



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

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Objective:

In this lab we are going to go through the steps needed in setting up the connection from the MIT App Inventor 2 to our Android device. There are three (3) options to setup your connection which are via **WiFi**, via **USB** cable, and lastly via an Android **Emulator**. For this lab we're going to focus on connecting using the AI Companion app that you can download from Google Play Store and connecting it via WiFi and USB cable to the MIT App Inventor 2.

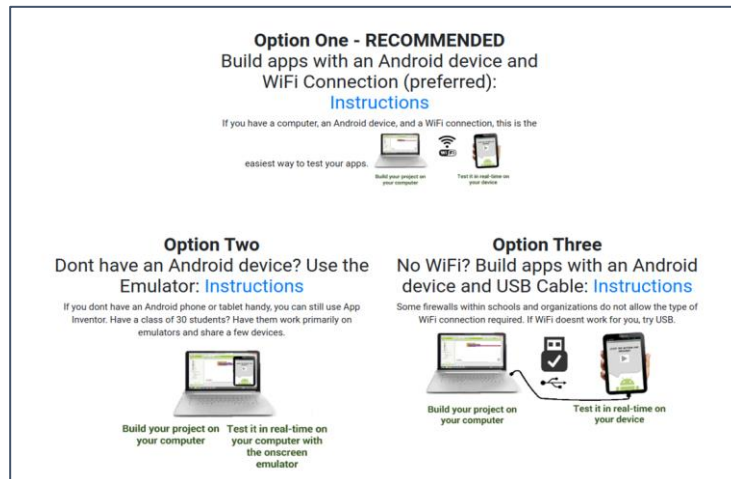
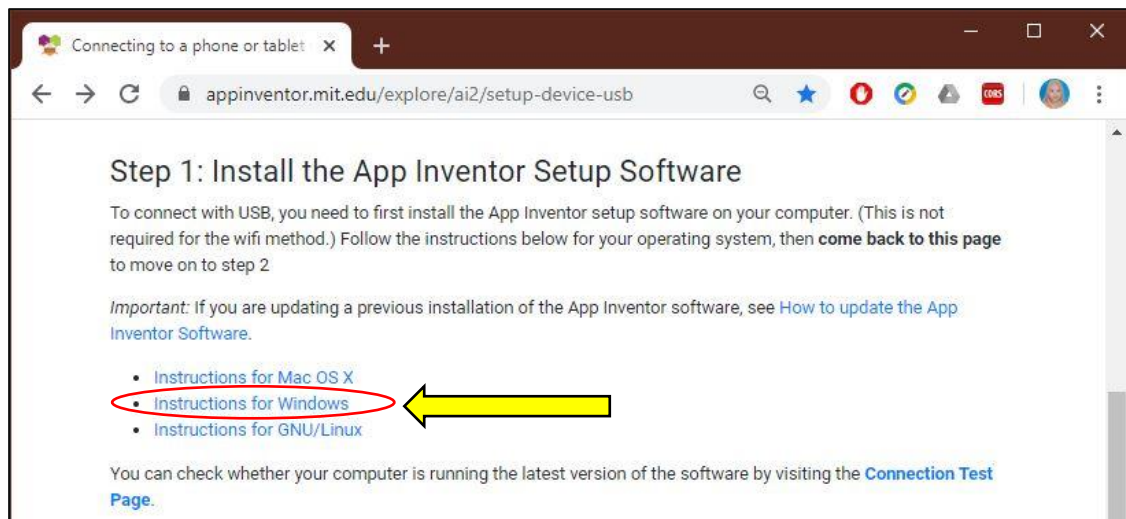


Figure 1: Connections between MIT App Inventor and your Android Device

Steps (via USB):

1. Go to <https://appinventor.mit.edu/explore/ai2/setup-device-usb> and scroll until you see a link to install App Inventor 2 for Windows as shown in figure below.



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

2. Then, click on the hyperlink **“Download the installer”**. Once you’ve clicked on the hyperlink, a window will pop-up prompting the location to save the installer.

The screenshot shows the MIT App Inventor 2 Setup page in a web browser. The page title is "Installing App Inventor 2 Setup on Windows". It contains instructions for installing the software, including a note about browser compatibility and a list of steps. A yellow arrow points from a text box "Click here to download." to the link "1. Download the installer." in the list. A large blue arrow points from this link to a "Save As" dialog box. The dialog box shows the file name "MIT_App_Inventor_Tools_2.3.0_win_setup.exe" and the save location "Desktop > MIT App Inventor". A yellow arrow points from a text box "You can set the location for the installer to be downloaded. In this case I've created a folder over at the Desktop named 'MIT App Inventor'" to the folder path in the dialog. Another yellow arrow points from a text box "Click on the button 'Save' to continue downloading the installer" to the "Save" button in the dialog.

Installing App Inventor 2 Setup on Windows

Installing the Windows software for App Inventor Setup has two parts:

1. Installing the App Inventor Setup software package. This step is the same for all Android devices, and the same for Windows XP, Vista, Windows 7, 8.1, and 10.
2. If you choose to use the USB cable to connect to a device, then you'll need to [install Windows drivers](#) for your Android phone.

NOTE: App Inventor 2 does not work with Internet Explorer. For Windows users, we recommend using either [Chrome](#) or [Firefox](#) as your browser for use with App Inventor.

Installing the App Inventor Setup software package

You must perform the installation from an account that has administrator privileges. Installing via a non-administrator account is currently not supported.

If you have installed a previous version of the App Inventor 2 setup tools, you will need to uninstall them before installing the latest version. Follow the instructions at [How to Update the App Inventor Setup Software](#).

1. [Download the installer.](#)
2. Locate the file **MIT_Appinventor_Tools_2.3.0 (~80 MB)** in your Downloads file or your Desktop. The location of the download on your computer depends on how your browser is configured.
3. Open the file.

Click here to download.

Save As

Desktop > MIT App Inventor

File name: MIT_App_Inventor_Tools_2.3.0_win_setup.exe

Save as type: Application (*.exe)

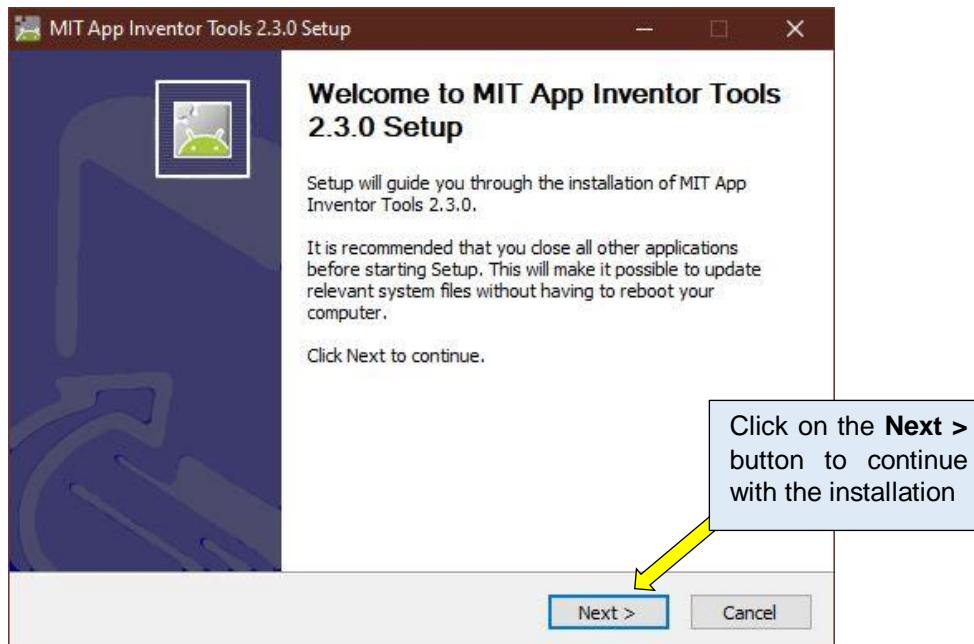
Save Cancel

You can set the location for the installer to be downloaded. In this case I've created a folder over at the Desktop named "MIT App Inventor"

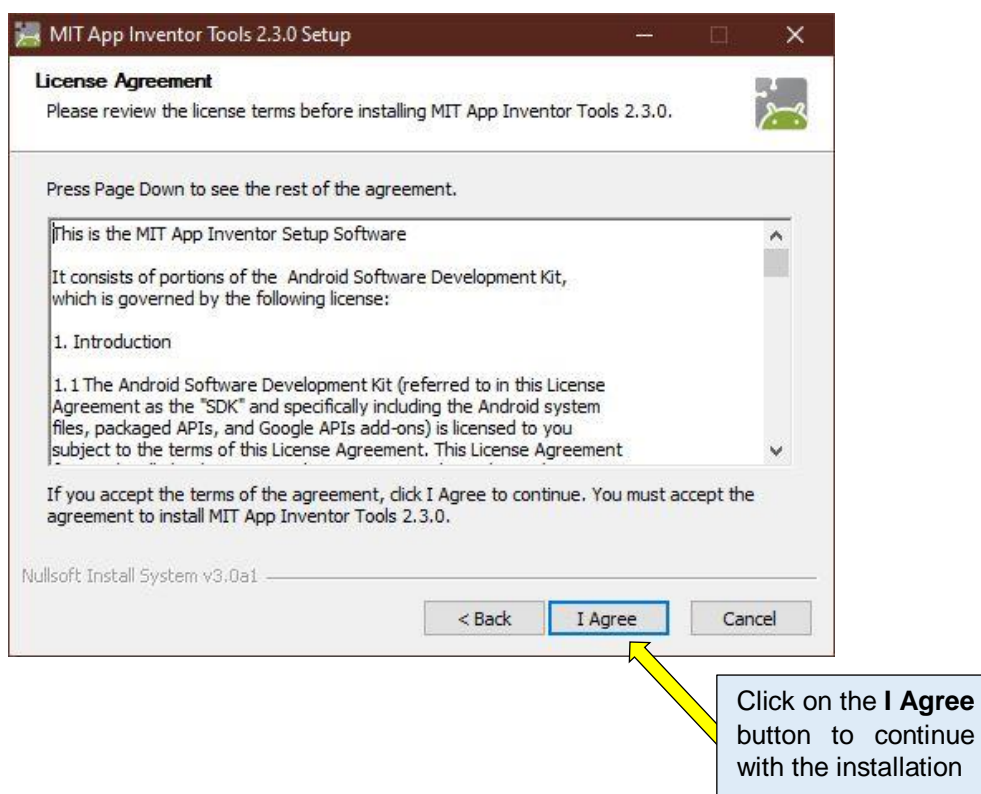
Click on the button "Save" to continue downloading the installer

LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

3. Once you have located the installer, right-click on it and “**Run as administrator**”. Then, allow it to run.
4. After you have run the installer, a setup window will pop-up as shown in figure below. Click on the button “**Next >**” to continue with the installation.

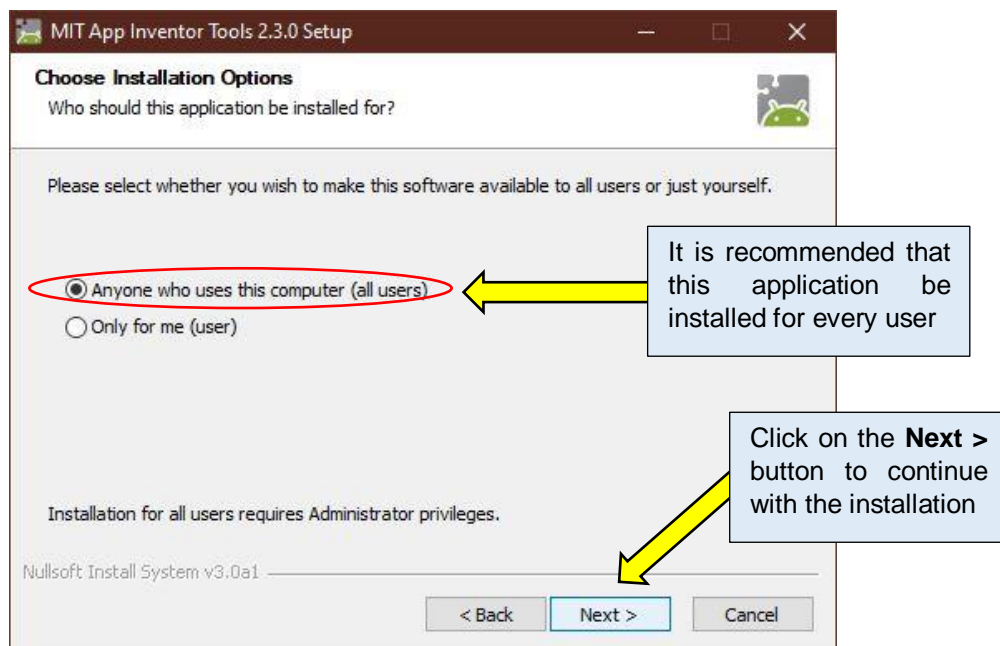


5. Then you'll be presented with the License Agreement for MIT App Inventor Tools. Read carefully before agreeing. If you agreed with the agreement, click on the “**I Agree**” button to continue with the installation.

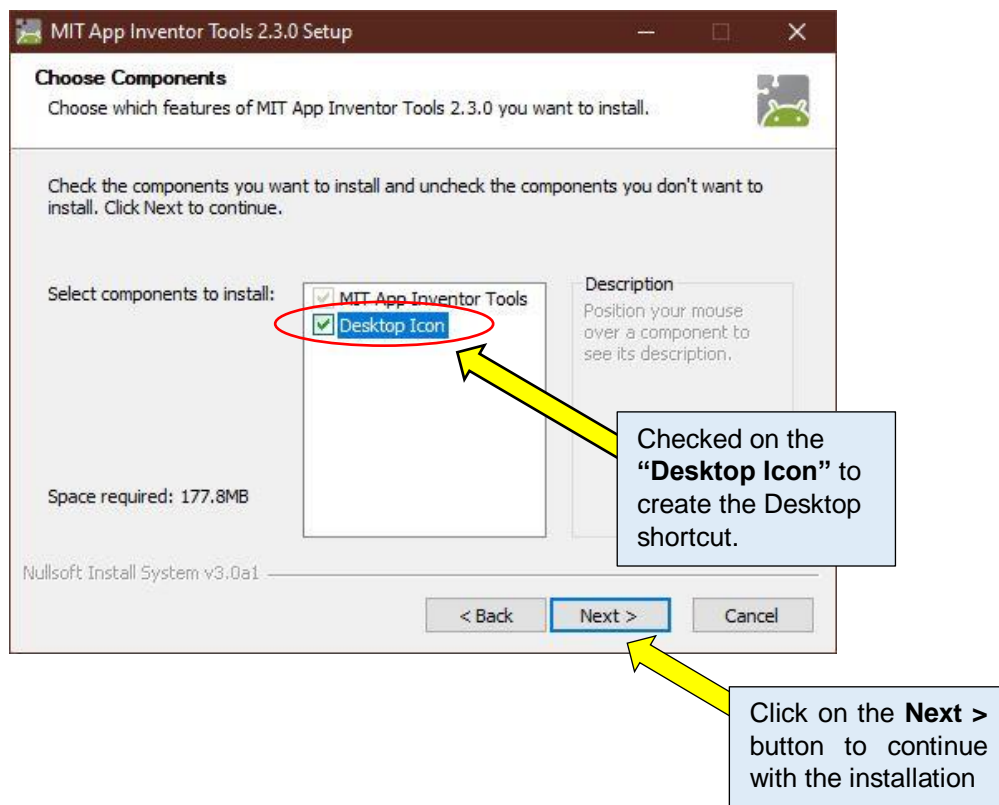


LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

- Next, you need to choose whether to make the application or software accessible to all users or only for the current user. It is recommended that the software to be accessible to all users.

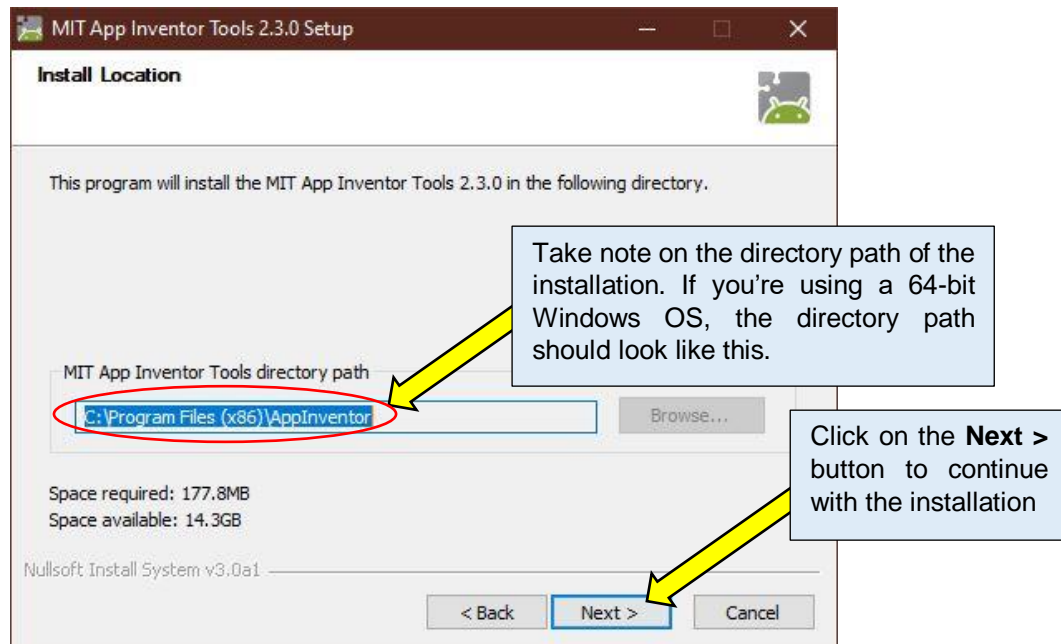


- After that, you can choose the components to be installed. As you can see, by default the MIT App Inventor Tools have been checked. You are left to choose either to create a Desktop Icon or not.

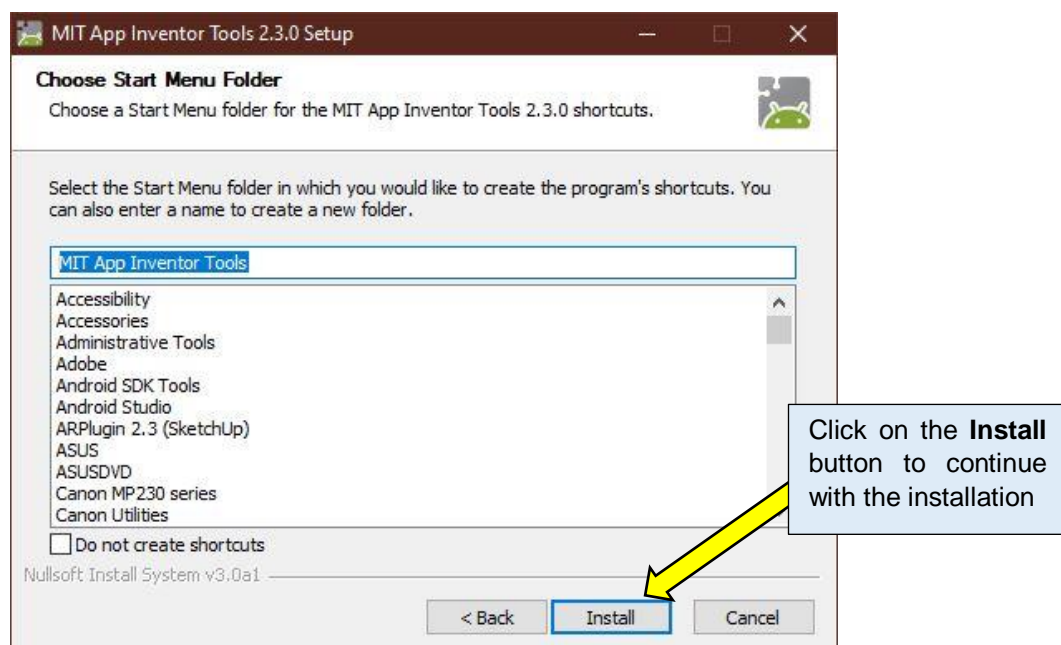


LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

8. It is important for you to remember the directory path of the MIT App Inventor Tools.

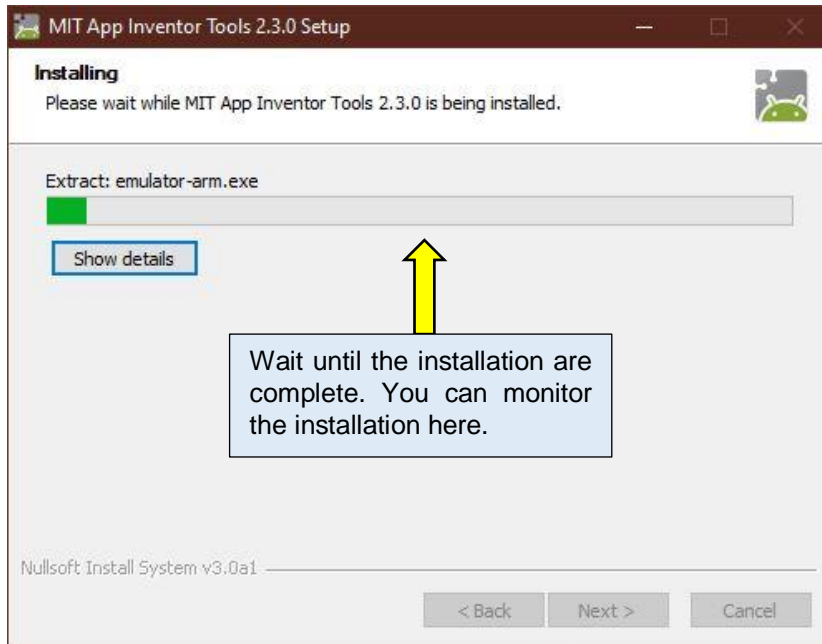


9. Now, all that is left is for you to do is to install this applications on your laptop or workstation. You can change the name of the folder for the MIT App Inventor Tools shortcut if you want but by default the name of the folder is already given to you.



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

10. Sit back, relax and wait until the installation finished. You can monitor the progress of the installation from the installation window as shown in the figure below.

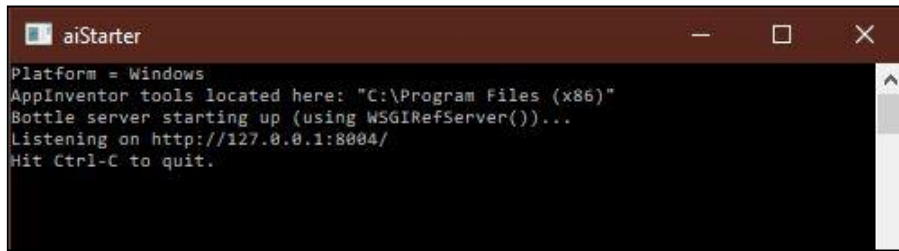


11. Lastly, click on the Finish button and the **aiStarter tool** will start.

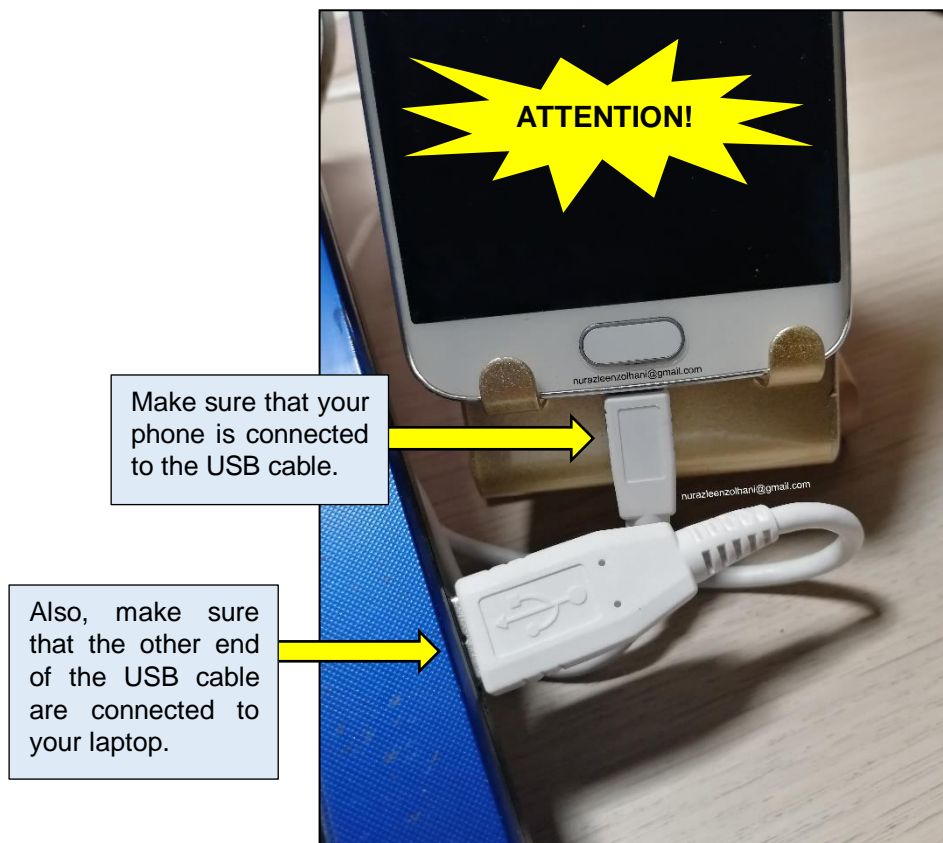


LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

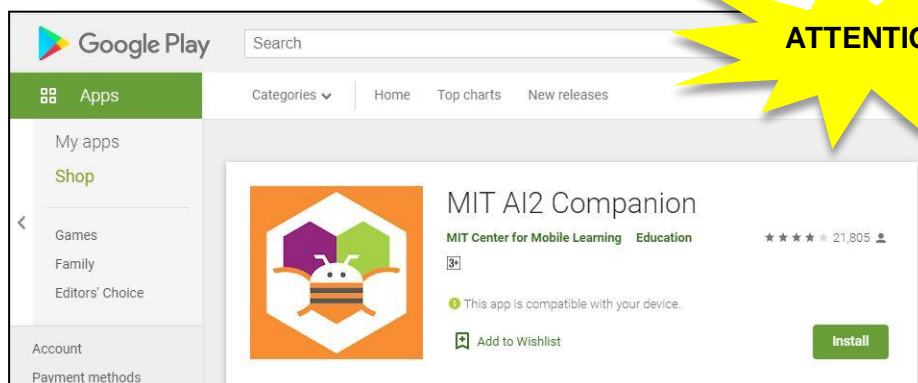
12. Then, a window will pop-up looking like the figure below. This is the tools to connect to the MIT App Inventor 2.



```
aiStarter
Platform = Windows
AppInventor tools located here: "C:\Program Files (x86)"
Bottle server starting up (using WSGIServerRefServer())...
Listening on http://127.0.0.1:8084/
Hit Ctrl-C to quit.
```



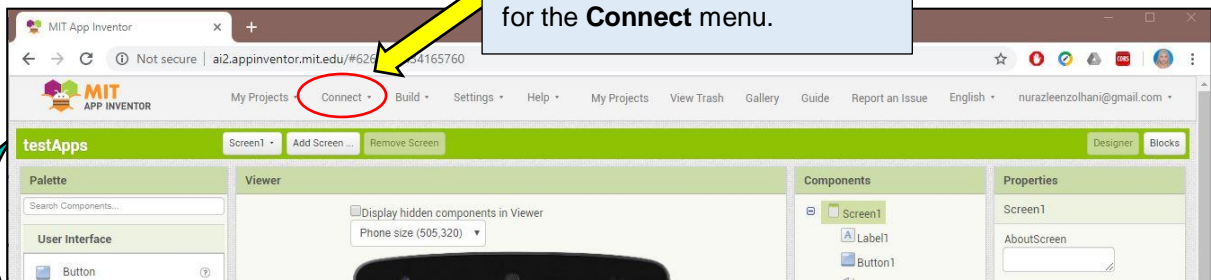
Besides that, make sure that you **“Allow USB Debugging”** at your phone. As well as **downloading the MIT AI2 Companion** app over at the **Google Play Store** as shown in figure below.



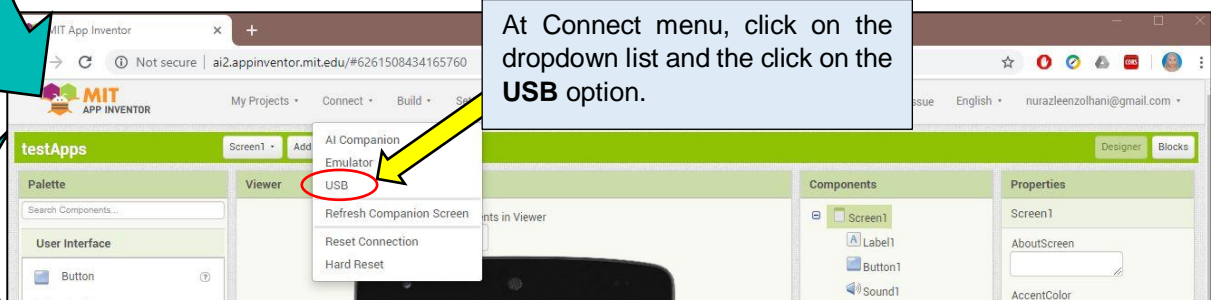
LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

13. Next step, go to the MIT App Inventor 2 web application, and click on the second menu which the Connect menu.

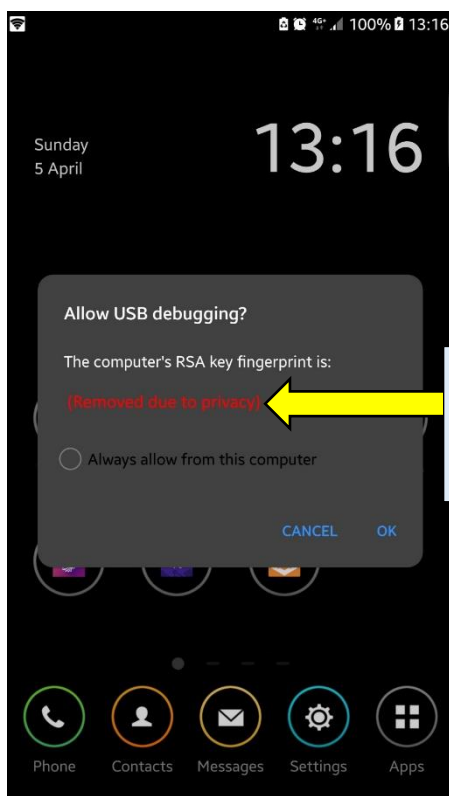
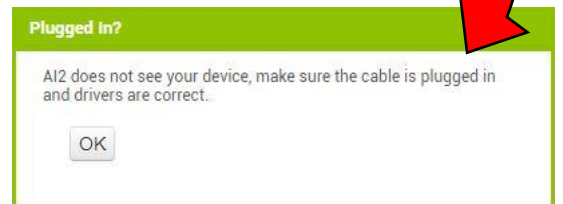
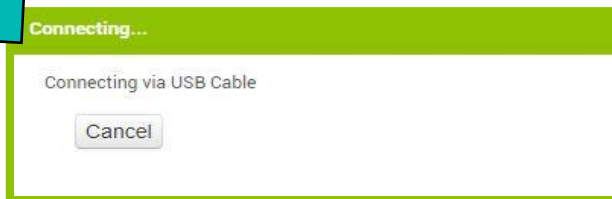
At the MIT App Inventor 2 menu on top, click on the dropdown list for the **Connect** menu.



At Connect menu, click on the dropdown list and click on the **USB** option.



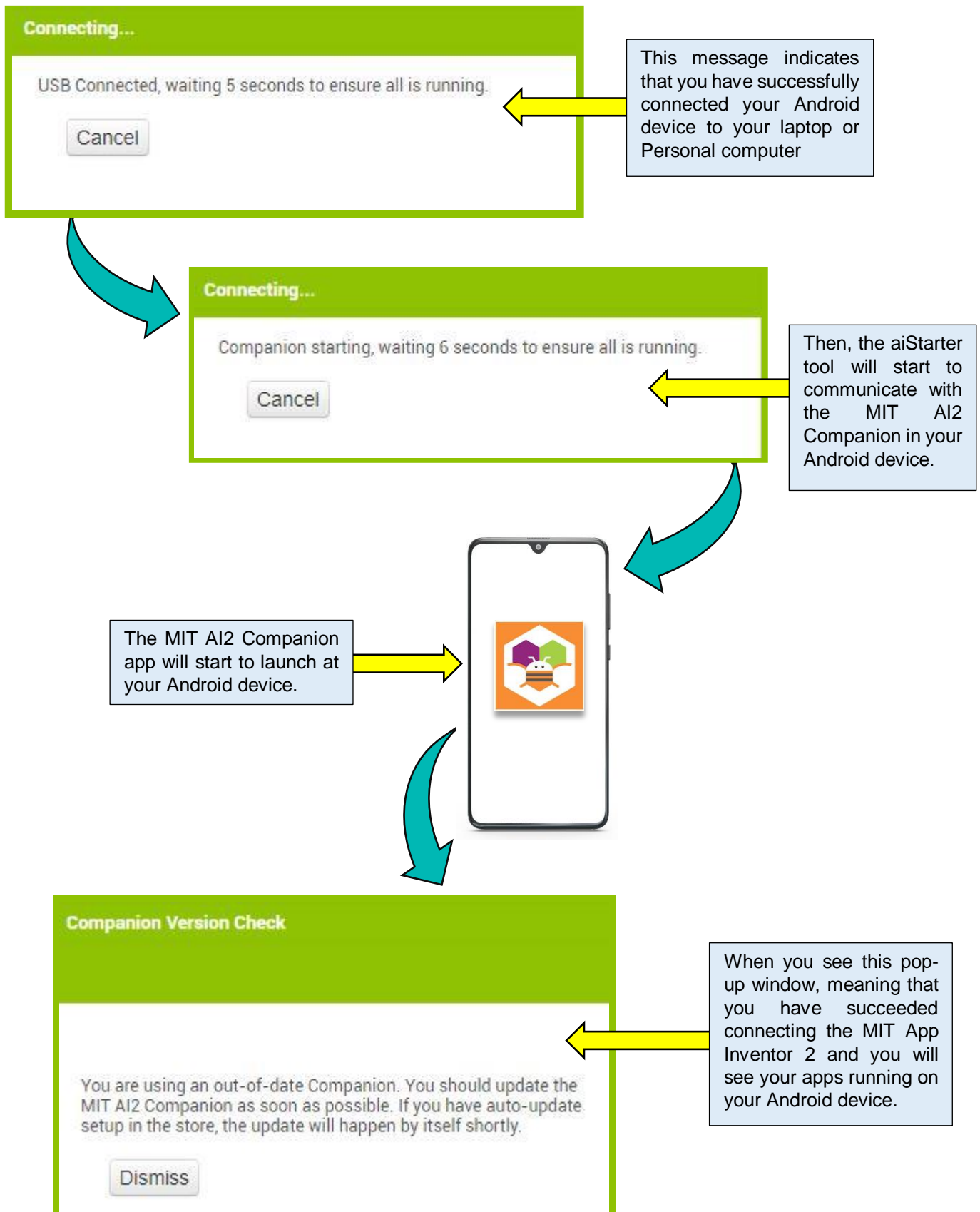
A window will pop-up notifying that the MIT App Inventor 2 is trying to connect to your Android device via USB. If your android phone is **NOT** properly connected to your laptop, you will get a message regarding the matter as shown in the figure.



Here you will see a sequence of your RSA key. Each android phone or device have its own RSA key. Click **OK** to continue.

LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

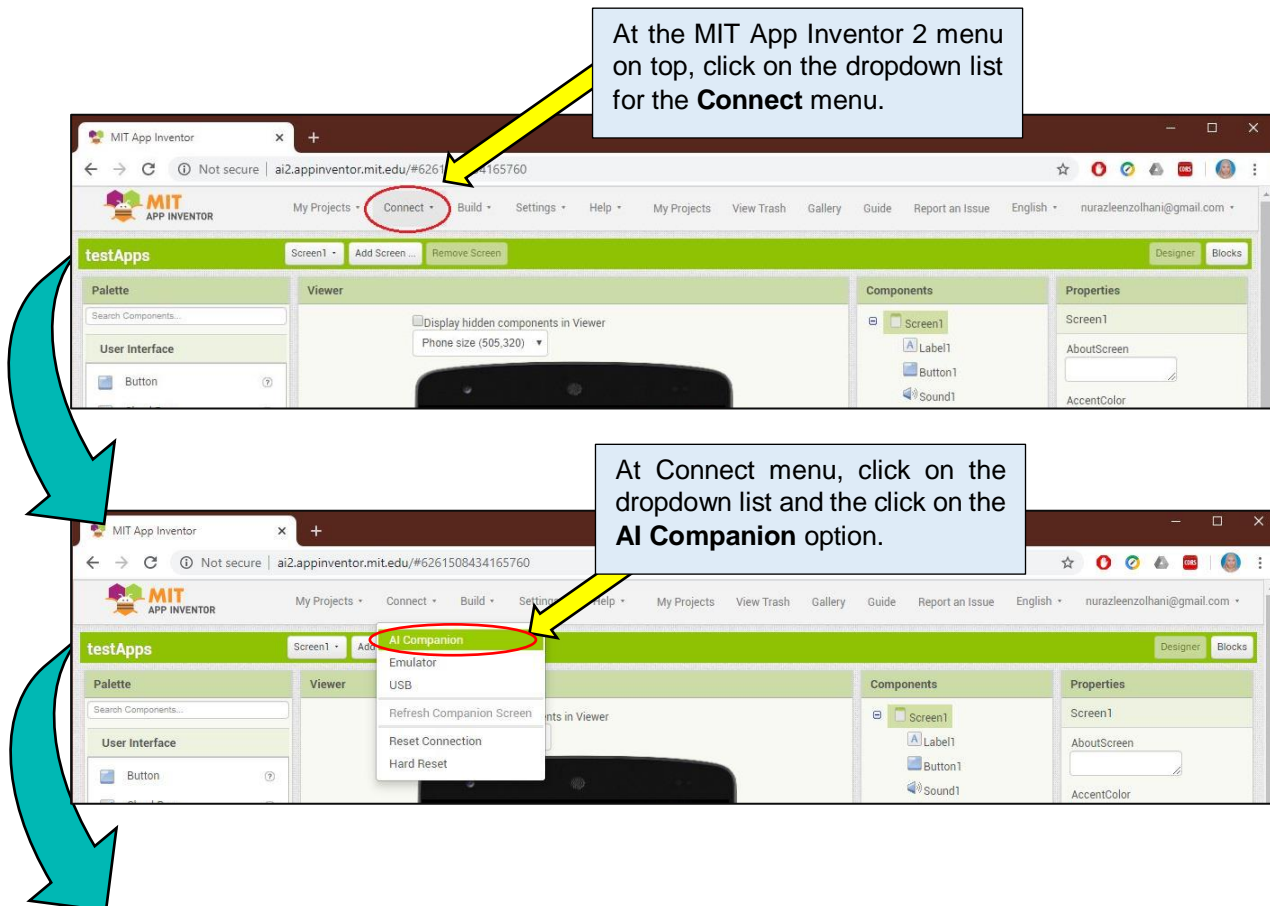
14. Once the MIT App Inventor 2 managed to connect via USB, another window will pop-up notifying that it has successfully connect via USB.



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

Steps (via Wi-Fi)

1. For this step, please make sure that your phone and your laptop have internet connection.
2. Go to the MIT App Inventor 2 web application, and click on the second menu which the Connect menu.
3. Then, at the menu choose “**AI Companion**”. Then a pop-up window with a code as well QR Code will appear.



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

- Over at your phone, launch your MIT AI2 Companion app, and in this lab we are going to scan the QR Code generated by the MIT App Inventor 2 web application.



LAB 2: SETTING UP CONNECTION FOR MIT APP INVENTOR 2

References:

1. <http://appinventor.mit.edu/explore/sites/all/files/teachingappcreation/unit1/MagicTrickHandout.pdf>
2. <https://appinventor.mit.edu/explore/library>
3. <https://appinventor.mit.edu/explore/ai2/tutorials>
4. <https://www.programwithappinventor.org/>
5. <https://www.amazon.com/Learning-MIT-App-Inventor-Hands-On/dp/0133798631/>