

## COSC 1315 Software Installation Directions - macOS

This handout shows you how to download and install the software used in COSC 1315. These directions are for the macOS. 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 Plug-in for Alice. This plugin will allow you to bring in an Alice project into 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.

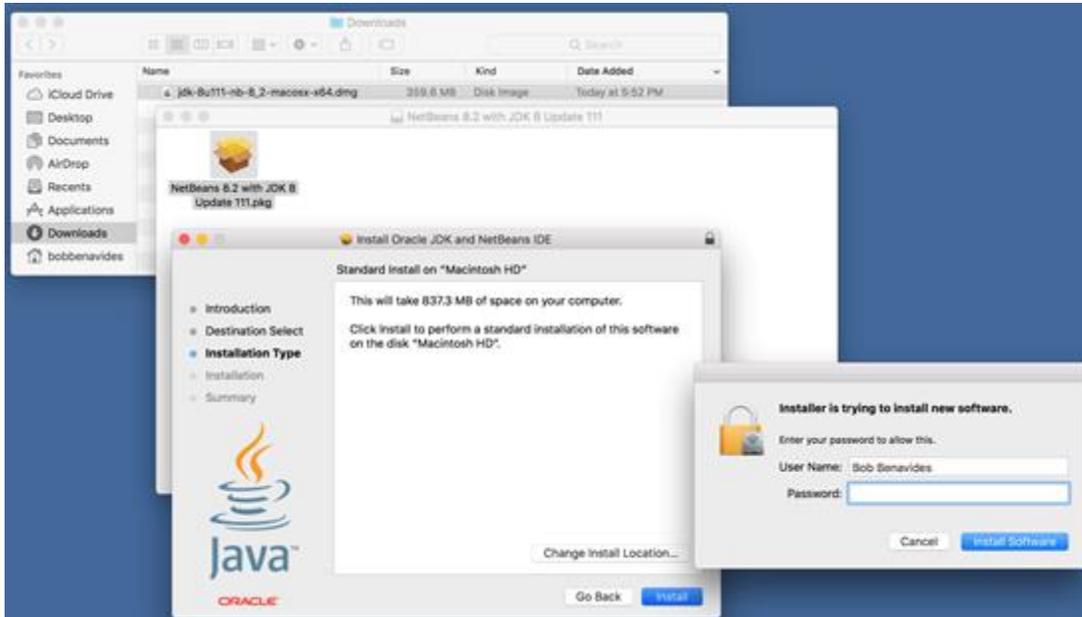
You should download the NetBeans and Java SDK bundle. This bundle will include everything that you will need to write and run Java programs. Please follow the install directions for installing this software.

- 1.) Go to Oracle downloads, accept the license agreement, and download bundle:
  - Go to website for bundle download: [JDK and NetBeans Bundle](#)
  - Accept the license agreement by clicking the radio button.
  - Download the file for your operating system (macOS):

2.) Install the bundle:

- Once it has finished downloading, go to Downloads folder, and double click it.
- Follow through the steps for installing the software:

When you double click on the .dmg file in the Downloads folder, it will open a window with a .pkg file. Double click the .pkg file to start the install. Click the Continue button get to the Standard Install dialog. Click the Install button. Enter your User name password and click Install Software button.



After you finish the install you will get a success notice and you will be asked if you want to move the Installer to the Trash. Click Move to Trash.



Launch NetBeans from Spotlight. Add it to dock: Right mouse click on NetBeans app icon on dock, point to Options, and then click Keep in Dock.



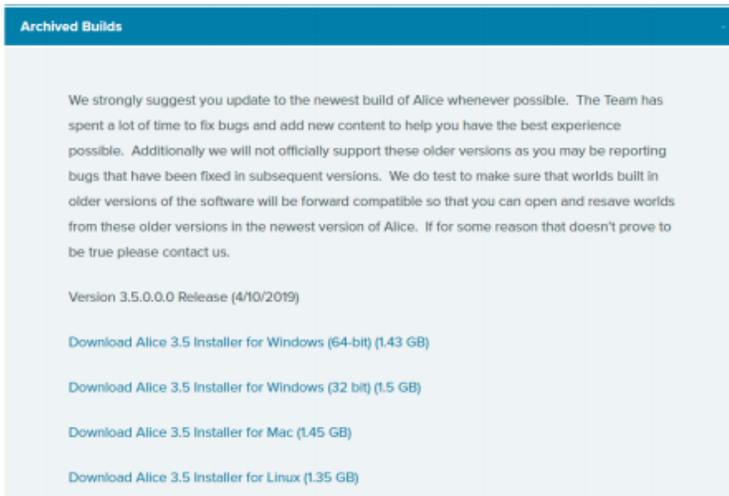
## Step 2: Install Alice Programming Environment

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: <http://www.alice.org/get-alice/alice-3/>

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:

- You may get a dialog saying “Alice 3 Installer.app” can’t be opened because it’s from an unidentified developer. So, go to Security and Privacy in System Preferences and click button “Open Anyway”. You will then get dialog saying “Alice 3 Installer.app” is from an unidentified developer. Are you sure you want to open it? Click “Open”.
- The installation will complete without a success notice. Open Spotlight and launch Alice 3. Accept the terms of the License Agreement – parts 1 and 2. Click OK.
- Right mouse click Alice 3 icon on Dock and point to Options and then click “Keep in Dock”.

You will need to download the Alice 3 Plugin so that Alice programs can be transferred into NetBeans. Please follow the directions for installing the plugin on the next page.

## 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: <http://www.alice.org/get-alice/alice-3-with-netbeans/>

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.

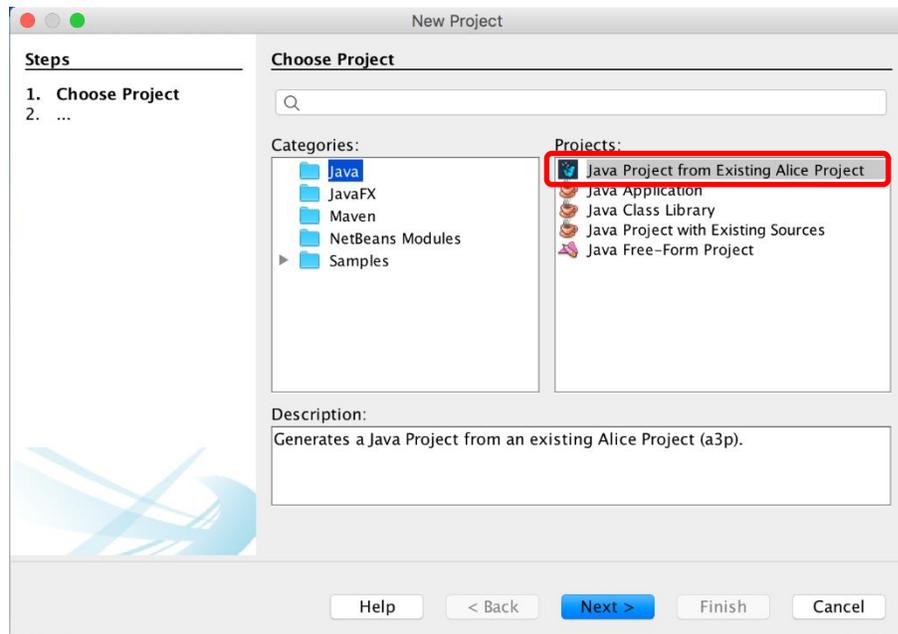
### Archived NetBeans Plugins

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 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 plug-in 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.



*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>