WA1921 Enterprise Android Application Development

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Minimum Hardware Requirements

NOTE: this software used in this course cannot be run in a virtual machine. It also requires a supported Intel CPU. AMD CPU's are not supported.

- CPU - an Intel® processor with support for Intel® VT-x, Intel® EM64T (Intel® 64) and Execute Disable (XD) Bit functionality.
- Hardware virtualization support enabled in the BIOS.
- 4GB RAM minimum, 8 GB recommended
- 10 GB in the hard disk
- Sound card
- Speakers (or earphones/headset)
- Connectivity to the Internet
    - If an HTTP Proxy is required, students must have details of how to configure this proxy

Part 2 - Minimum Software Requirements

- Windows 7 or later
- Apache Web Server 2.2.14 *
- Android Studio 4.0.10 and Android SDK (includes JDK 8)*

* - indicates software provided as part of the courseware.

Part 3 - Software Provided

List of ZIP files required for this course and used in next steps on this document:

WA1921_REL_7_0.ZIP

Send an email to support@webagesolutions.com in order to obtain a copy of the software for this course if you haven't receive it yet.

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 4 - Instructions

__1. Make sure the account that you are using to install the software has administrative privileges and if the students won't use the same account then add privileges in the Apache folder (you will install it later). During the class the student has to access to the Apache location and do changes there.

__2. Extract the **ZIP** file to **C:**

__3. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software**
- **C:\Software\Android**
- **C:\Software\Apache**

Part 5 - Privileges to Users

During the labs students will require privileges on several directories. They will need to be able to write, read, and modify files in these directories for the labs. Although the directions below are provided as an example, this may differ depending on Windows version. The important thing is to make sure students have full permissions on the folders below or they may not be able to accomplish some labs.

- **C:\Software**
- **C:\LabFiles**
- **C:\Workspace**

__1. Create the user that the students will use during the class.

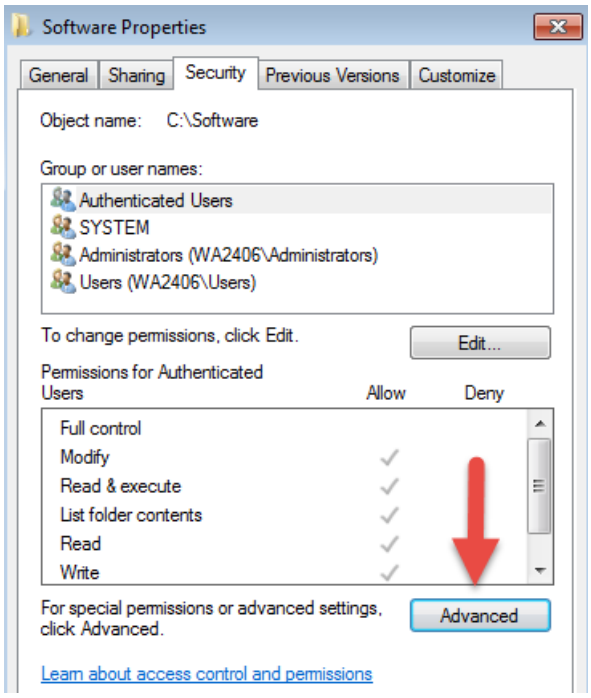
__2. Give the student user account administrative rights. During the labs the student requires this to install software.

__3. Open Windows Explorer.

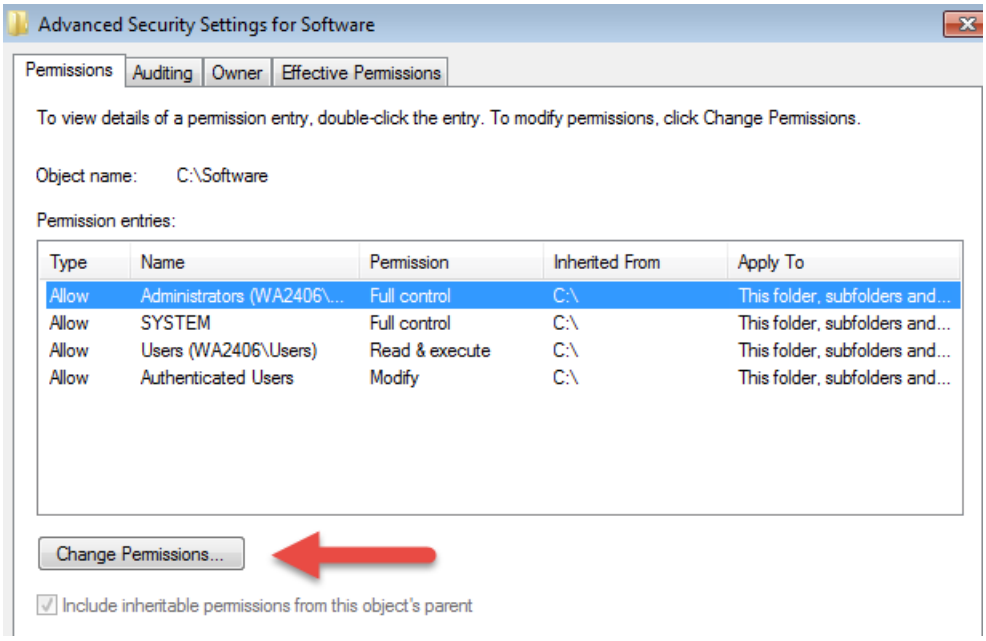
__4. Right click C:**Software** and select **Properties**.

__5. Click the **Security** tab.

__6. Click **Advanced**.

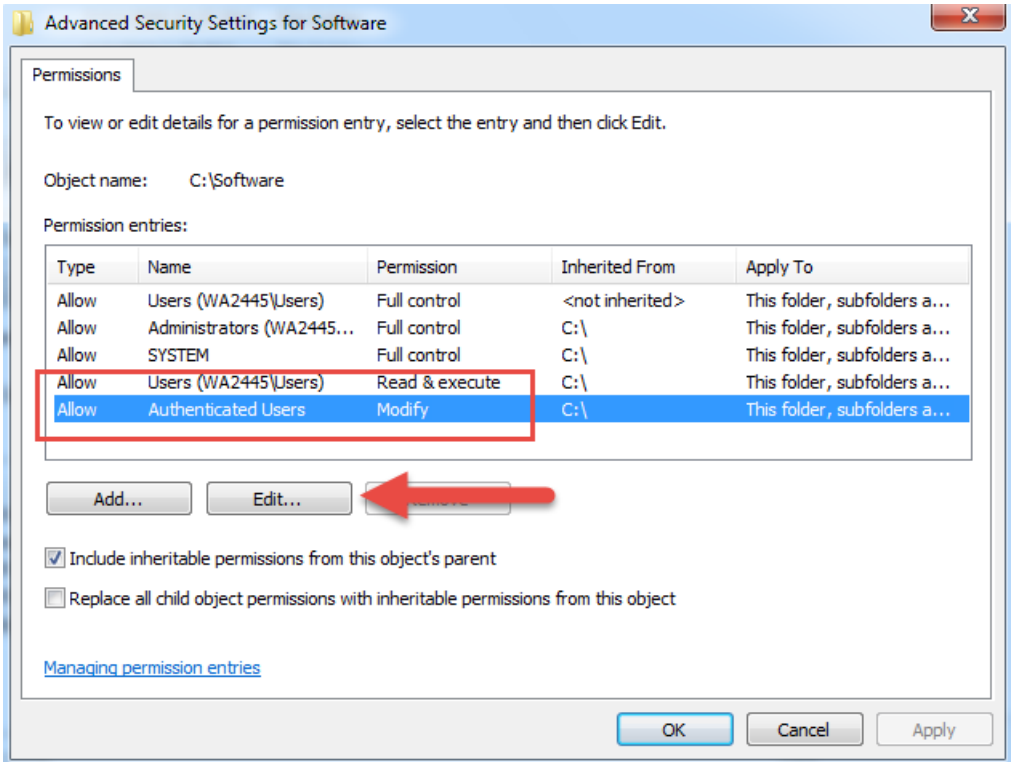


__7. Click **Change Permissions**.

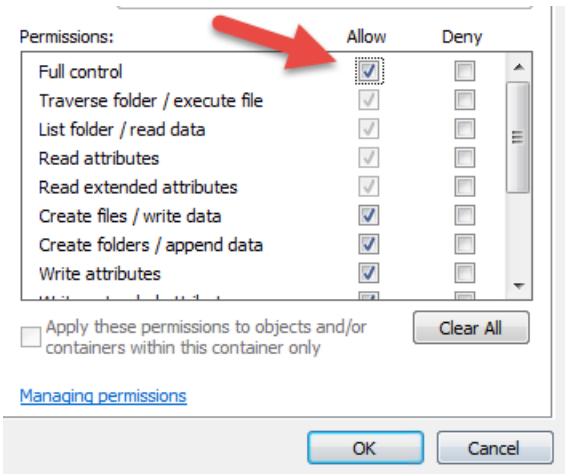


__8. Select the **Authenticated Users** entry and click **Edit…**

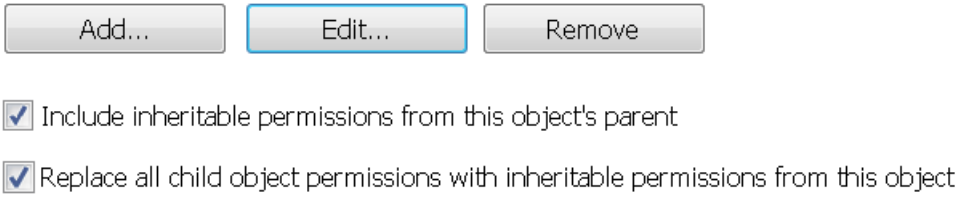
Note. If you don't have a domain in your environment the select **Users** instead Authenticated Users.



__9. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.



__10. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.



__11. A *Windows Security* dialog will open. Click **Yes**.

__12. Wait until Windows finishes updating security.

__13. Back in the *Advanced Security Settings* dialog, click **OK**.

__14. Back in the *Properties* dialog, click **OK**.

__15. Do the same steps to the **C:\LabFiles** folder.

__16. Create a folder called **C:\Workspace** if its not already created.

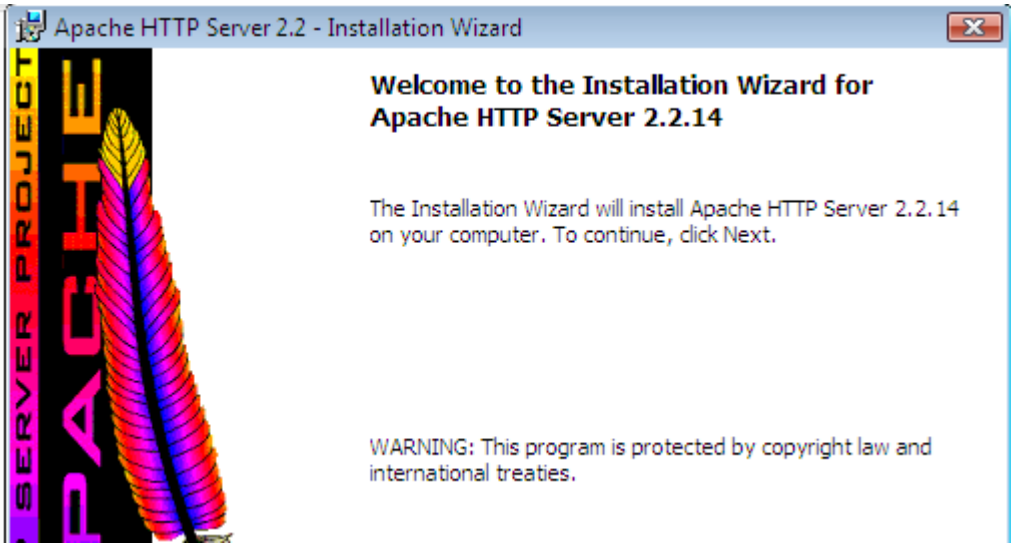
__17. Do the same steps to the **C:\Workspace** folder.

Part 6 - Installing Apache HTTP Server 2.2.14

__1. Login as the administrative ID created for the class.

__2. Run **apache_2.2.14-win32-x86-no_ssl.msi** from the **C:\Software\Apache** folder.

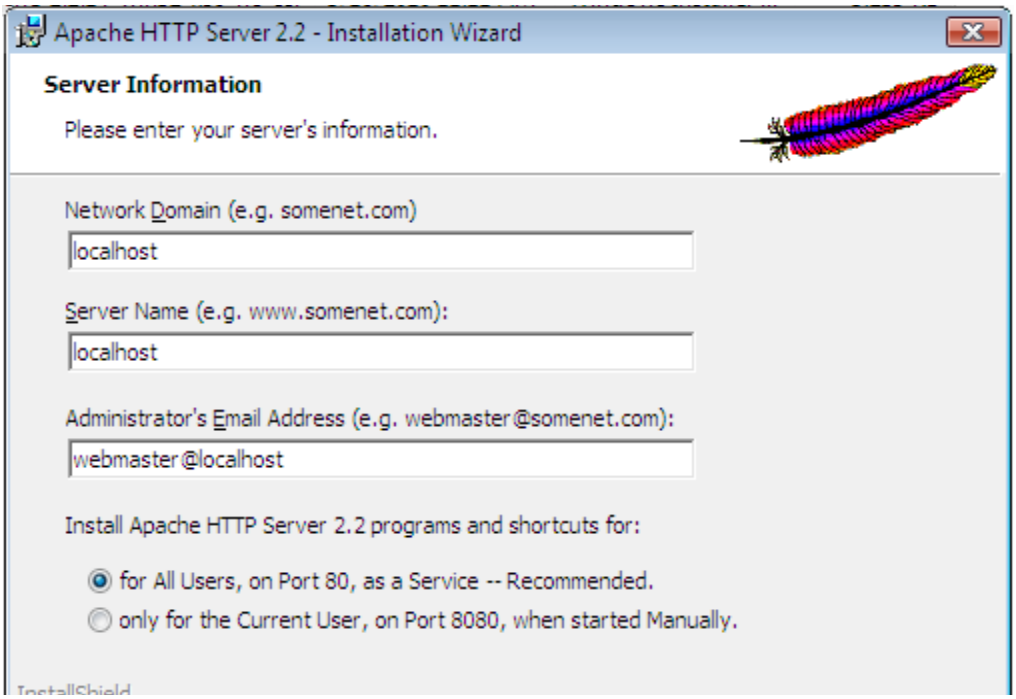
__3. In the Welcome screen, click **Next**.



__4. Accept the License Agreement and click **Next**.

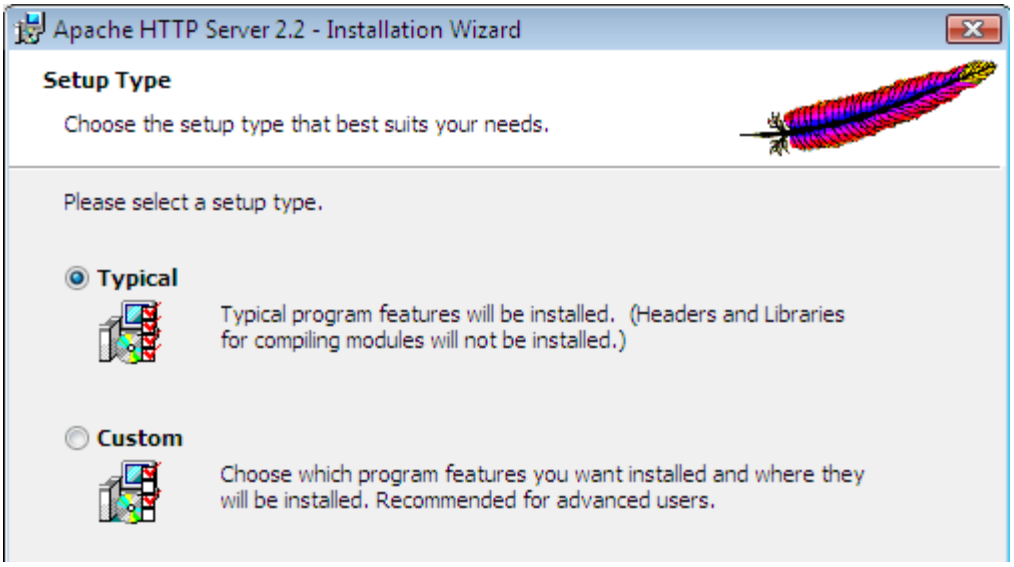
__5. In the *Read This First* page, click **Next**.

__6. Enter **localhost** for **Network Domain** and **Server Name**. Enter **webmaster@localhost** for **Administrator's E-mail Address** as shown below.

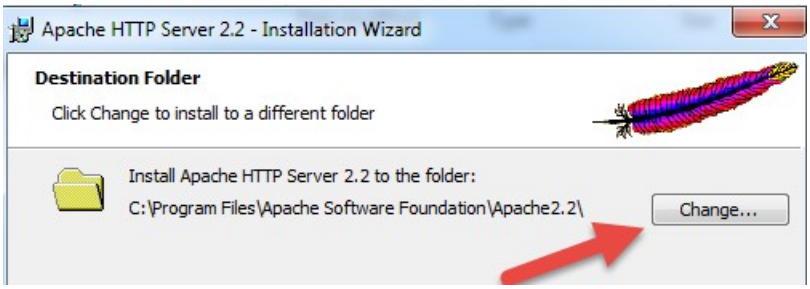


__7. Click the **Next** button.

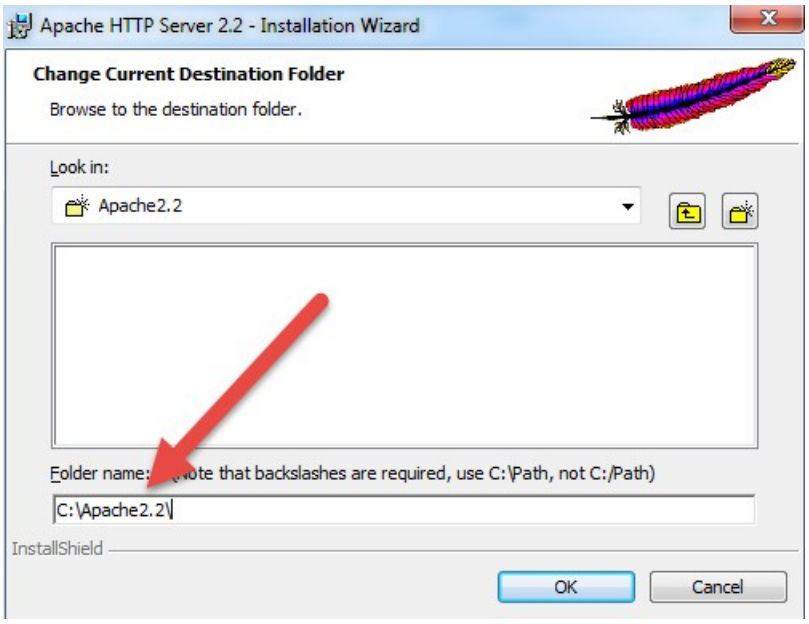
__8. Select **Typical** installation and click **Next**.



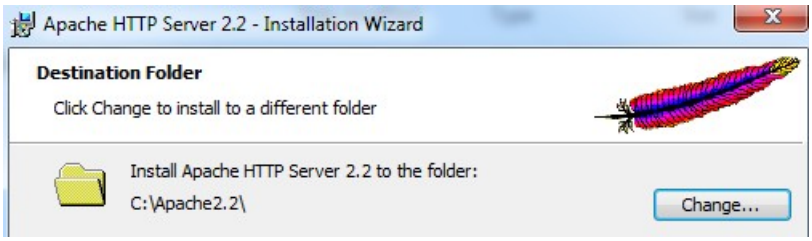
__9. Click the **Change** button to change the destination folder.



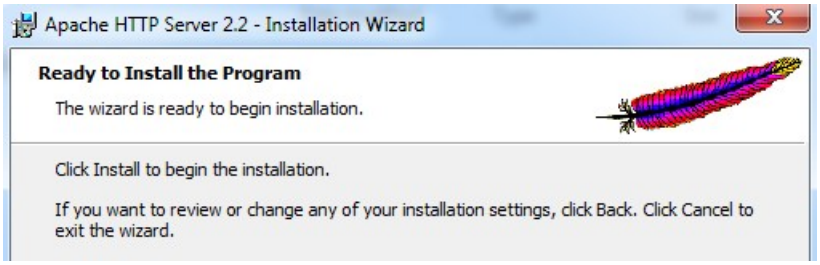
__10. Then change the **Folder name** to C**:\Apache2.2** and click **OK**.



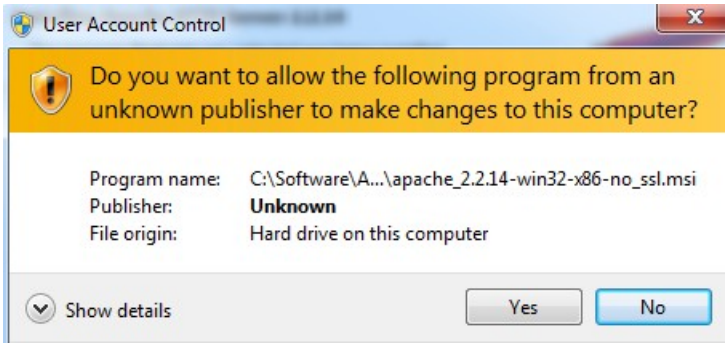
__11. Back in the *Destination Folder* page, confirm the new folder name (**C:\ Apache2.2**\) and click **Next**.



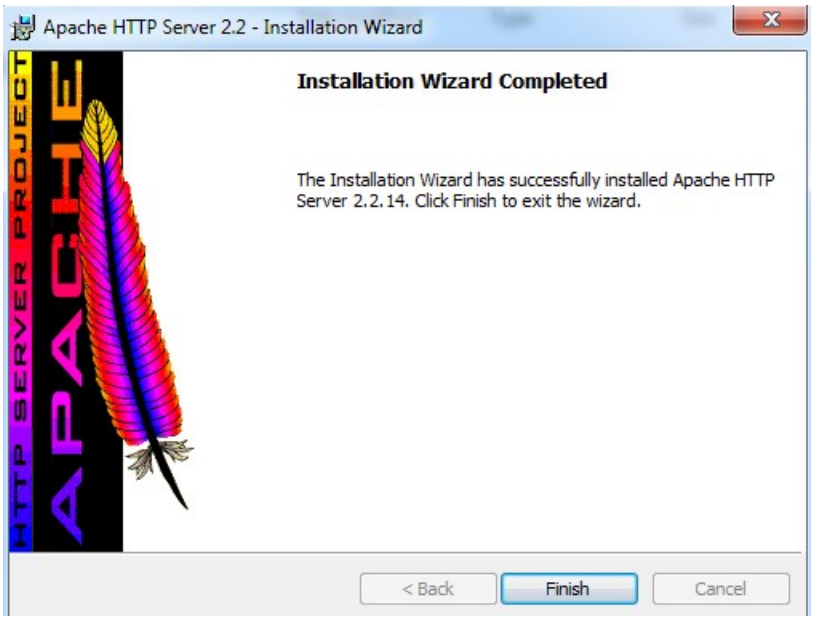
__12. Click **Install** to start the installation.



__13. If prompted by Windows security, click **Yes** to allow the installation to proceed.



__14. When the *Installation Wizard Completed* message appears, click **Finish**.

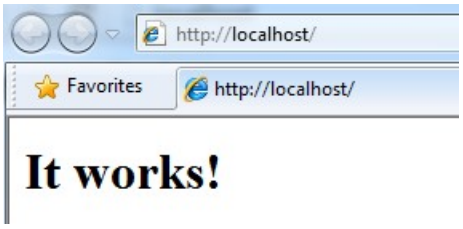


__15. Verify that the Apache Server is running on the task bar of Windows.

__16. Open a browser and type:

```
http://localhost
```

__17. Verify you see the message: **It works!**



Apache HTTP Server 2.2.14 is installed.

Part 7 - Modify File Permissions (Windows Vista, Windows 7, Windows Server 2008, or Windows 8)

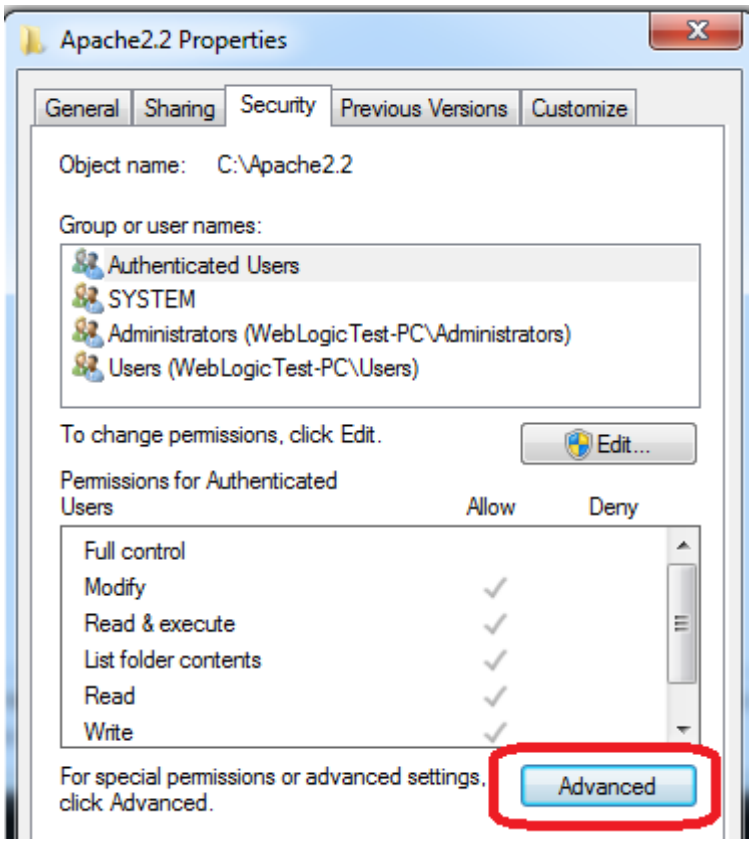
Note: If installing on Windows Vista, Windows 7, Windows Server 2008, or Windows 8 perform this section. Failure to follow these additional steps will lead to an unusable installation. These steps allow full access to the directories used by the Apache Web Server install. This is required so that students can write to the document root.

__1. Open Windows Explorer.

__2. Right click C:**Apache2.2** and select **Properties**.

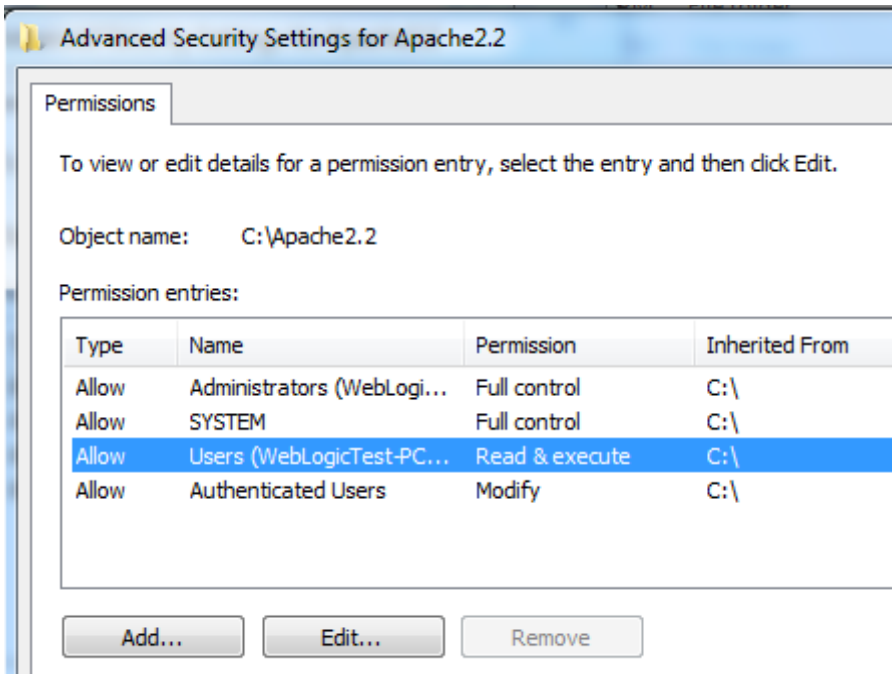
__3. Click the **Security** tab.

__4. Click **Advanced**.



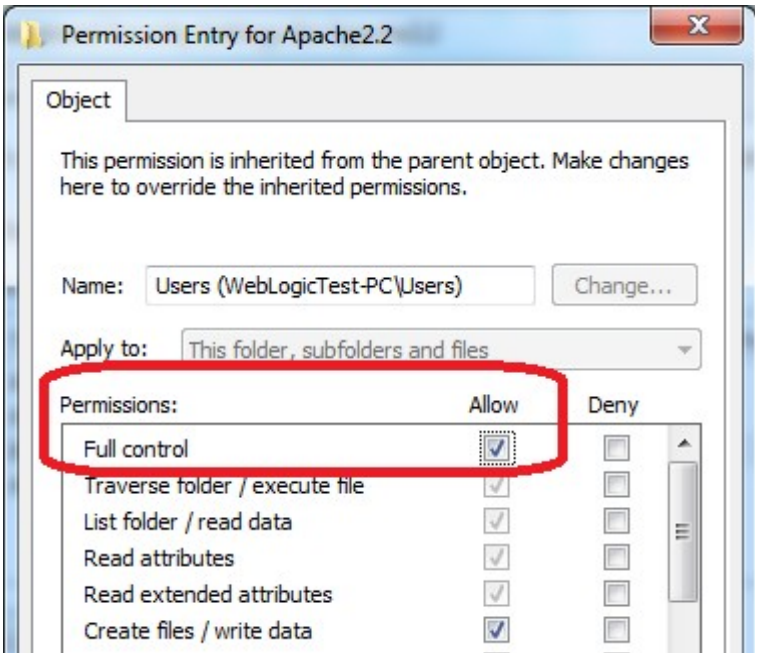
__5. Click **Change Permissions**.

__6. Select the **Users** entry **(add one if not present)**.

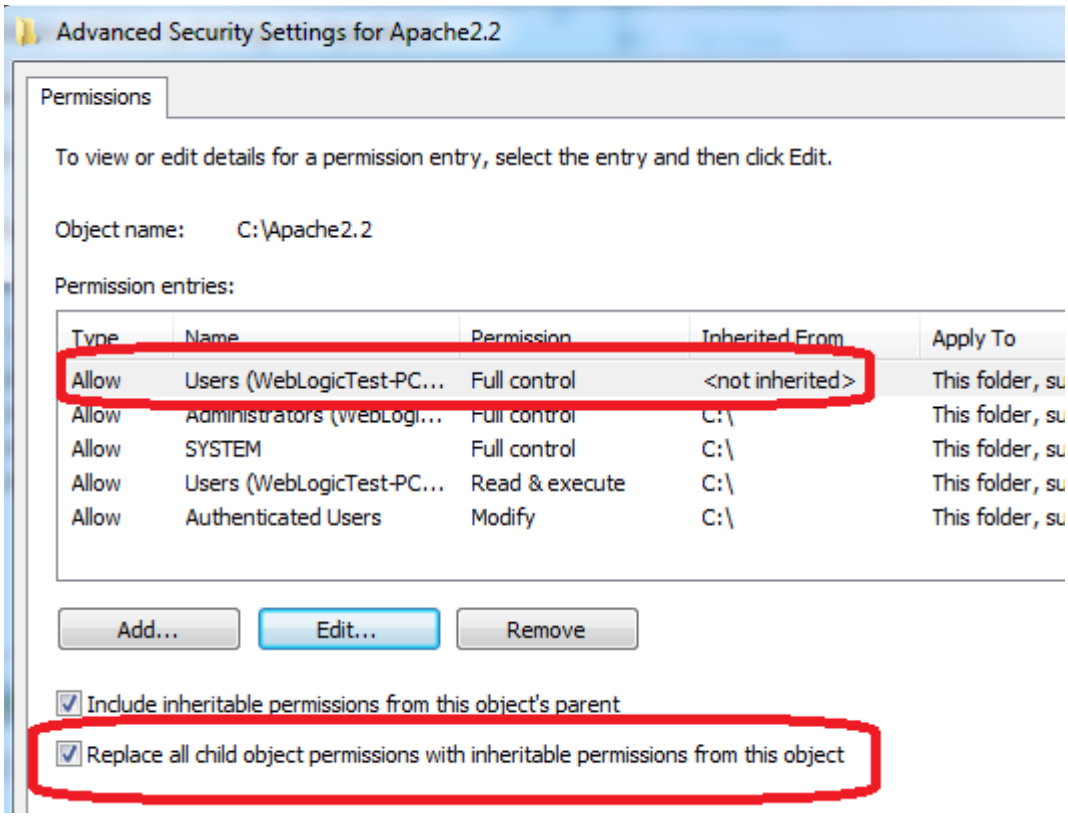


__7. Click **Edit…**

__8. Check the **Allow** checkbox to the right of **Full Control** and click **OK**.



__9. Select the checkbox for **Replace all child permissions with inheritable permissions from this objects** and then click **OK**.



__10. Click **OK** to continue.

__11. A *Windows Security* dialog will open. Click **Yes**.

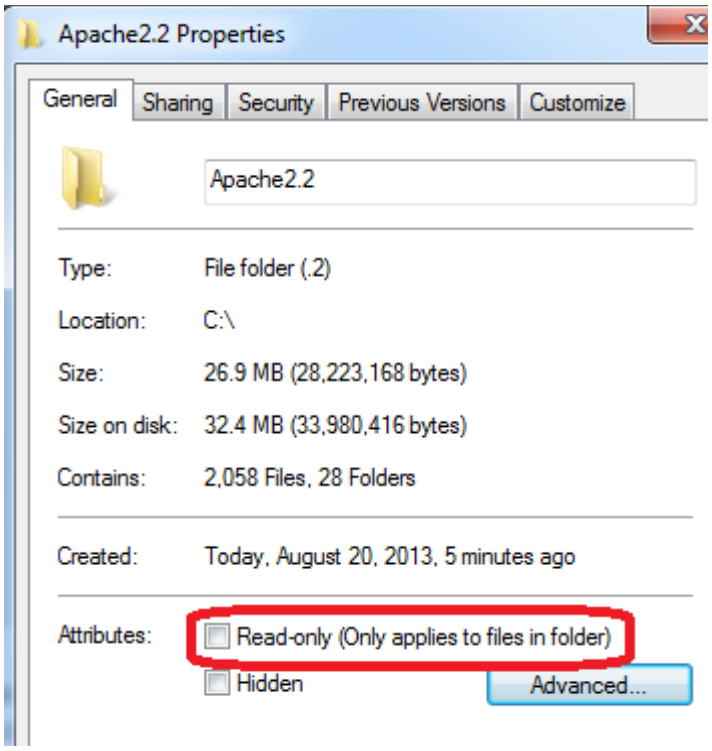
__12. Wait until Windows finishes updating security.

__13. Back in the *Advanced Security Settings* dialog, click **OK**.

__14. Back in the *Apache2.2 Properties* dialog, click **OK**.

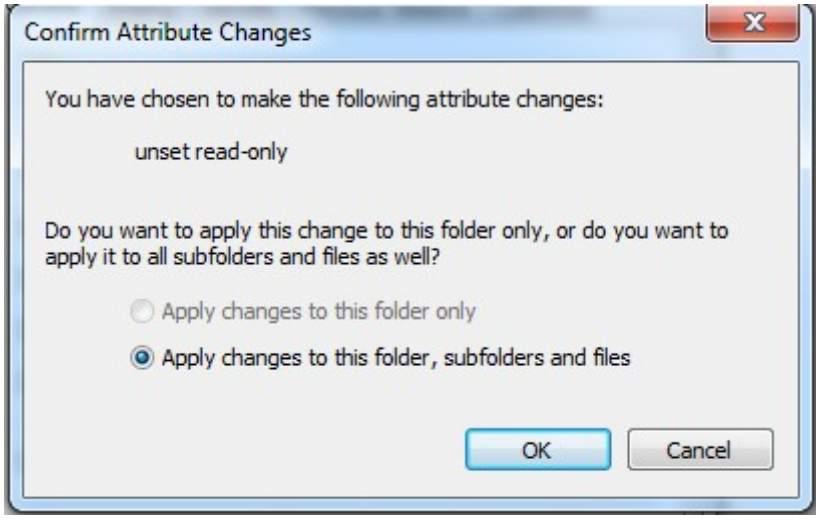
__15. Right click C:**Apache2.2** and select **Properties**.

__16. Uncheck the **Read-only** checkbox so files can be written to the directory.



__17. Click **OK**.

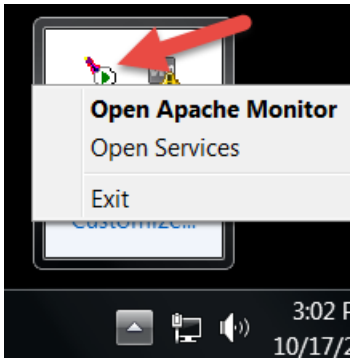
__18. In the *Confirm Attribute Changes* dialog, click **OK**, so the change will be applied to this folder, subfolder, and any files.



__19. Restart the computer and log in with the user that the student will use to do the labs.

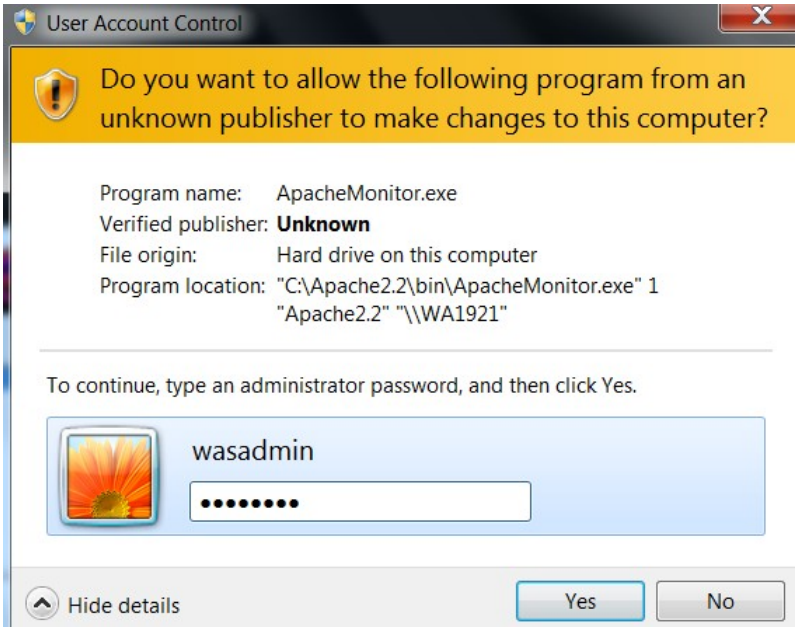
__20. Make sure the user has full access to the **C:\Apache2.2\conf** and **C:\Apache2.2\htdocs** folders.

__21. Right click the task bar and select **Open Apache Monitor**.

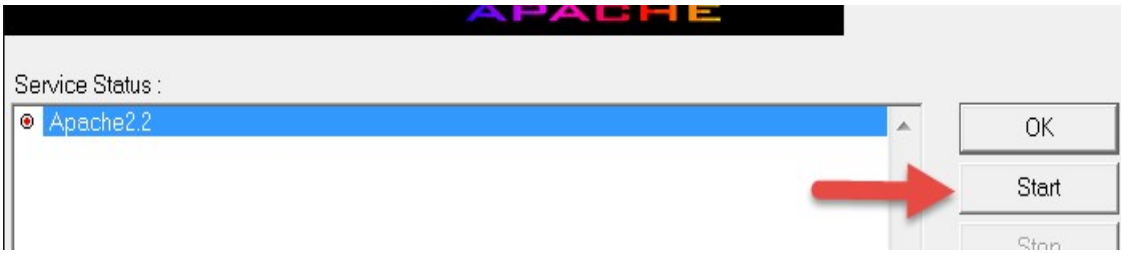


__22. The **Open Apache Monitor** window will open then click **Stop**.

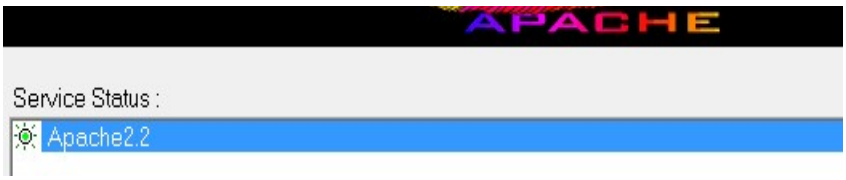
__23. Enter the admin password if it is required and click **Yes**.



__24. The server will stop, click **Start**.



The server will be started again.



Note. If you were asking for password to stop the server means that you need to configure the user to allow the student starting the server without asking permissions or you need to provide the admin password to the student to be able to stop and restart the server because this is required during the labs.

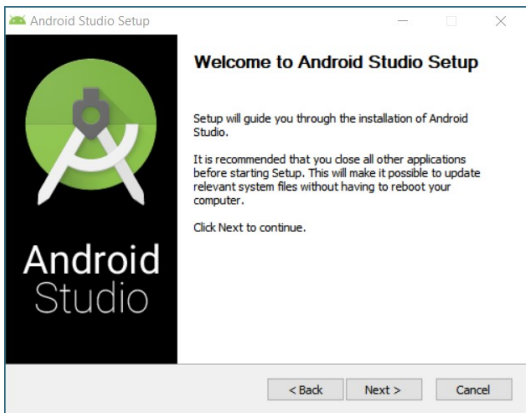
Part 8 - Installing Android Studio 4.0.10

Android Studio MUST be installed as the same user that will perform the labs. If required, create a local administrative account to perform installation and have the student login as that account to do the class labs.

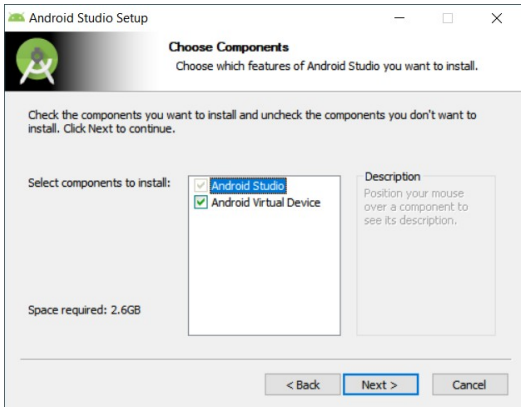
__1. From the **C:\Software\Android** directory run the following file:

`android-studio-ide-193.6626763-windows.exe`

Note: If prompted by a security prompt allow the installation to continue.



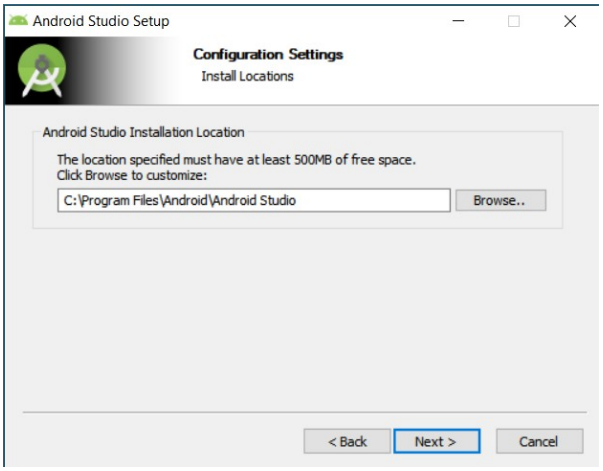
__2. On the Welcome screen, click the **Next** button.



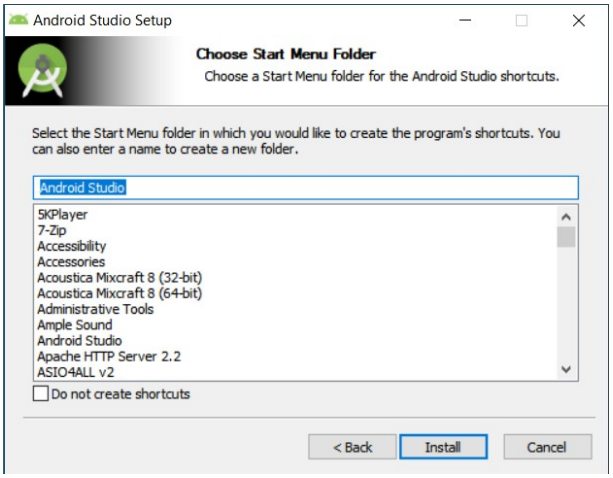
__3. Leave all components checked and click the **Next** button.

Note: You may not see the same options.

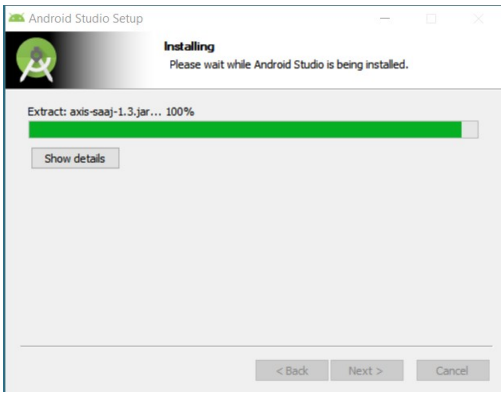
__4. On the Install locations screen leave the location of Android Studio as the default and click the **Next** button.



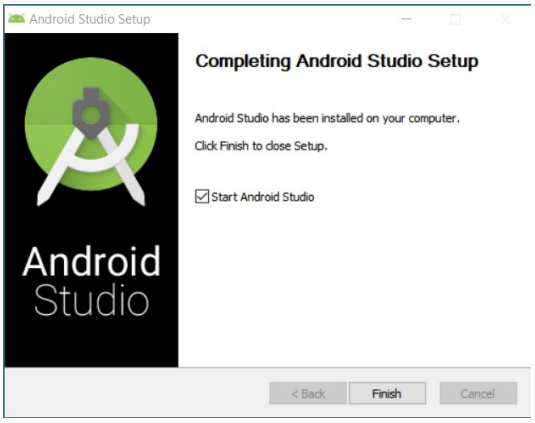
__5. Click the **Install** button in the 'Choose Start Menu Folder' window.



The progress window will show while the installation is running.



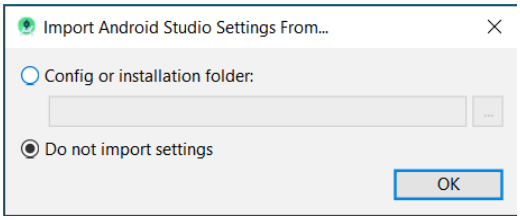
__6. Finally the 'Installation Complete' window will show



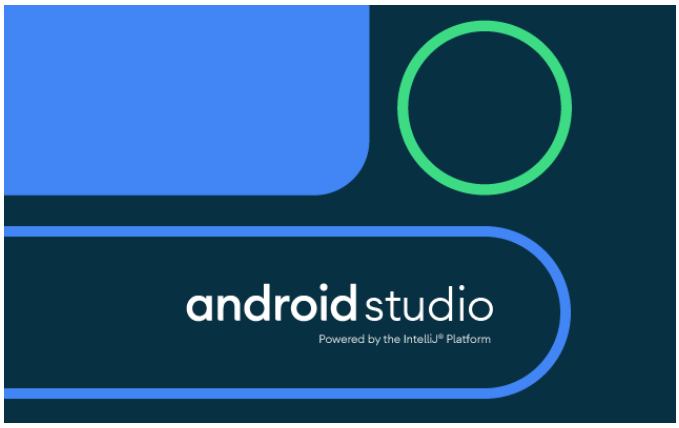
__7. Click **Finish**. This will close the installer and start Android Studio.

__8. If prompted by Windows Firewall while Android Studio is loading, select to unblock the process if possible.

__9. If a Complete Installation dialog open, select **do not import settings** and click **OK**.

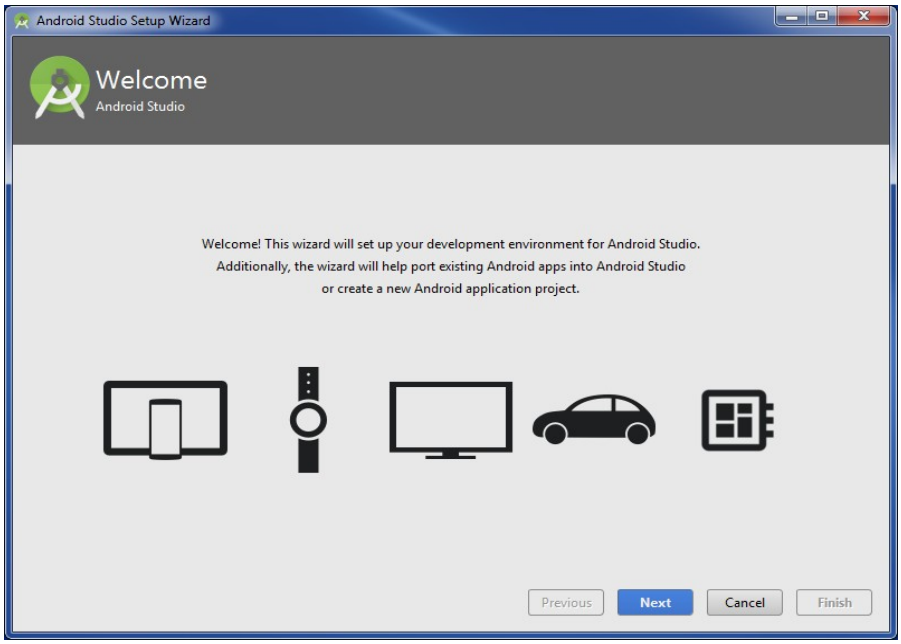


__10. Android will start loading.

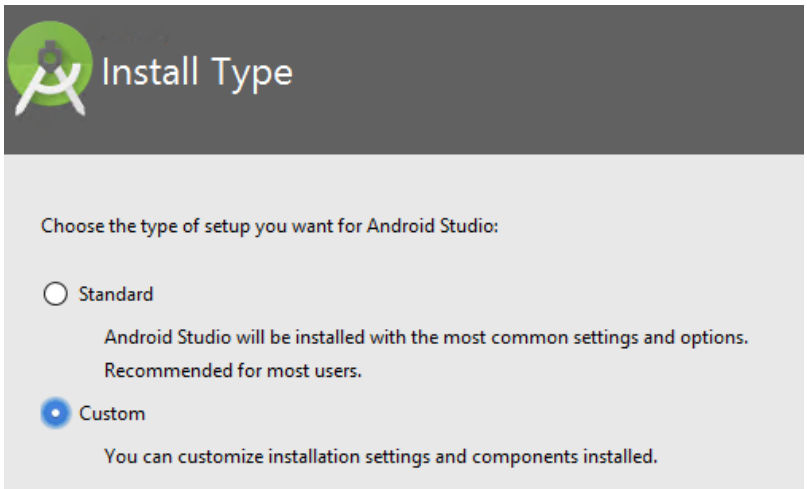


__11. In the 'Data Sharing' window, click don't send.

__12. In the 'Welcome' window, click **Next**.



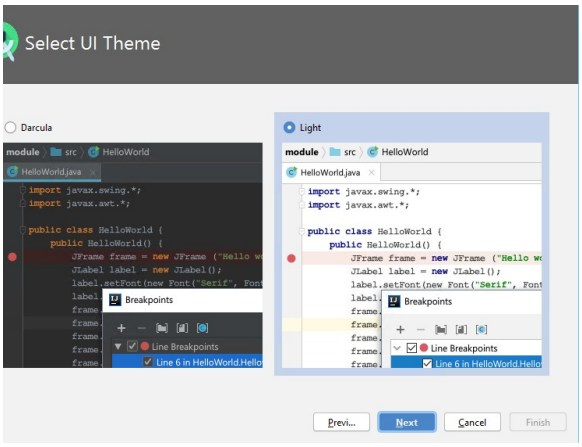
The "Install Type" window will appear.



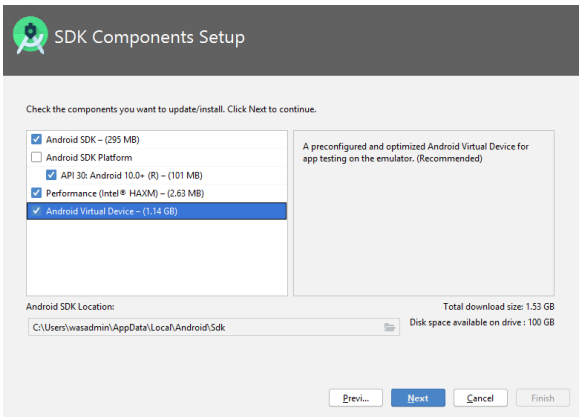
__13. Select **Custom** and click **Next**.

__14. Click **Next** to accept the default JDK for Gradle.

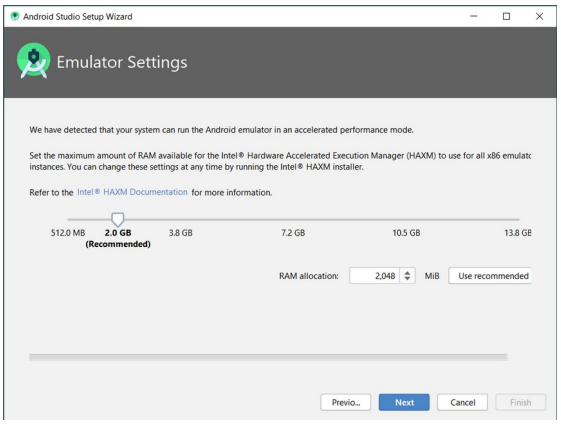
__15. Leave the **Light** theme selected and click the **Next** button.



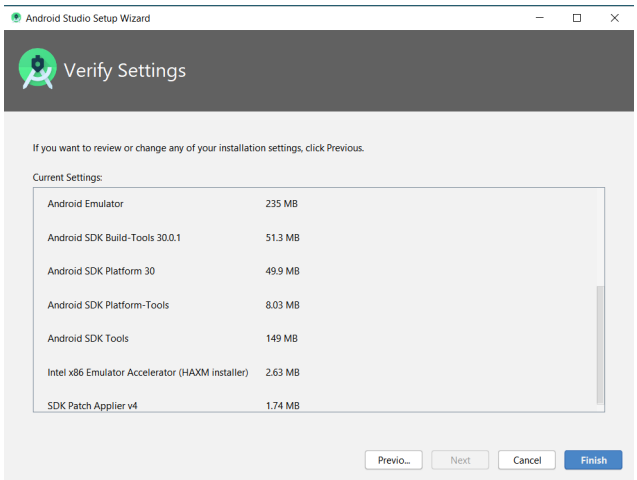
__16. Next select the following options from the SDK Components Setup screen:



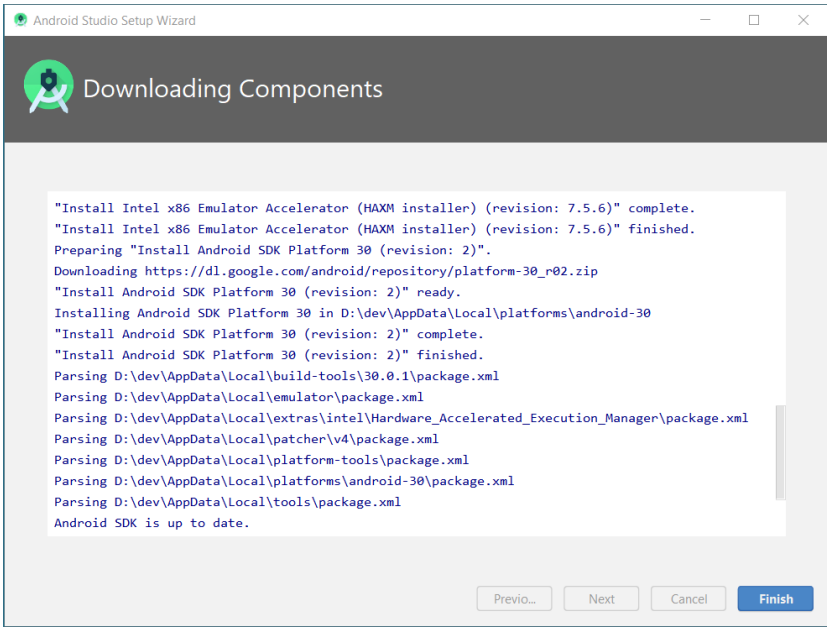
__17. Next you should get the "Emulator Settings" Screen. Leave the defaults and click **Next**.



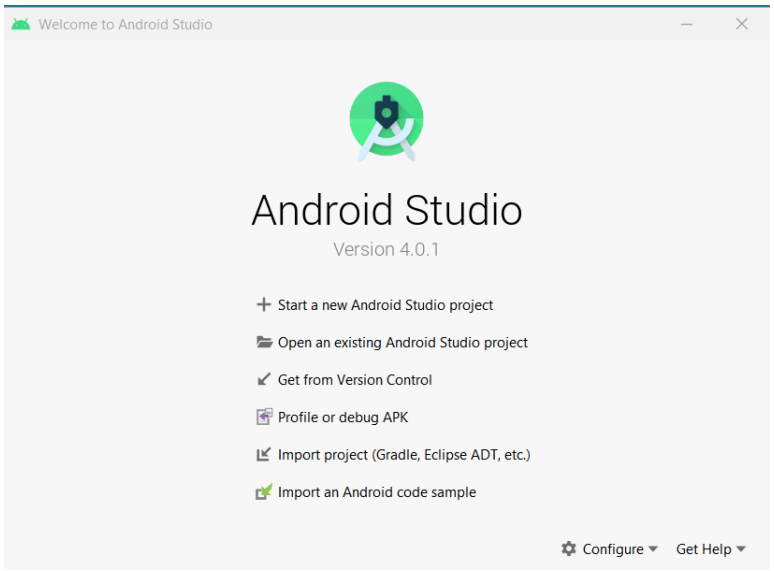
__18. The "**Verify Settings**" screen will come up. Click on "Finish".



__19. The "**Downloading Components**" screen will appear.



__20. When all components have been downloaded click "**Finish**". The next screen you see will be the Android Studio "**Welcome**" Screen.



__21. The installation is complete.

Part 9 - Summary

You have successfully installed the software for this course!

If you have any question please contact us by email at support@webagesolutions.com

From US and Canada call: 1-877-812-8887 ext. 26

International call: 416-406-3994 ext. 26