.5 for your system.



- 2.) Once it has finished downloading (see Downloads folder), double click on this file.
 - Follow through the steps for installing the software.
 - If Windows Defender SmartScreen opens, then click the "More Info" link in order to see the "Run Anyway" button. If the User Access Control dialog appears, click "Yes" to allow changes to your computer
 - You will need to download the Alice 3 Plugin so that Alice programs can be transferred into NetBeans. Please follow Step 3 for directions on installing the plugin.

Step 3: Install NetBeans Plugin for Alice

You will need to download the Alice 3 Plugin so that Alice programs can be transferred into NetBeans. This plugin will need to be added to the NetBeans environment. Please follow the directions listed below.

1.) Click this link: <u>http://www.alice.org/get-alice/alice-3-with-netbeans/</u>

Scroll down till you see the Archived NetBeans Plugins. Click the

plus sign and download the Alice Version 3.5 NetBeans Plugin for

Java 8.

Archived NetBeans Plugins

If you are not able to update your version of Alice you will need to download the version of the plug in that matches your version of Alice. This is required so that worlds created in your version of Alice will be usable in NetBeans. Below you can find the corresponding plugins for our major releases.

Alice Version 3.5

Download NetBeans Plugin for Java 8

- 2.) Verify that you downloaded the plugin. Open File Explorer and look in your Downloads folder: Alice3NetBeans8Plugin_3_5.nbm.
 - Do NOT try opening this file.
 - If your file does not have the .**nbm** extension, rename the file so the file has the .nbm extension.
- 3.) Once you have the Alice NetBeans plugin downloaded, open up the **NetBeans** IDE environment.
 - In the menu bar, click on **Tools** and then **Plugins**. Click on the **Downloaded** tab and then click the **Add Plugins... button**. Locate the Alice NetBeans plugin file. It should be in your Downloads folder and have .nbm extension. Select your plugin file and click **Open**. Click **Install button**.
 - Follow through with the install wizard.
- 4.) To ensure that the plugin installed, click **File**, **New Project**. If you see the following Alice option, the plugin has been installed.

New Project ×			
Steps	Choose Project		
1. Choose Project 2	Q Filter:		
	<u>C</u> ategories:	Projects:	
	→ Java JavaFX → JavaFX → Maven → NetBeans Modules ↔ → Samples	Java Project from Existing Alice Project Source Java Application Java Class Library Java Project with Existing Sources Java Project with Existing Sources Java Free-Form Project	
	Description:		
	Generates a Java Project from an existing	J Alice Project (a3p).	
	< <u>B</u> ack	Next > Einish Cancel Help	

Note: If you have trouble installing the NetBeans Alice plugin, please see the following help page:

http://alice3.pbworks.com/w/page/57586346/Download%20and%20Install%20Plugin