# Development in CS 250

## Module One

1. **Install Java**
2. Download and install the [Java SE Development Kit (JDK)](http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html).
3. **Install Eclipse**
4. Download and Install the latest version of [Eclipse](https://eclipse.org/).
5. There are many free YouTube videos that offer step-by-step instructions.
6. **Run your first program in Java using Eclipse**
7. Once Eclipse is open, go to the Welcome screen. (This can also be accessed via the Help menu.)
8. Click on “Create a Hello World application” for a walkthrough on creating the famous Hello World simple program in Eclipse.
9. **Exercise**
10. Put your name in the Hello World application when it runs.

## Module Two

1. **Install Swing Designer and WindowBuilder Plug-ins in Eclipse.**
   1. To begin developing with a graphical user interface (GUI), Eclipse needs additional software installed. Follow the directions in the first five minutes of the video [Installing Java WindowBuilder (Gui Designer Plugin) on Eclipse](https://youtu.be/oeswfZz4IW0) to install WindowBuilder.
2. **Run your first program with WindowBuilder in Eclipse.**
   1. Once the WindowBuilder and Swing Designer plug-ins are successfully installed, continue watching the above video to run your first program.
   2. To learn about adding controls to your GUI, watch and follow along with the [Java WindowBuilder - Intro - 1](https://www.youtube.com/watch?v=1sEYde5I7J8) video.
3. Change the background color, add a label with your name, and run the program.

## Module Three

1. **Run Java ListView control associated to the user story.**
2. Download the provided basic list control JAR file and run it to see the template before you make customizations.
3. Import the zip file to a new project in your Eclipse IDE.

* For help with importing a zip file to Eclipse, watch the following video: [Java Eclipse Tutorial – Part 10: Importing Projects](https://youtu.be/JAn_bO64HUI).

1. Using the source code given, update the simple list to your top five chosen destinations. Include the destination title, a short description, and a small image.
2. **Add images and additional customizations.**
3. Add images for each destination and at least one additional customization, color scheme, and so on to make the control as elaborate as you like.

* [Wikimedia Commons](https://commons.wikimedia.org/wiki/Main_Page) is an excellent source for copyright-free images. Be sure to credit the author or creator.
* For additional information on adding images to a Java project, watch this video: [Loading Resources in Java Using Eclipse IDE](https://youtu.be/yksgU4SxoJY).

1. Then, add a label with your name on it.
2. **Assignment:** Export your Eclipse Java project to an executable JAR file. This will include the source code and the image files so the full ListView control can run.

* For additional instructions on how to create an executable JAR file, watch the following video: [Exporting Your Eclipse Java Project to an Executable JAR File](https://youtu.be/P3CssFj1Jps).

## Module Four

1. Download and run the executable JAR file. This will serve as the wireframe update for you to rewrite the test case assignment.

## Module Five

1. **Import the code and customize the slideshow control.**
   1. Download the zip file of code for the updated slideshow control you played with in Module Four and import it into Eclipse.
   2. Update the slideshow control with pictures and text for the new requirements specified by the product owner this week.
2. **Assignment**
   1. Export your Eclipse Java project to an executable JAR file to be submitted to the instructor. This will include the source code and the image files so the full ListView control can run.
   * For additional instructions on how to create an executable JAR file, watch the following video: [Exporting Your Eclipse Java Project to an Executable JAR File](https://youtu.be/P3CssFj1Jps).