Special Olympics Washington
Unified Robotics

VIRTUAL UNIFIED ROBOTICS SOFTWARE INSTALLATION!

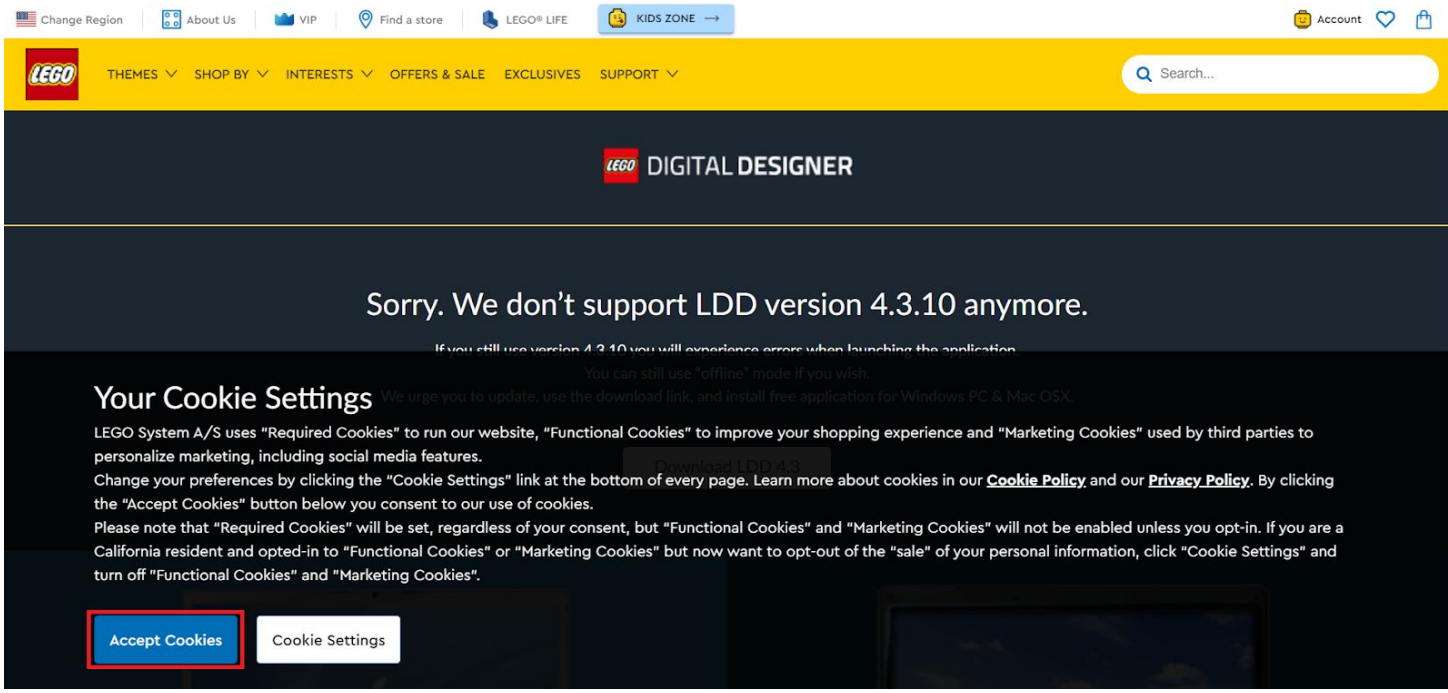
Instruction to download Lego Digital Designer, Lego MINDSTORMS EV3 and Virtual Robotics Toolkit

LEGO Digital Designer

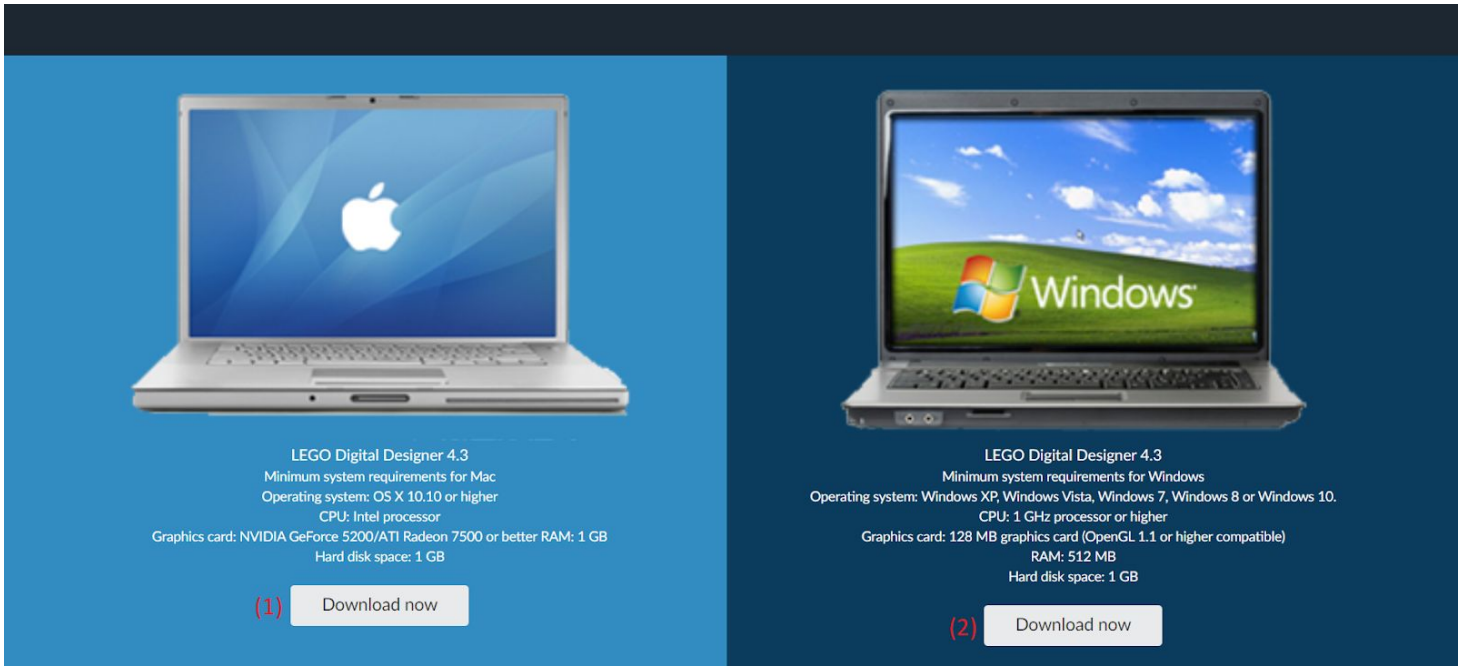
1. Go to website:
https://web.archive.org/web/20190622153357/https://lc-www-live-s.legocdn.com/downloads/ldd2.0/installer/setupLDD-PC-4_3_11.exe

(This may take a moment, and simply start the download. If so, continue to step 3)

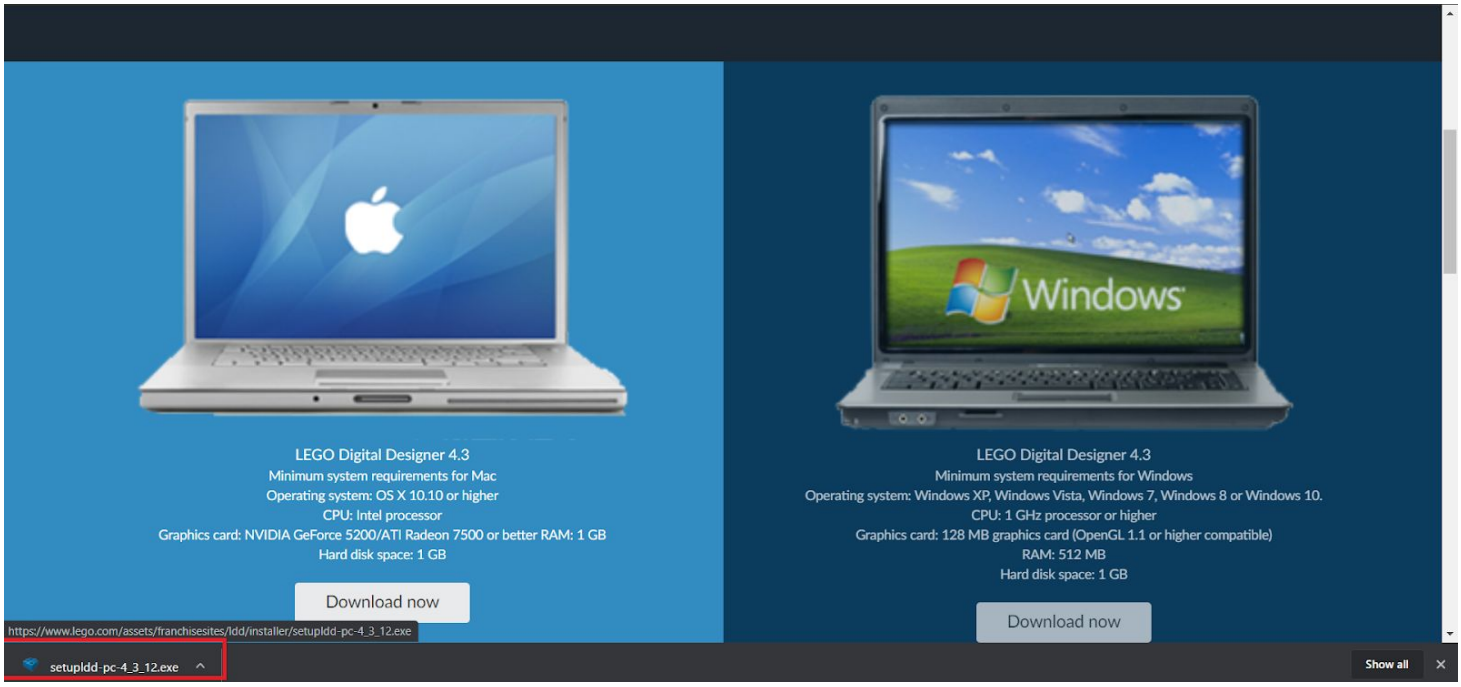
If prompted, select"Accept Cookies"



2. Scroll down and select "Download Now" for either a Mac (1) or a Windows (2) PC.

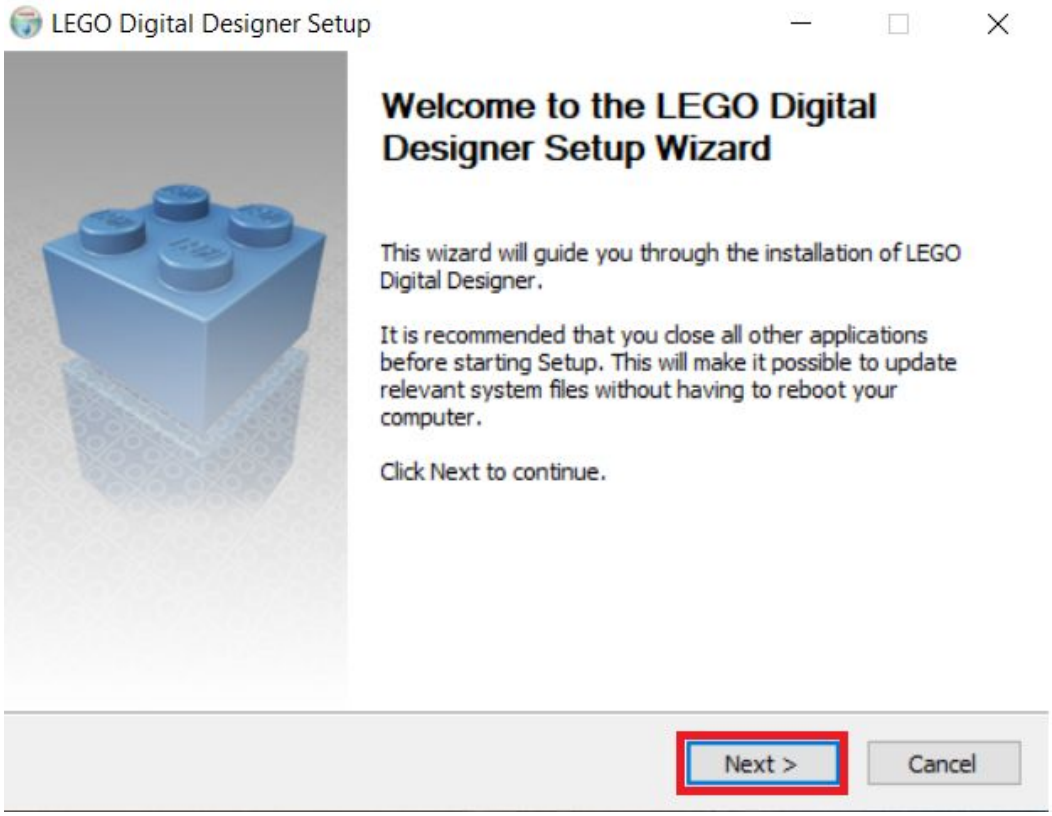


3. When ready, open the Setup .exe file

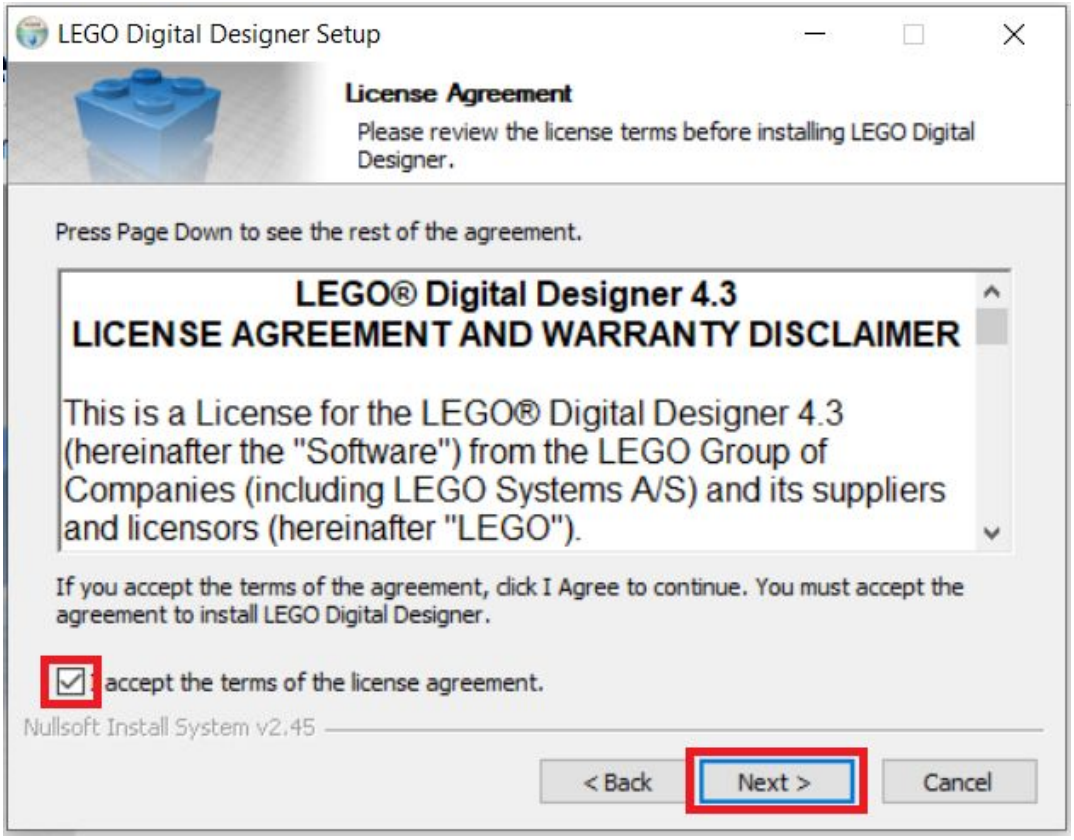


4. If prompted, Select “Yes” to allow the program to make changes to your computer

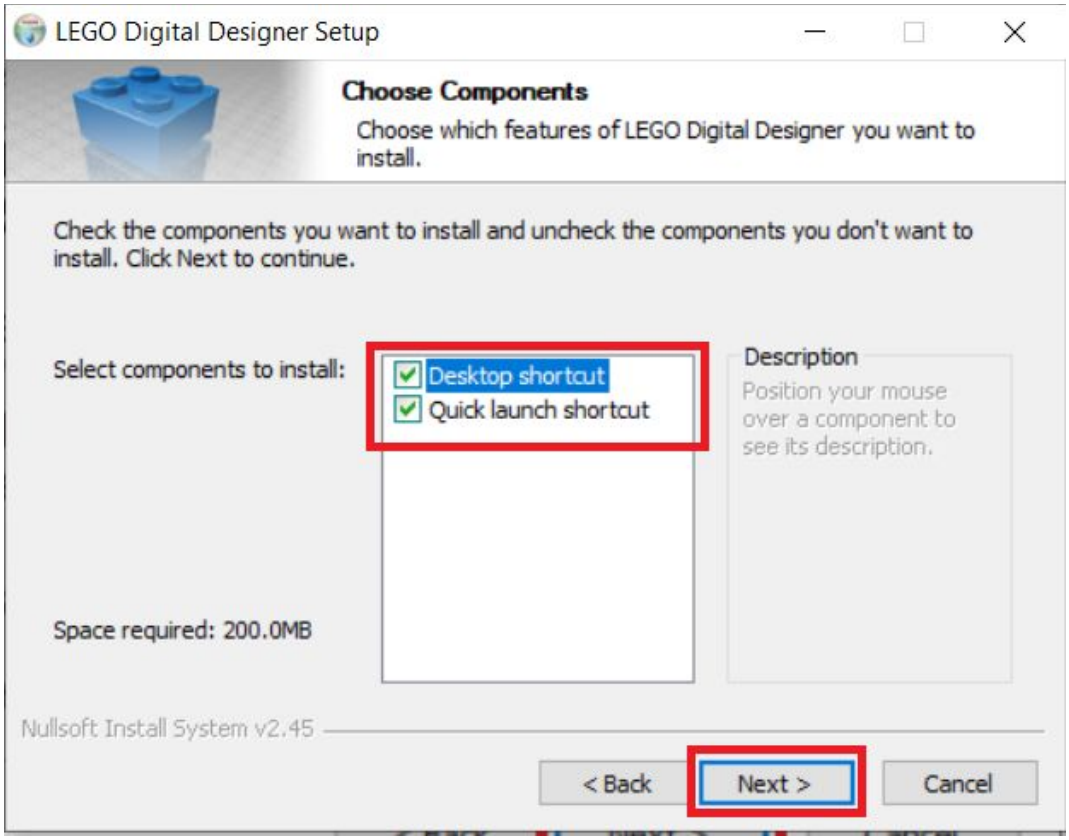
5. Select “Next”



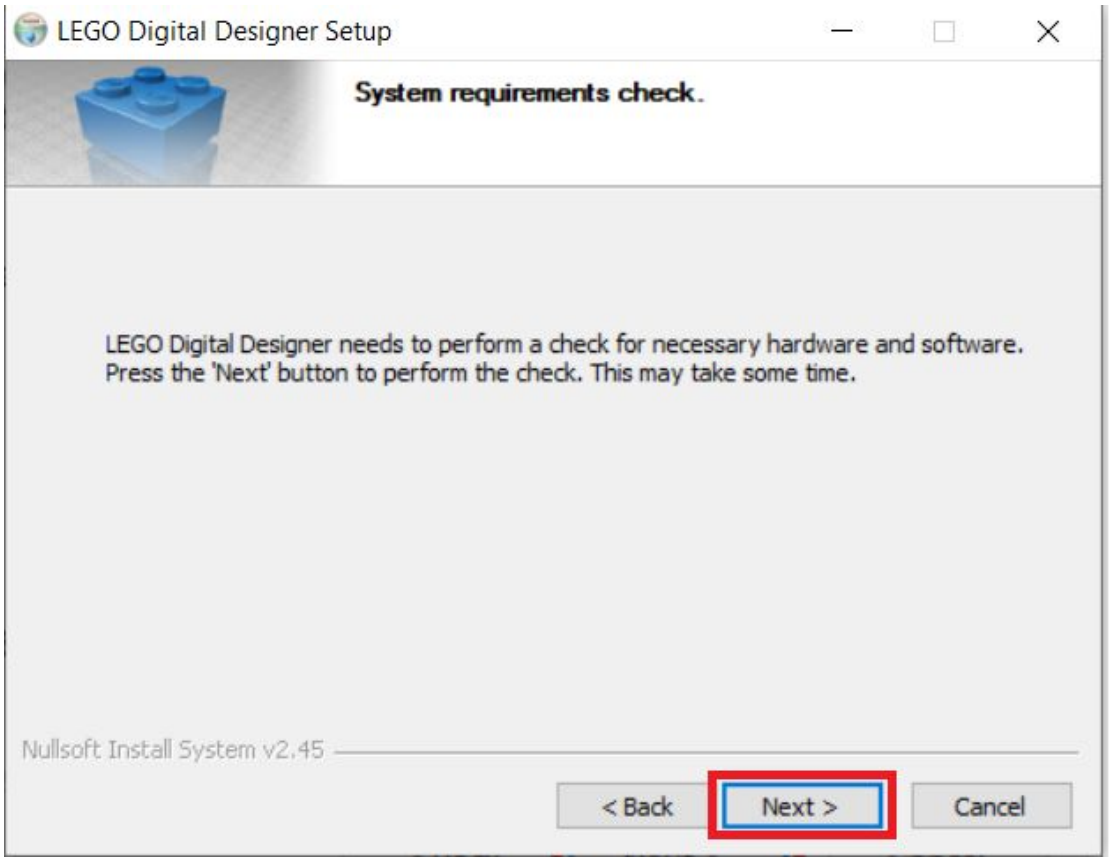
6. Check the box to “Accept the terms of the license agreement” and then select ”Next”



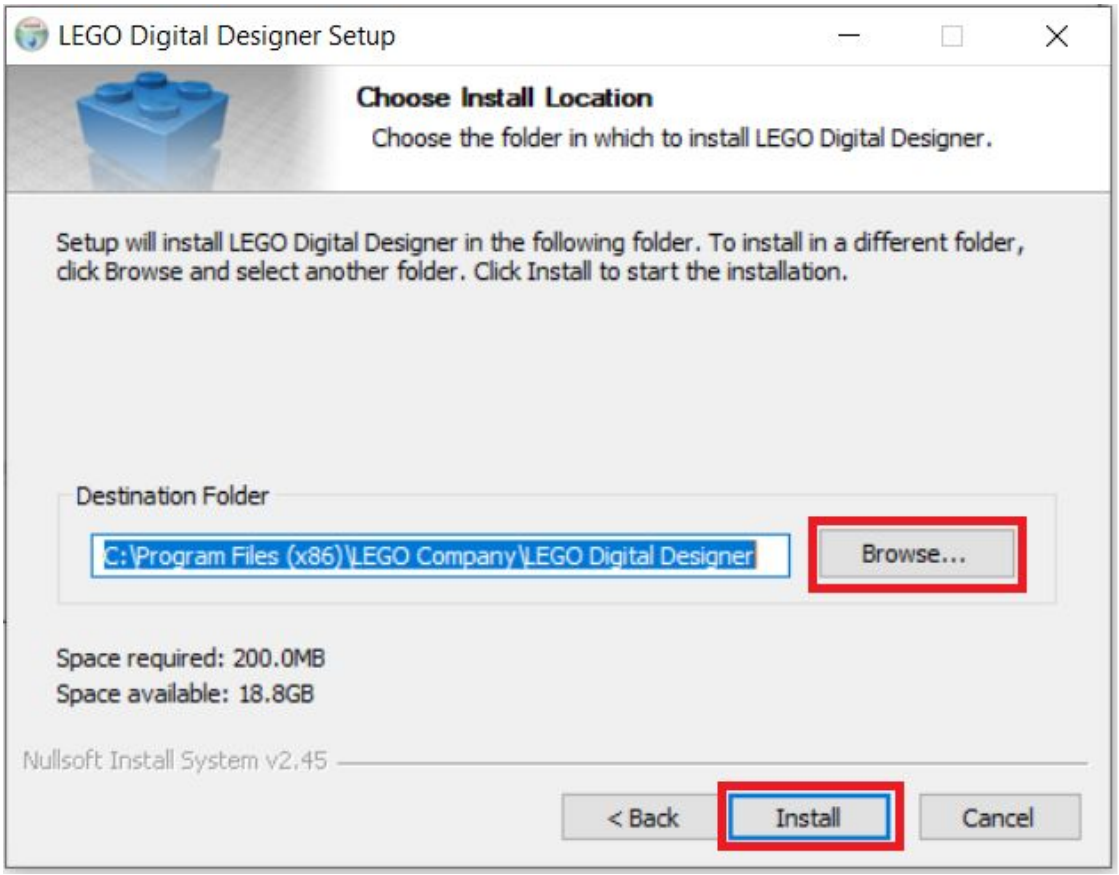
7. Check the boxes for your preferred Shortcut type and then select ”Next”



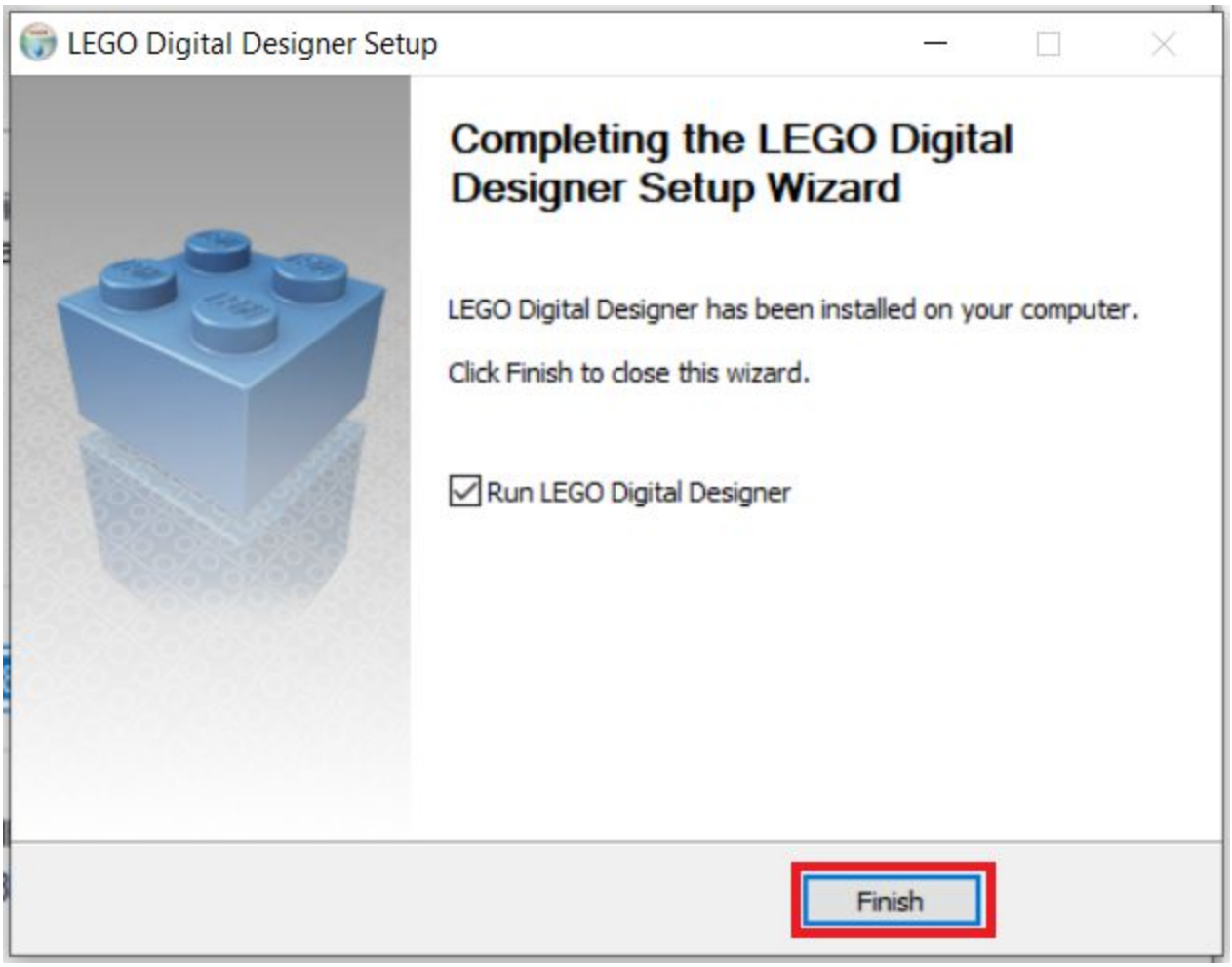
8. Select ”Next”



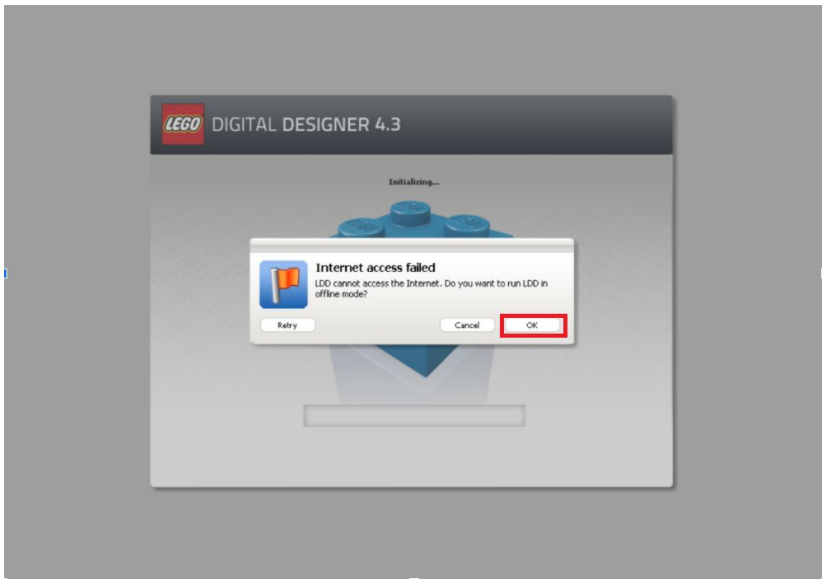
9. The default Install Destination is fine for most users, select ”Install”.



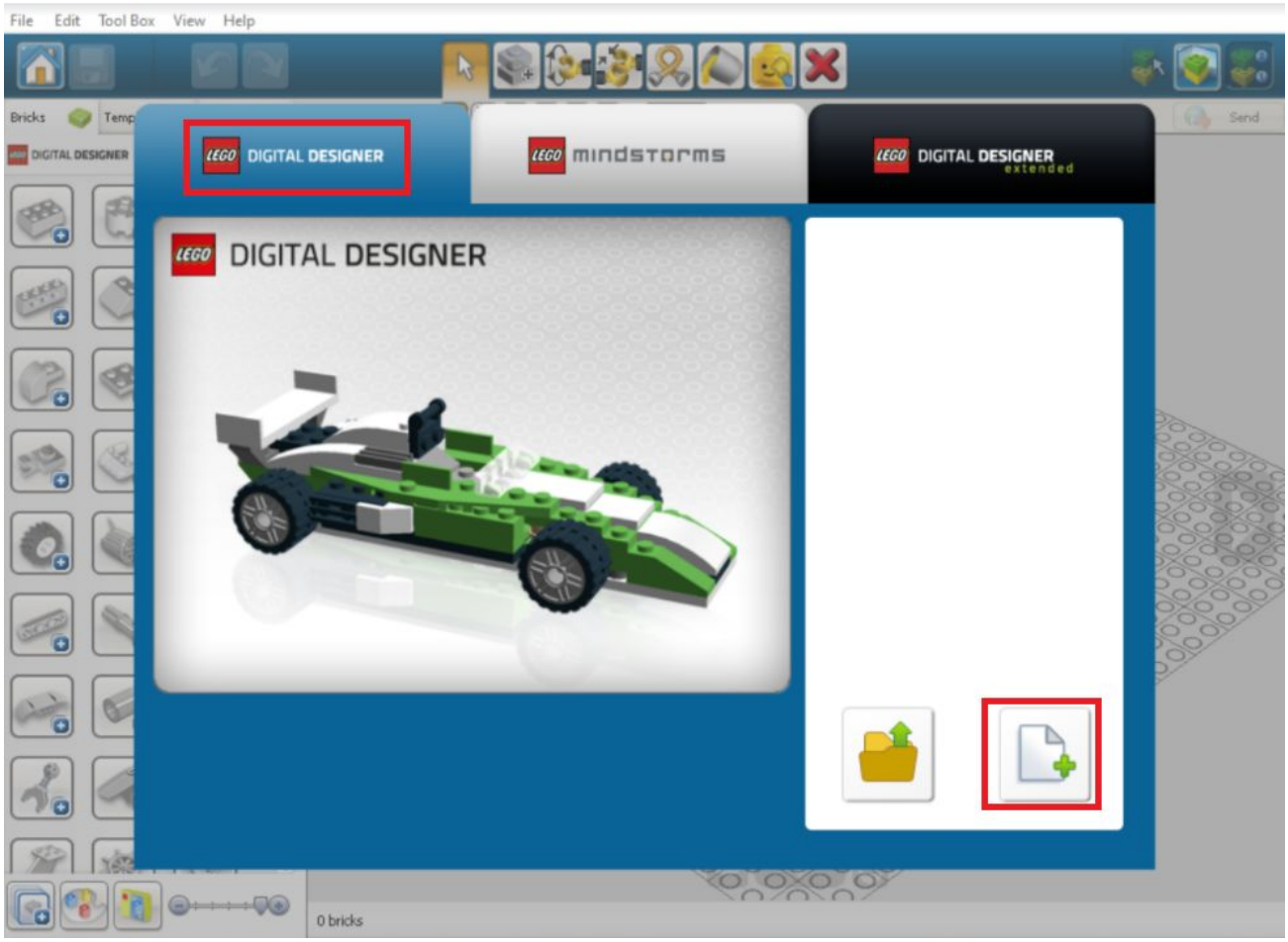
10. Select ”Finish”



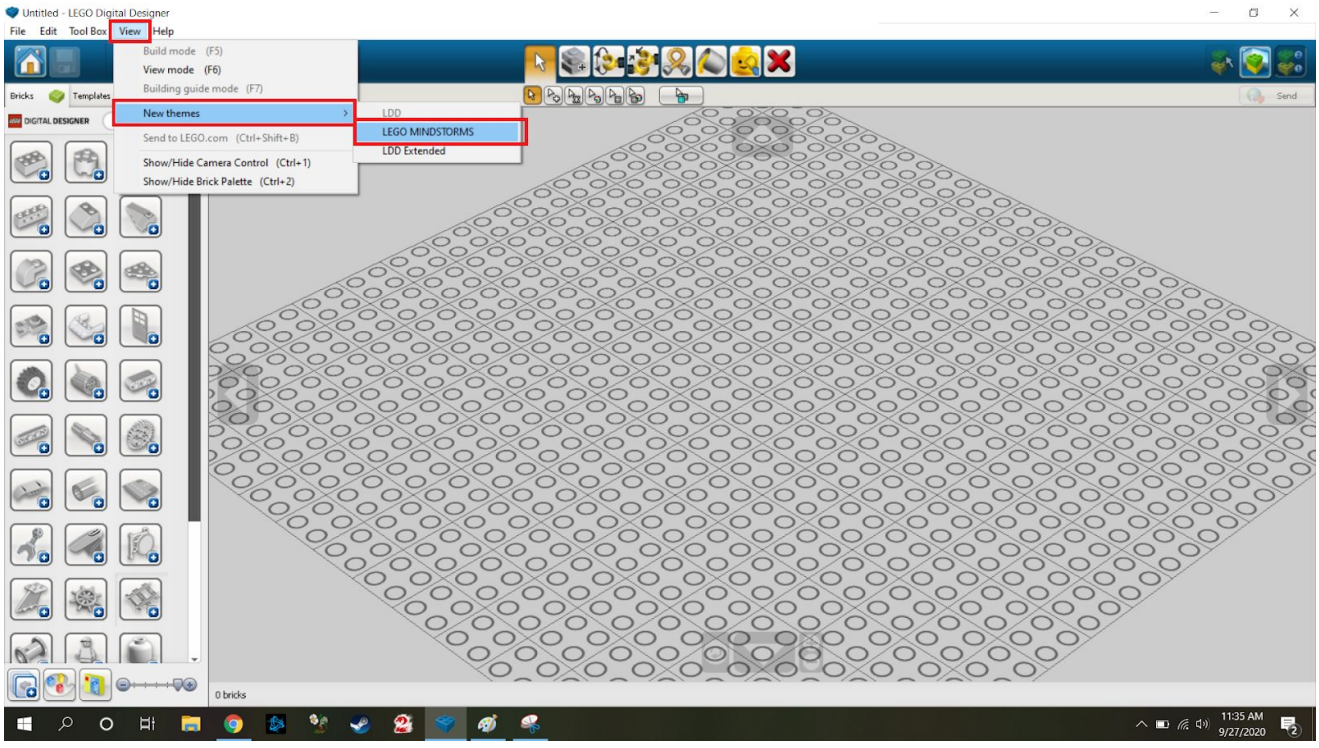
11. **When you launch the program, it may prompt that it cannot connect to the internet. Just select “OK” to use the program offline. You will not need any of the online features for Unified Robotics.**



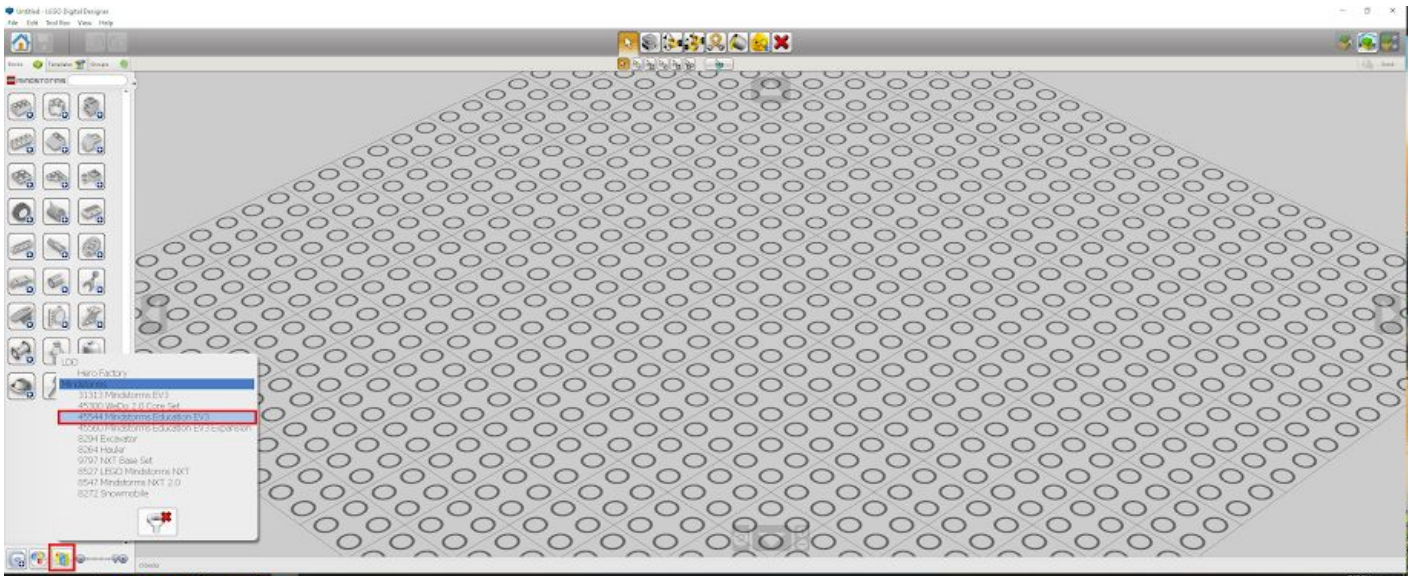
12. **Select “LEGO Digital Designer” and then create New file**



13. **At the top of your screen, go to “View”, “New Themes” and select “LEGO Mindstorms”**



14. **At the bottom of your screen, click “Filter Bricks by Boxes” and select “45544 Mindstorms Educational EV3”.**

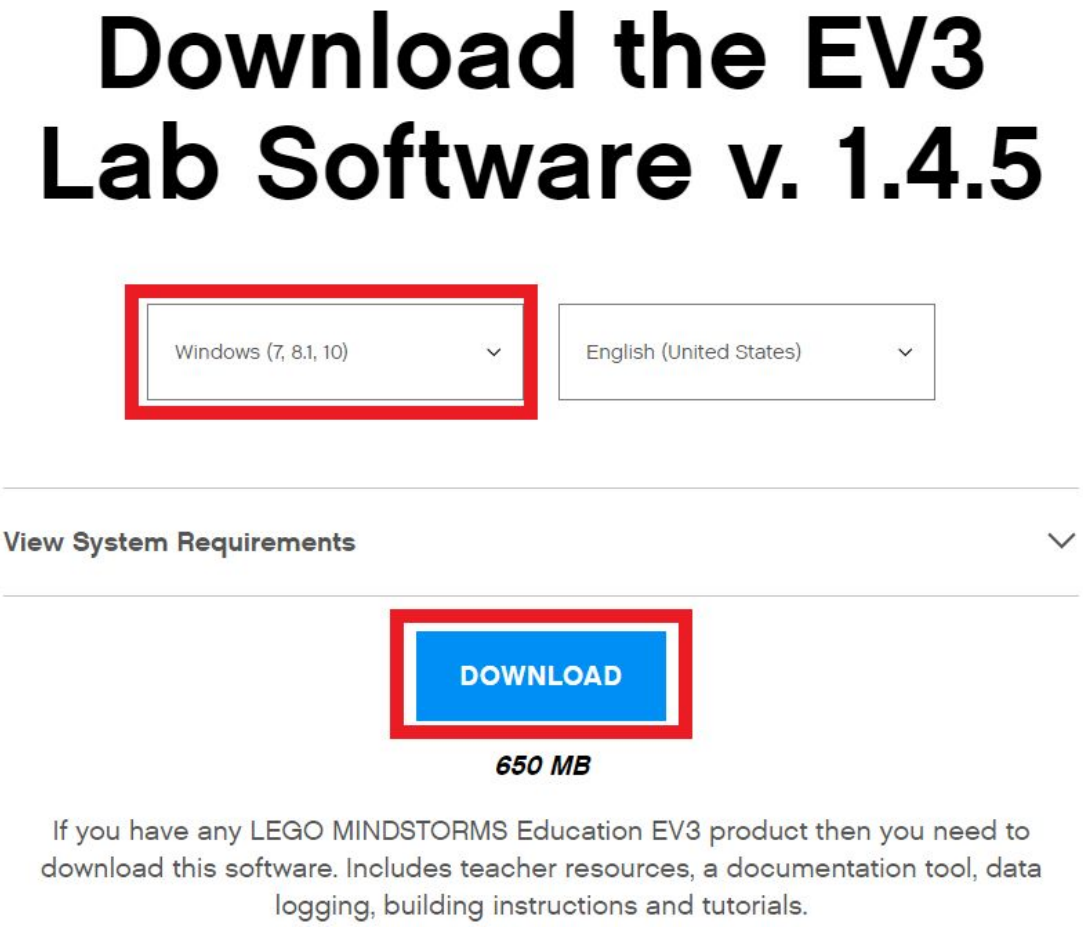


It will now show only the LEGOs available in the EV3 kit. You are now able to start building your robot. Enjoy!

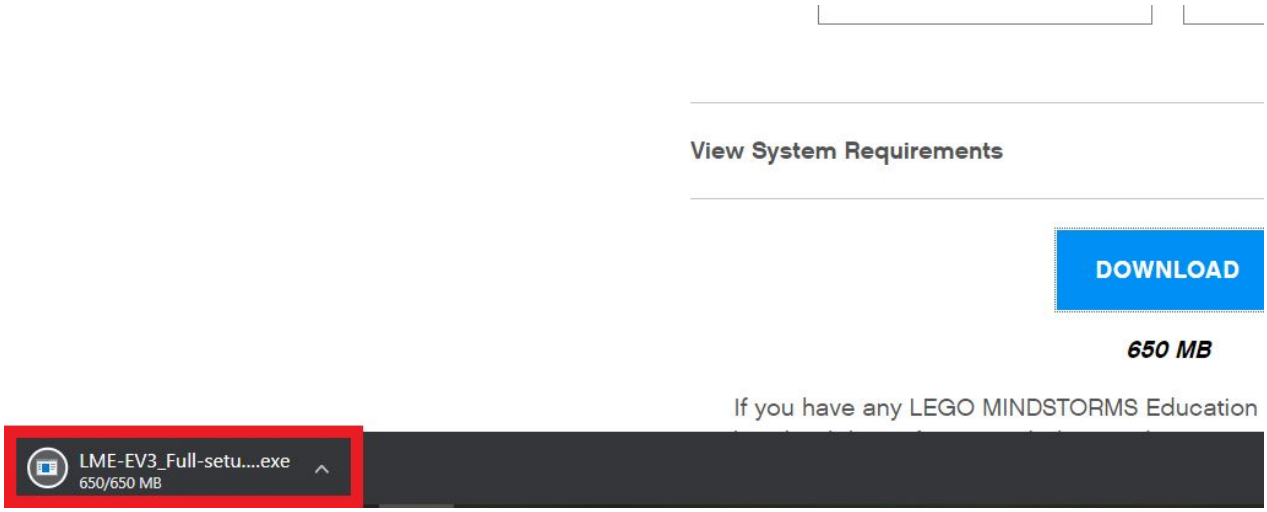
LEGO Mindstorms EV3

1. Go to website:
https://education.lego.com/en-us/downloads/retiredproducts/mindstorms-ev3-lab/software

2. Use the drop down to select Windows or Mac and select "Download":

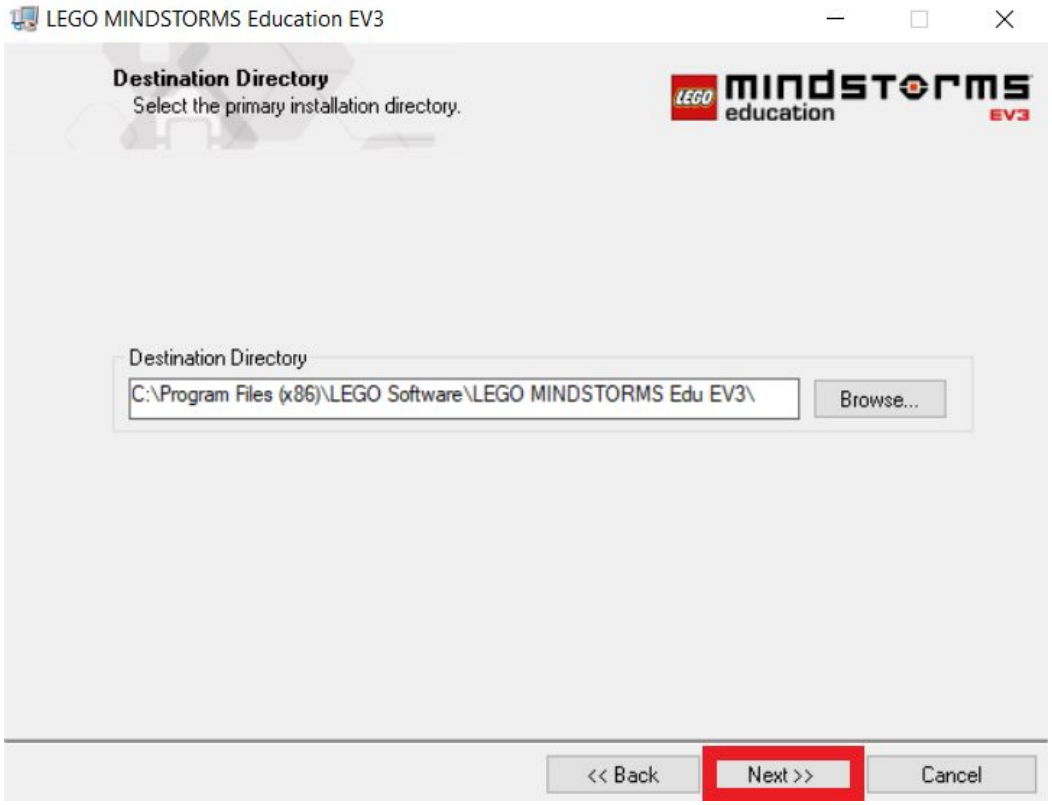


3. When ready, open the Setup .exe file

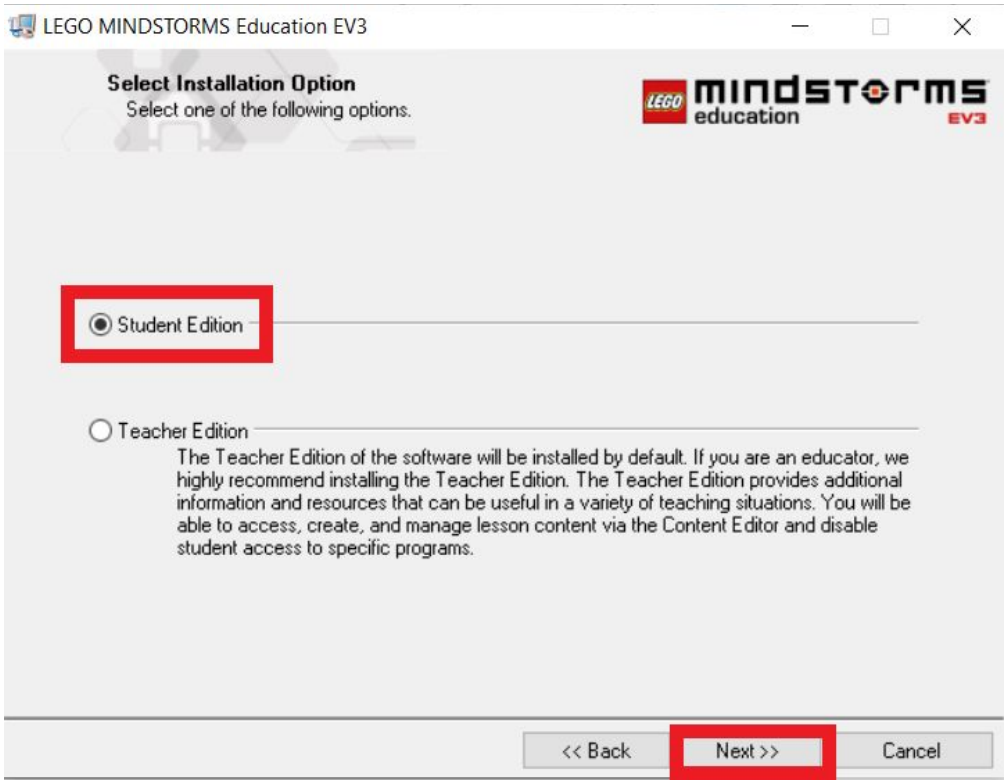


4. **If prompted, Select “Yes” to allow the program to make changes to your computer**

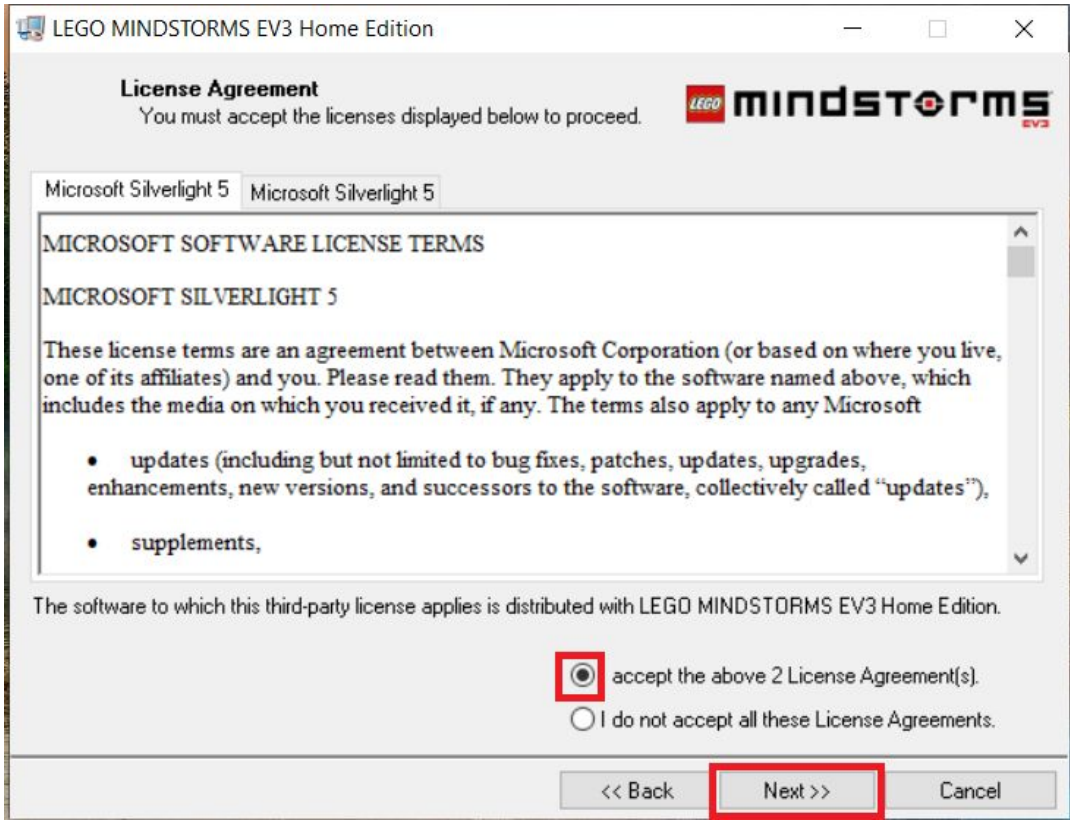
5. **The default Install destination is fine for most users, select ”Next”**



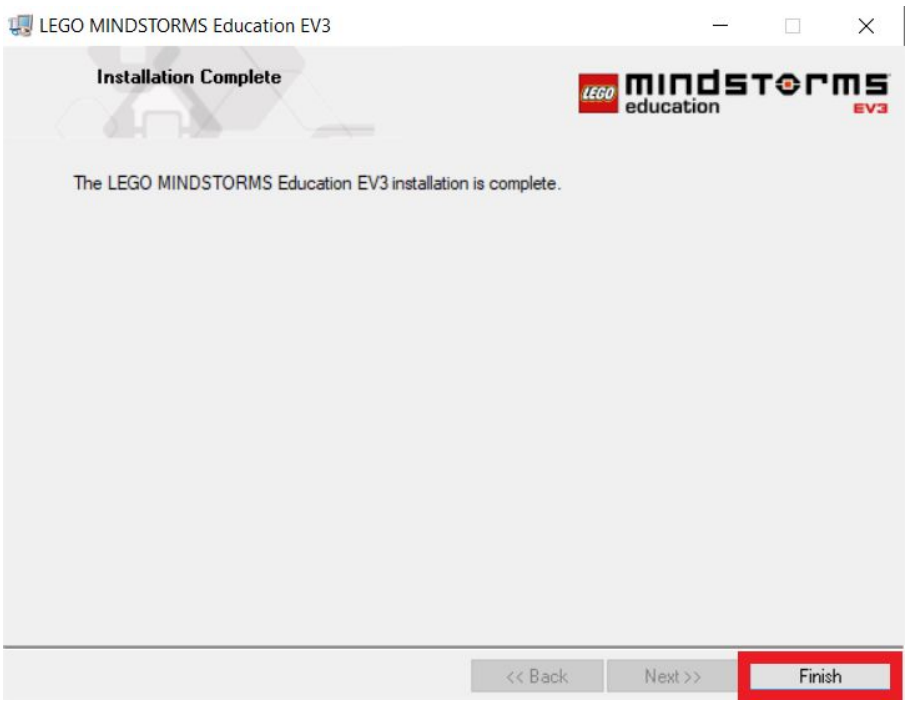
6. **Select “Student Edition” and press “Next”:**



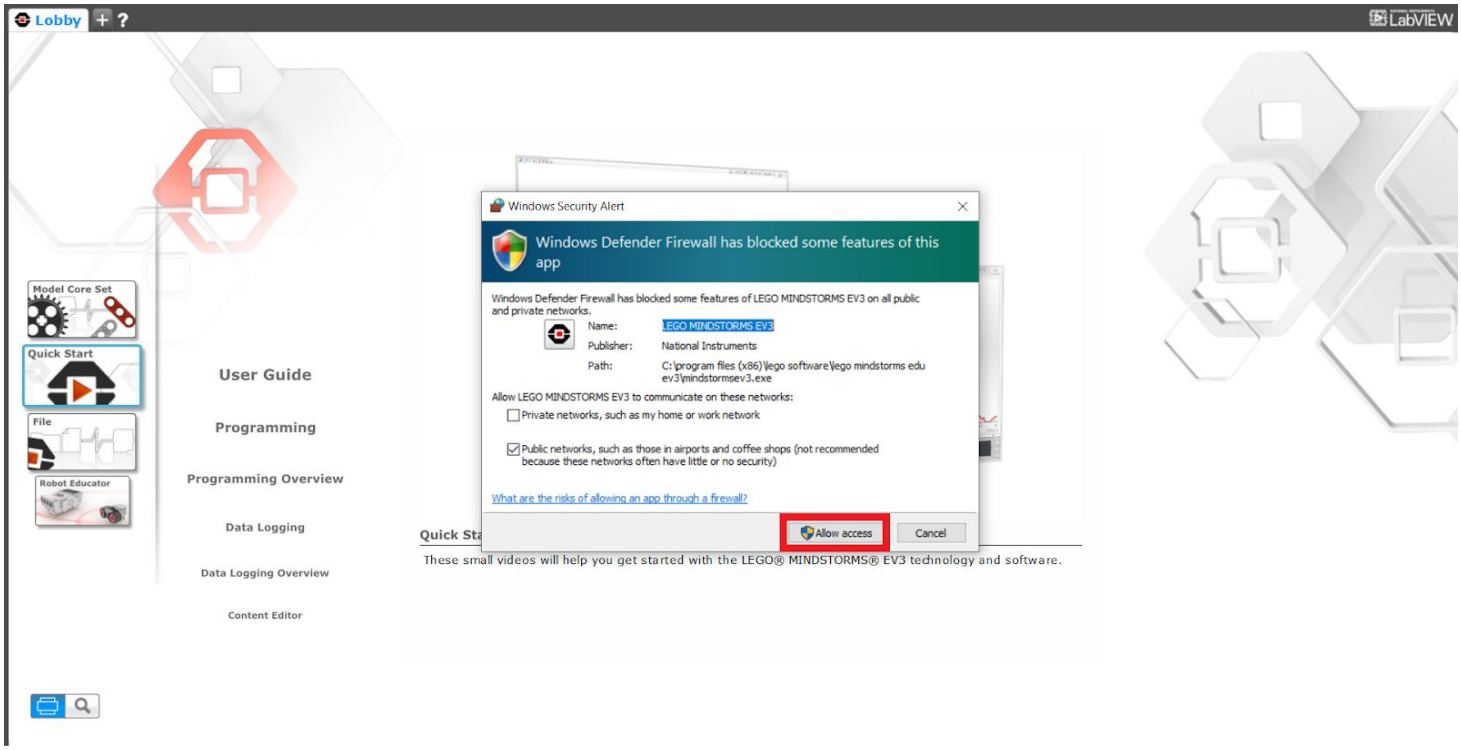
7. Check the box to “Accept the above 2 license agreements” and then select ”Next” on the next two screens



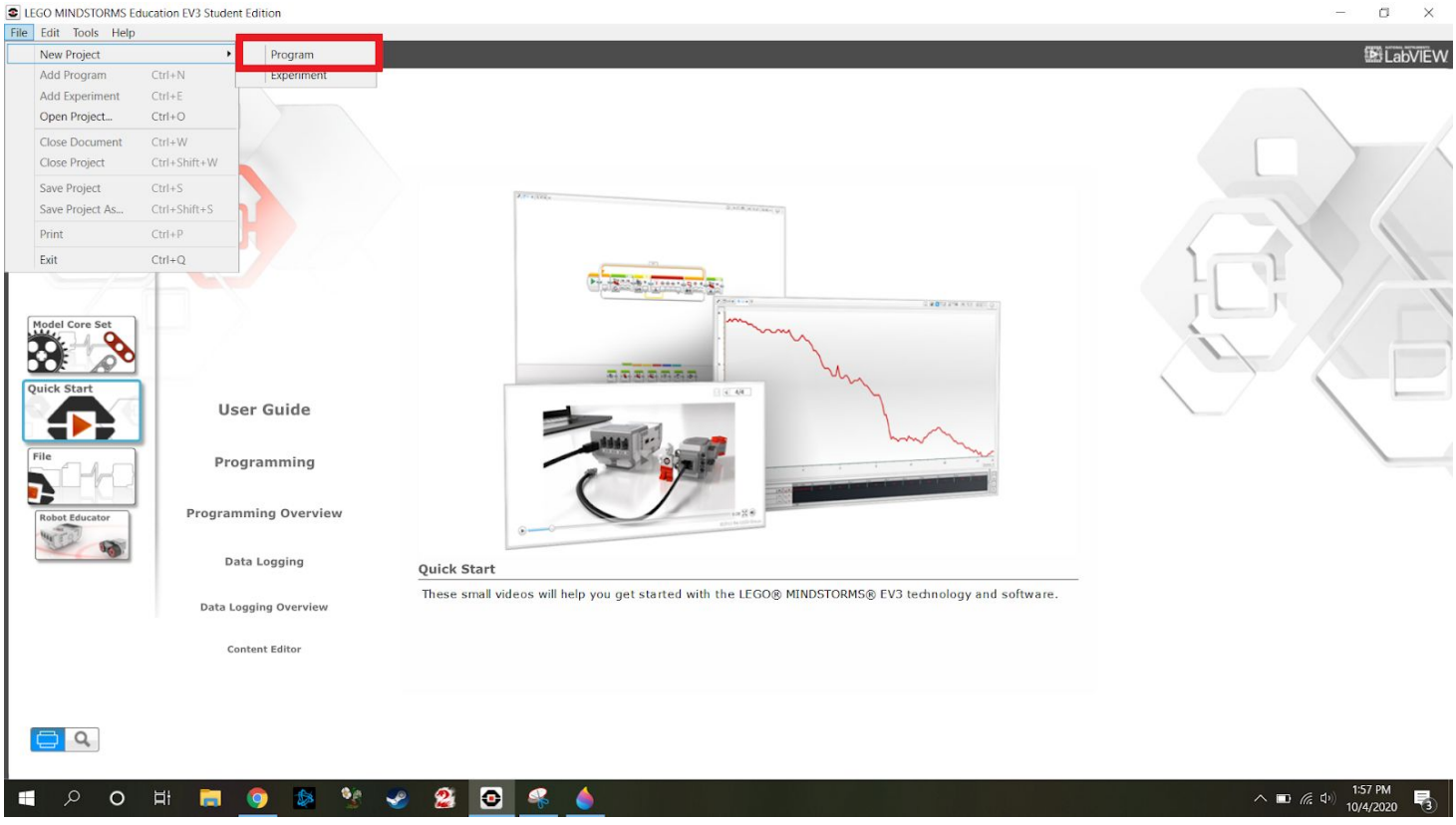
8. **The program will start installing. When it is complete, select ”Finish”**

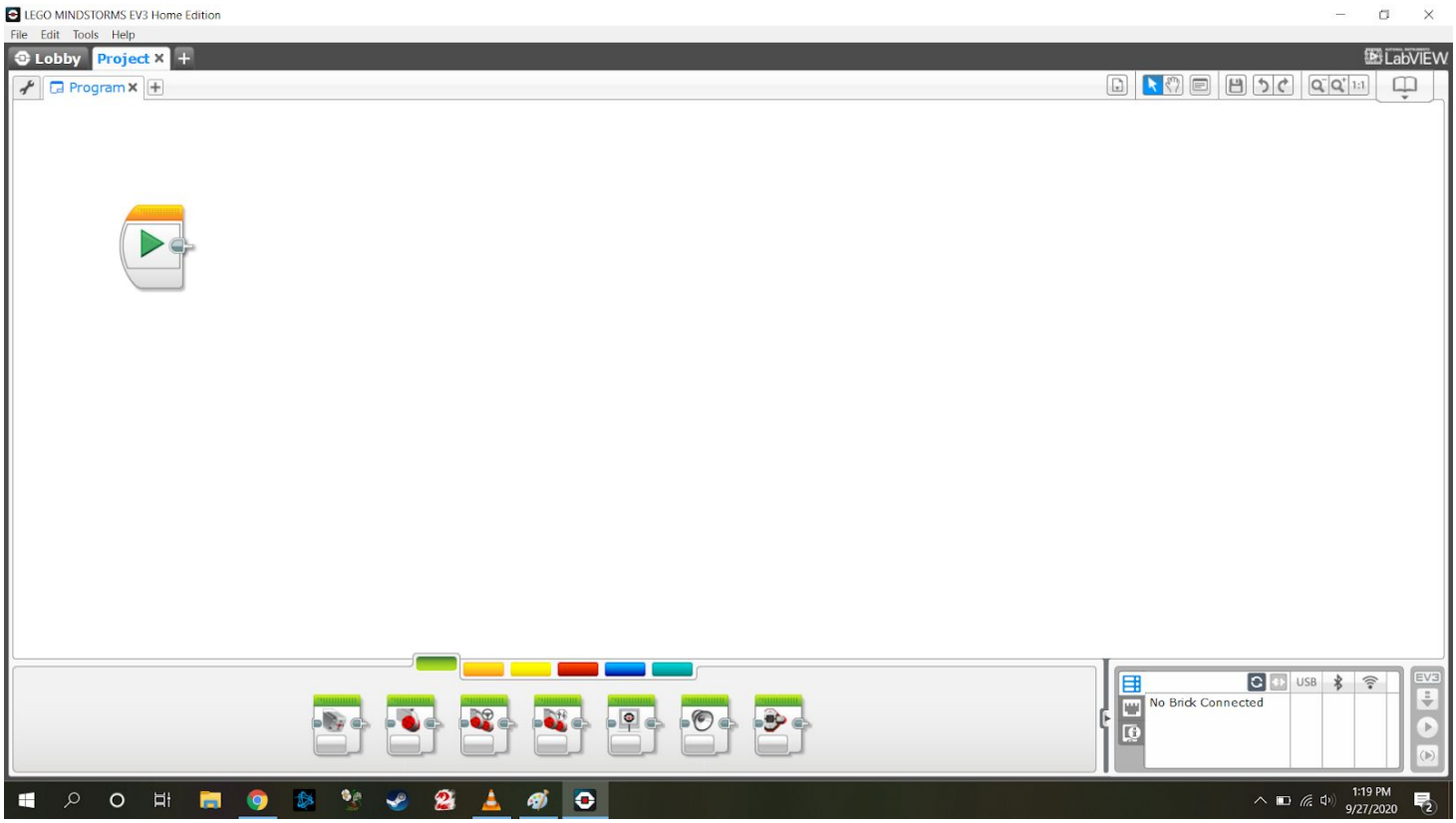


9. **When you launch the program, Windows Defender may prompt you to change your settings. To allow Lego MINDSTORMS EV3 access to the internet, simply select “Allow Access”.**



10. At the top, click on “File”, “New Project”



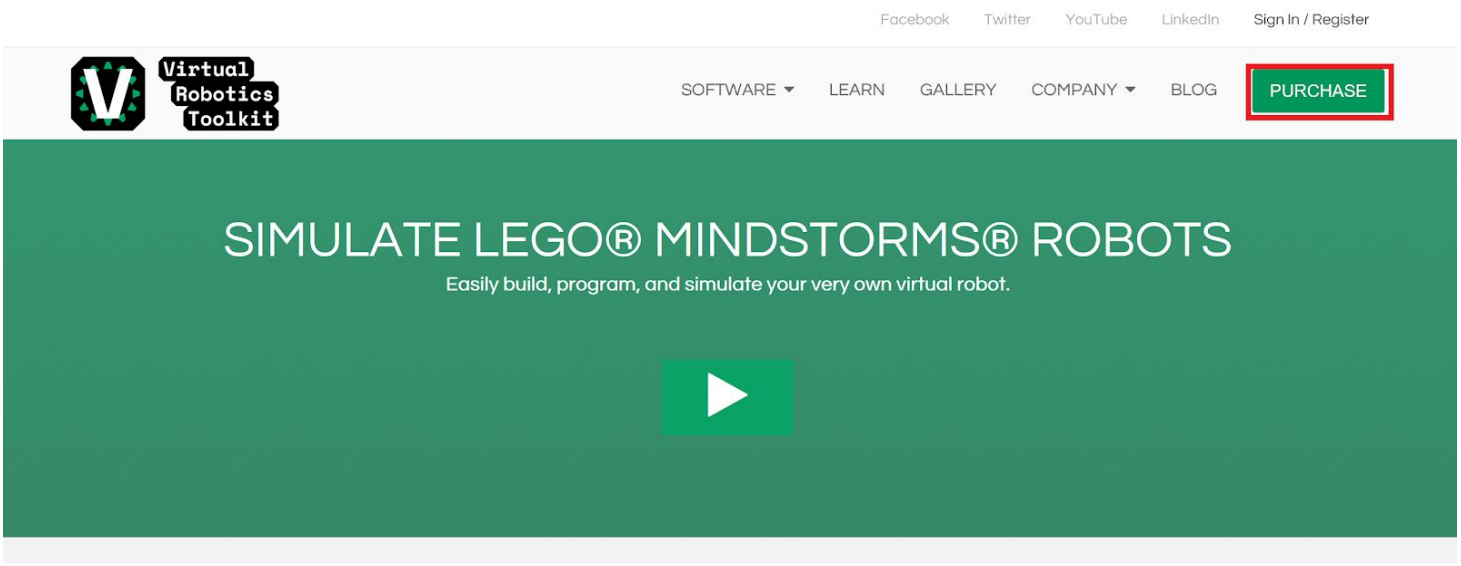


You can now start programming your robot.

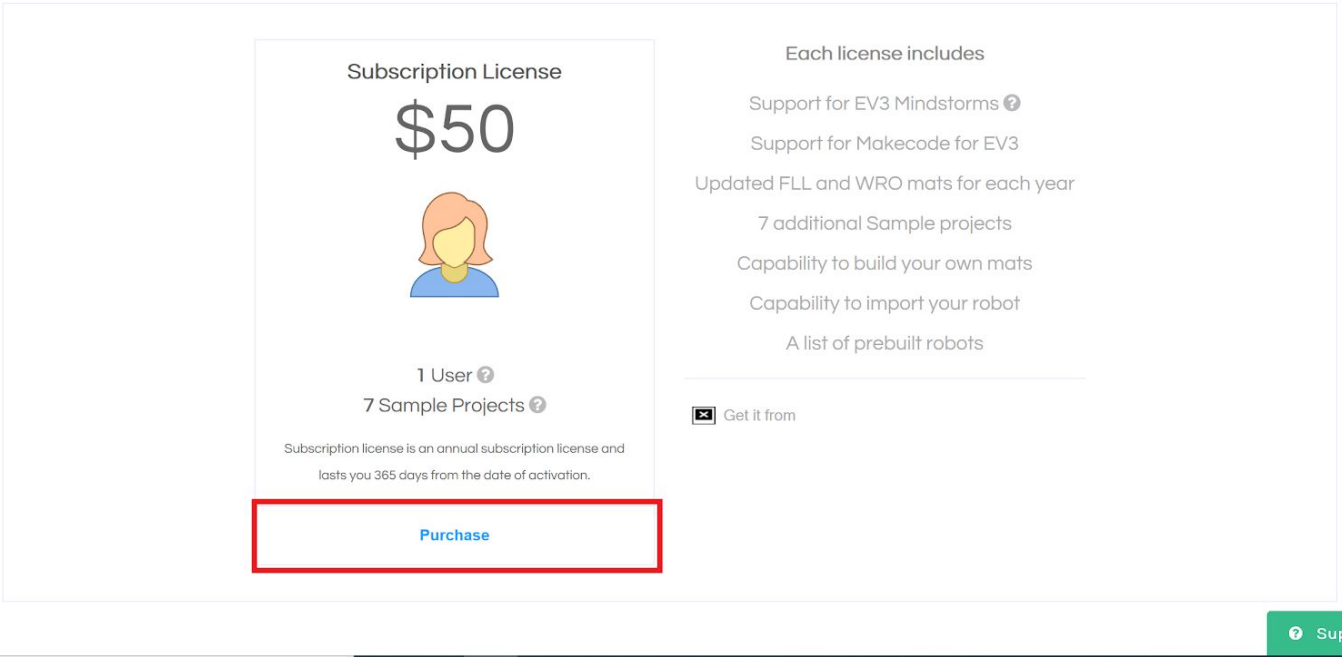
Virtual Robotics Toolkit

1. Go to website:
https://www.virtualroboticstoolkit.com/

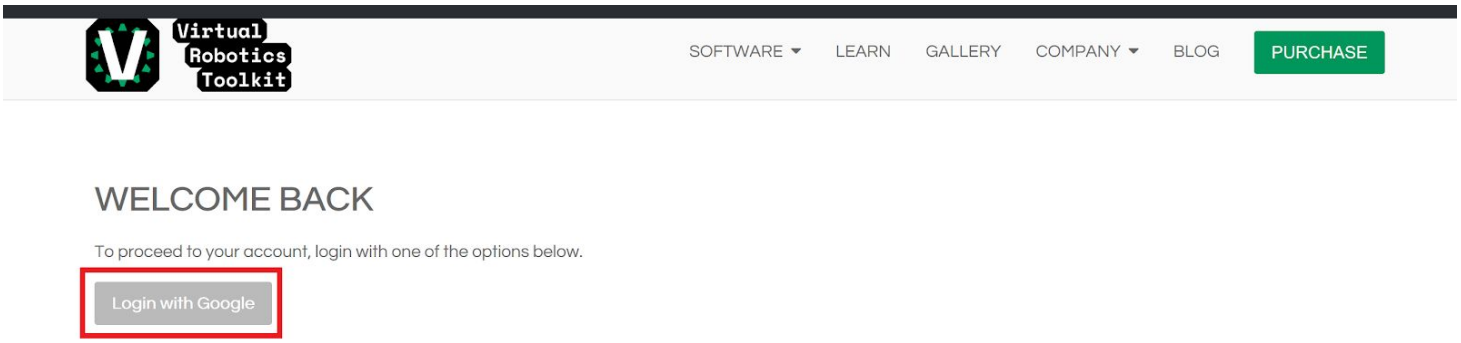
2. Click Purchase.



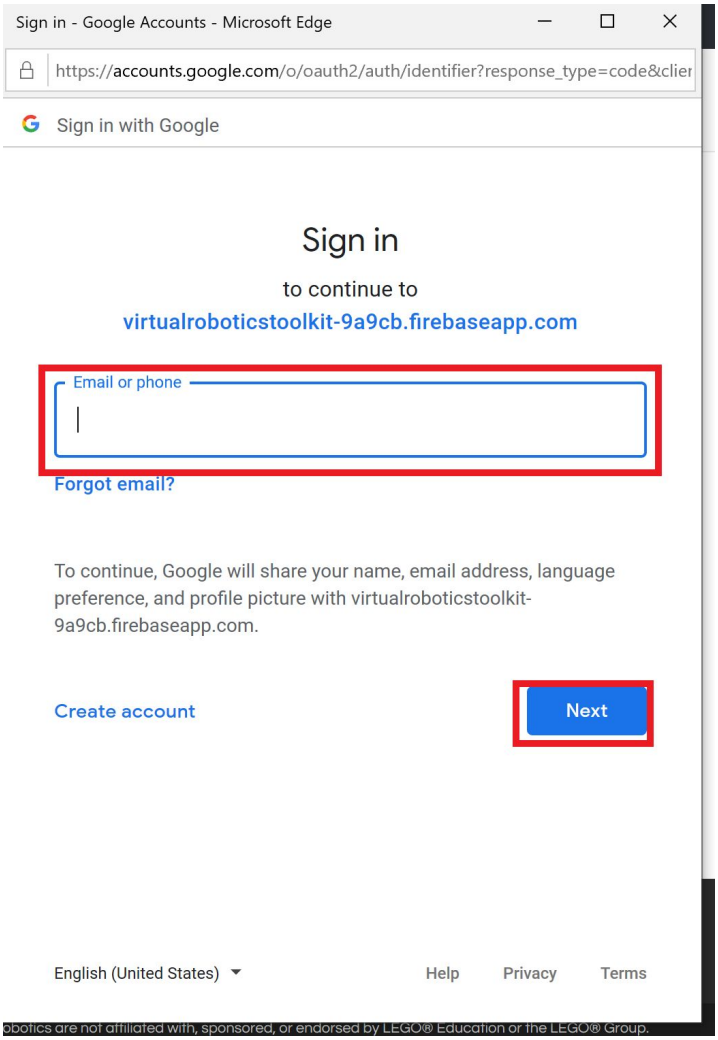
3. Select “Purchase” for the subscription license. (This grants 365 days of activation)



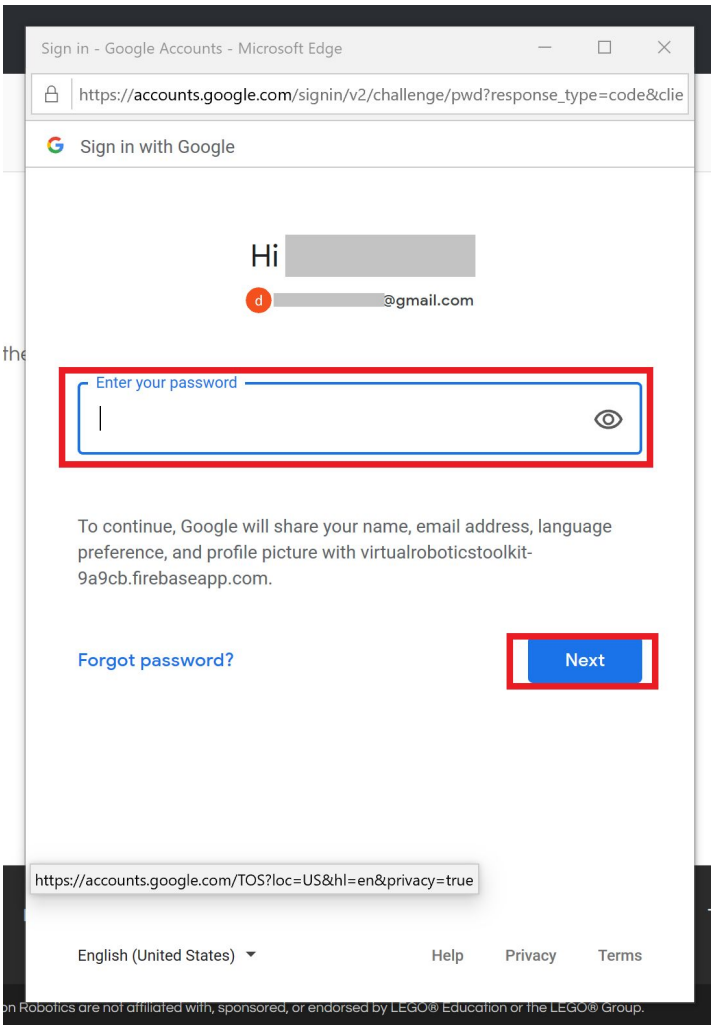
4. VRT uses Google for authentication. Select “Login with Google” (The next steps will require a Google account.)



5. Enter your Google Email address and click “Next”

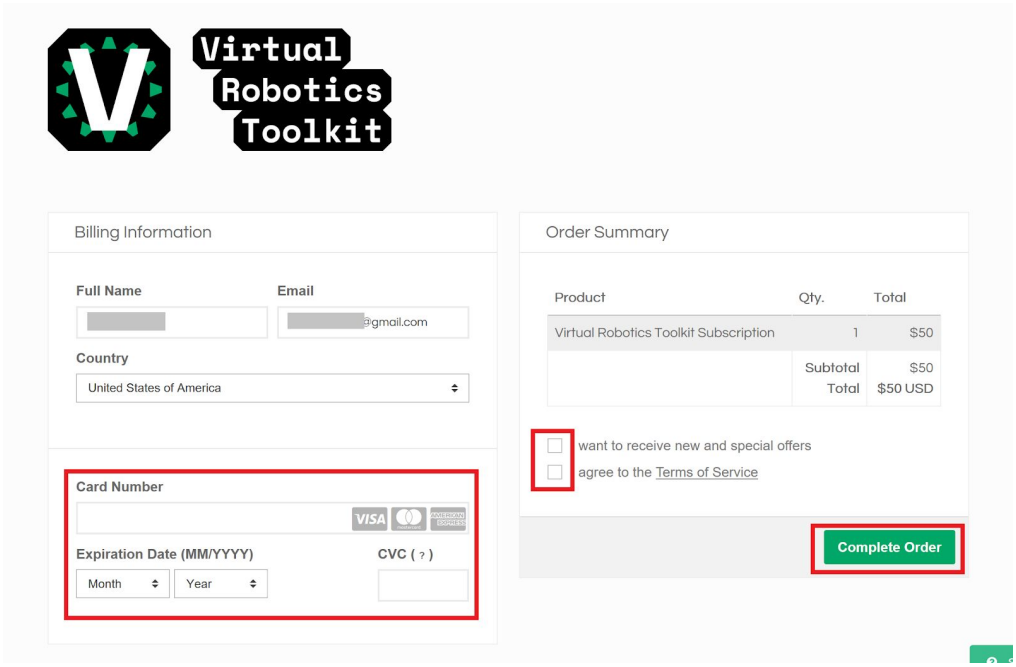


6. Enter your Google password and click “Next”

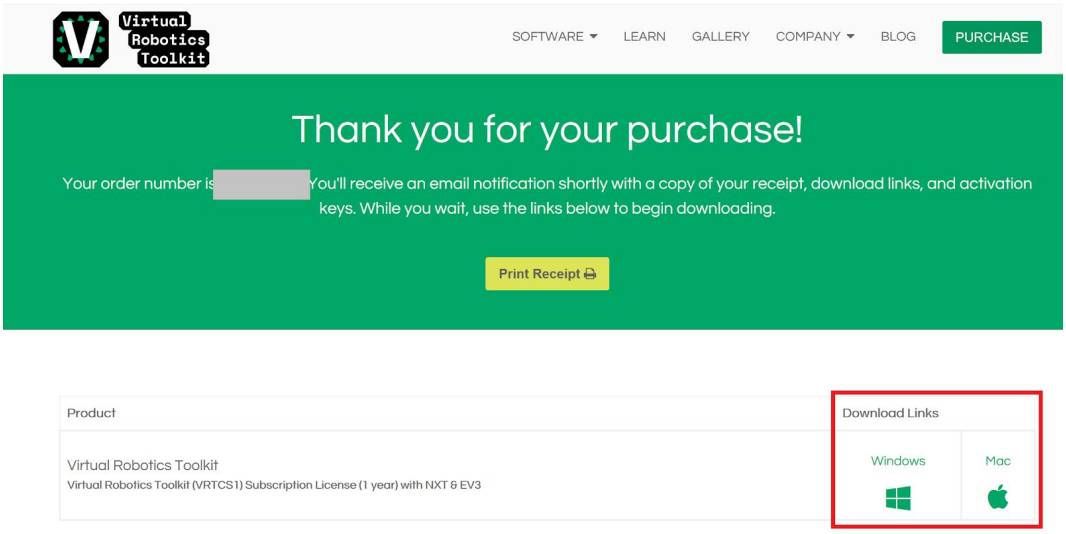


7. Fill in your information:

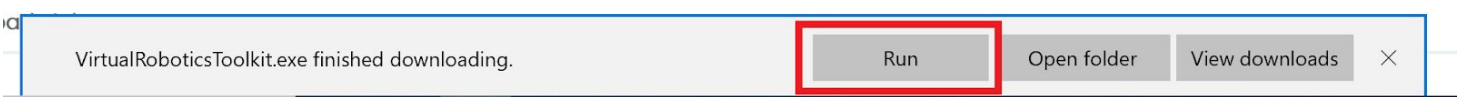
- Name
- Credit Card information
- Check the box agreeing to the Terms of Service
- As Cogmation is Canadian, I had a $0.50 transaction fee when ordering
- Click “Complete Order”



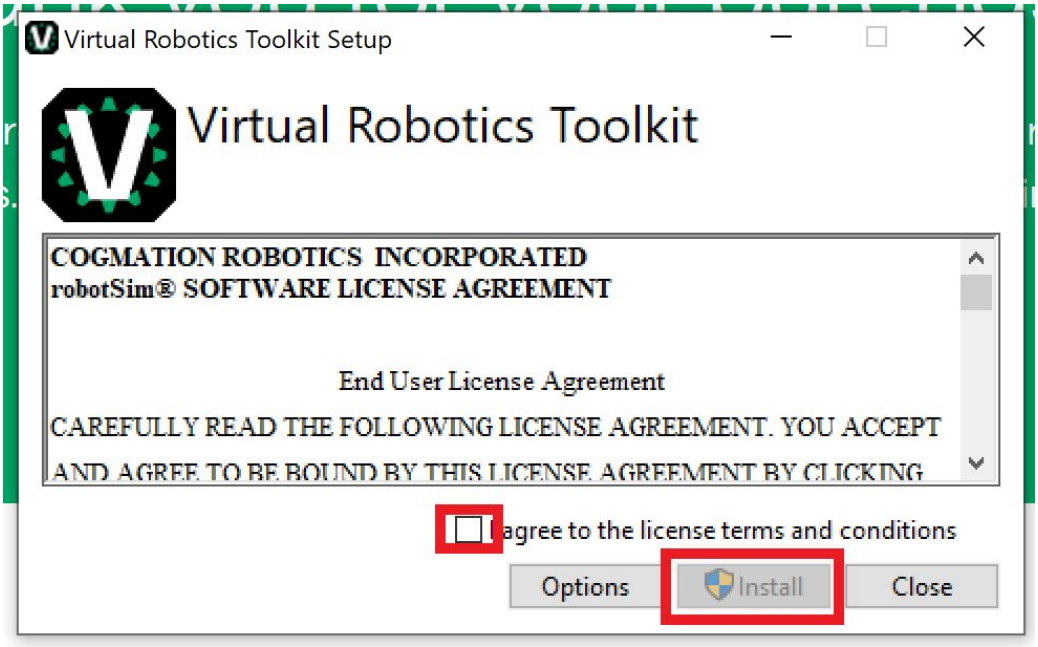
8. The download links appear on the next screen. You should also receive an Email. (If you do not, contact the VRT support.) Click to Download the VRT installer.



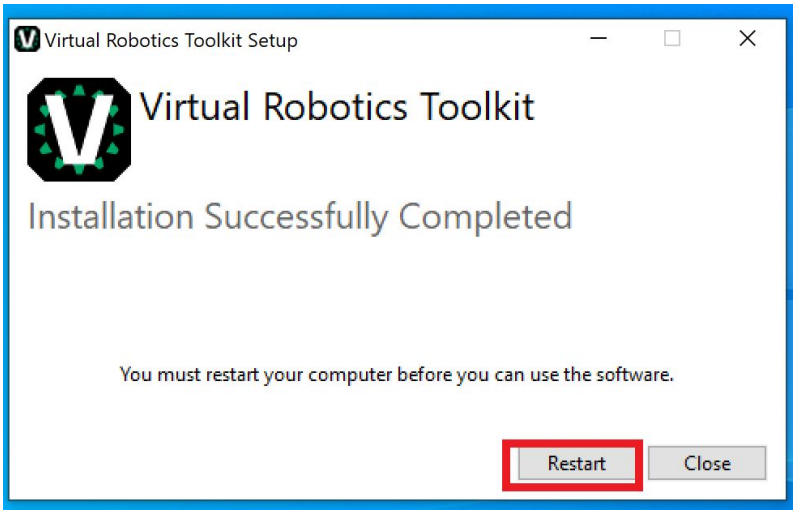
9. Once downloaded, click “Run”



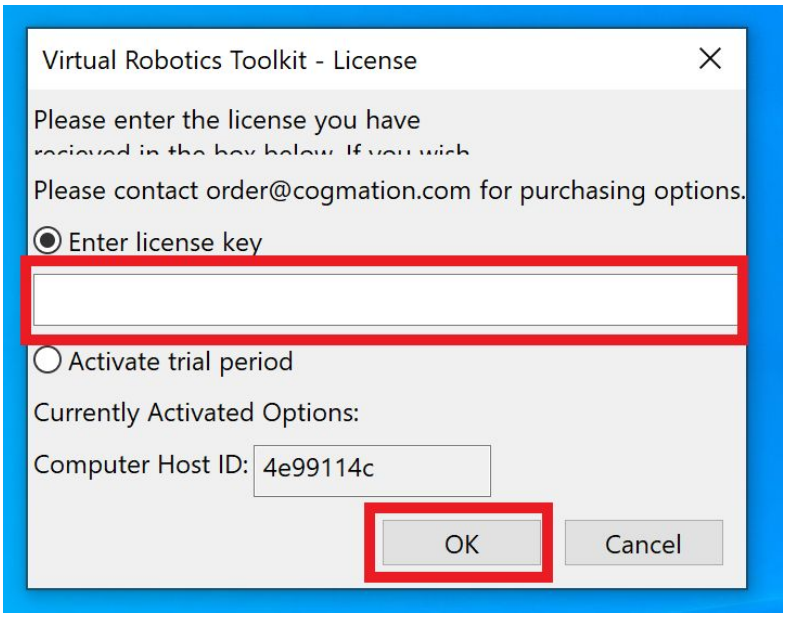
10. Accept the Terms and Conditions, and click “Install”



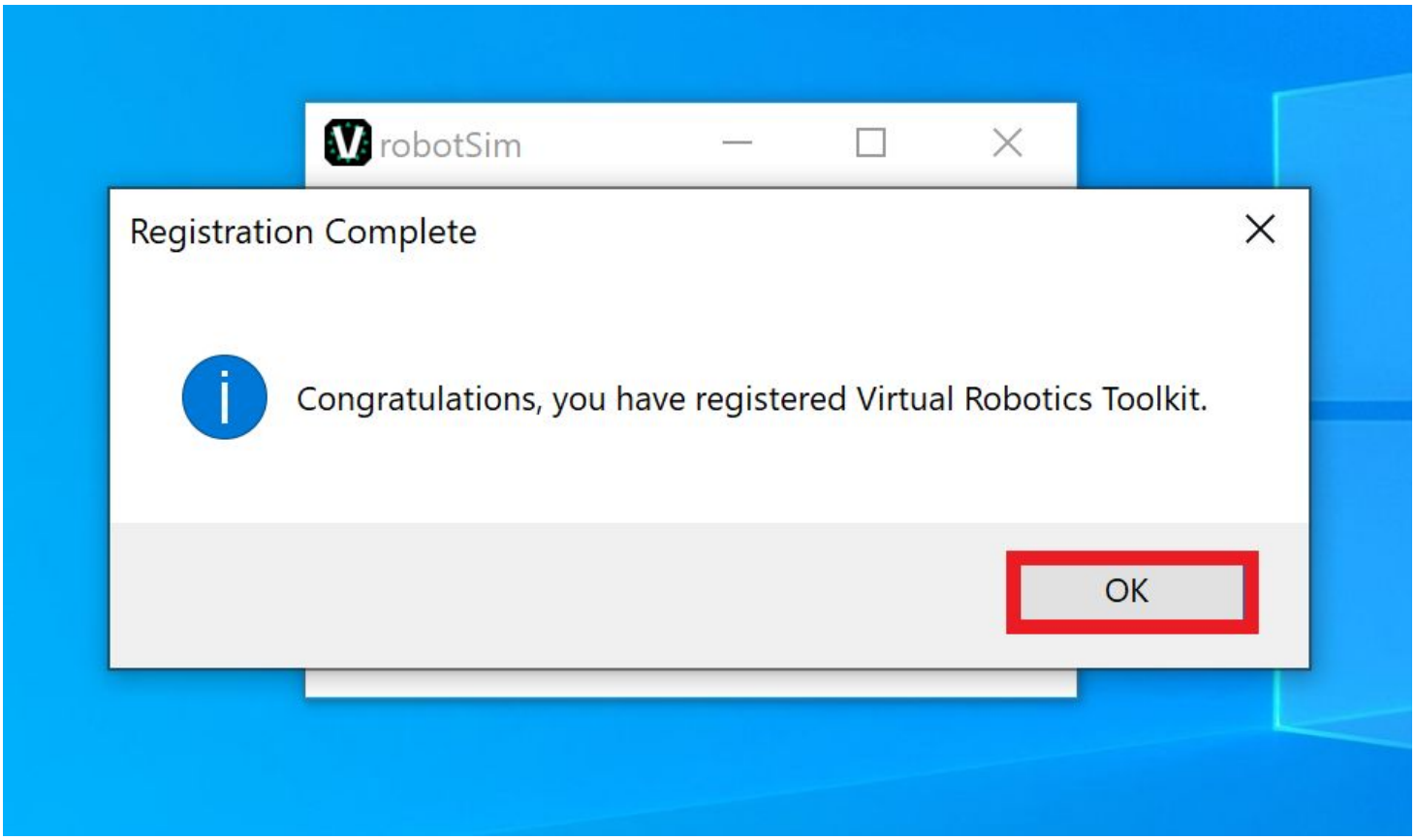
11. Once the installation is complete, click “Restart” to restart your computer. (Save any other open work!)



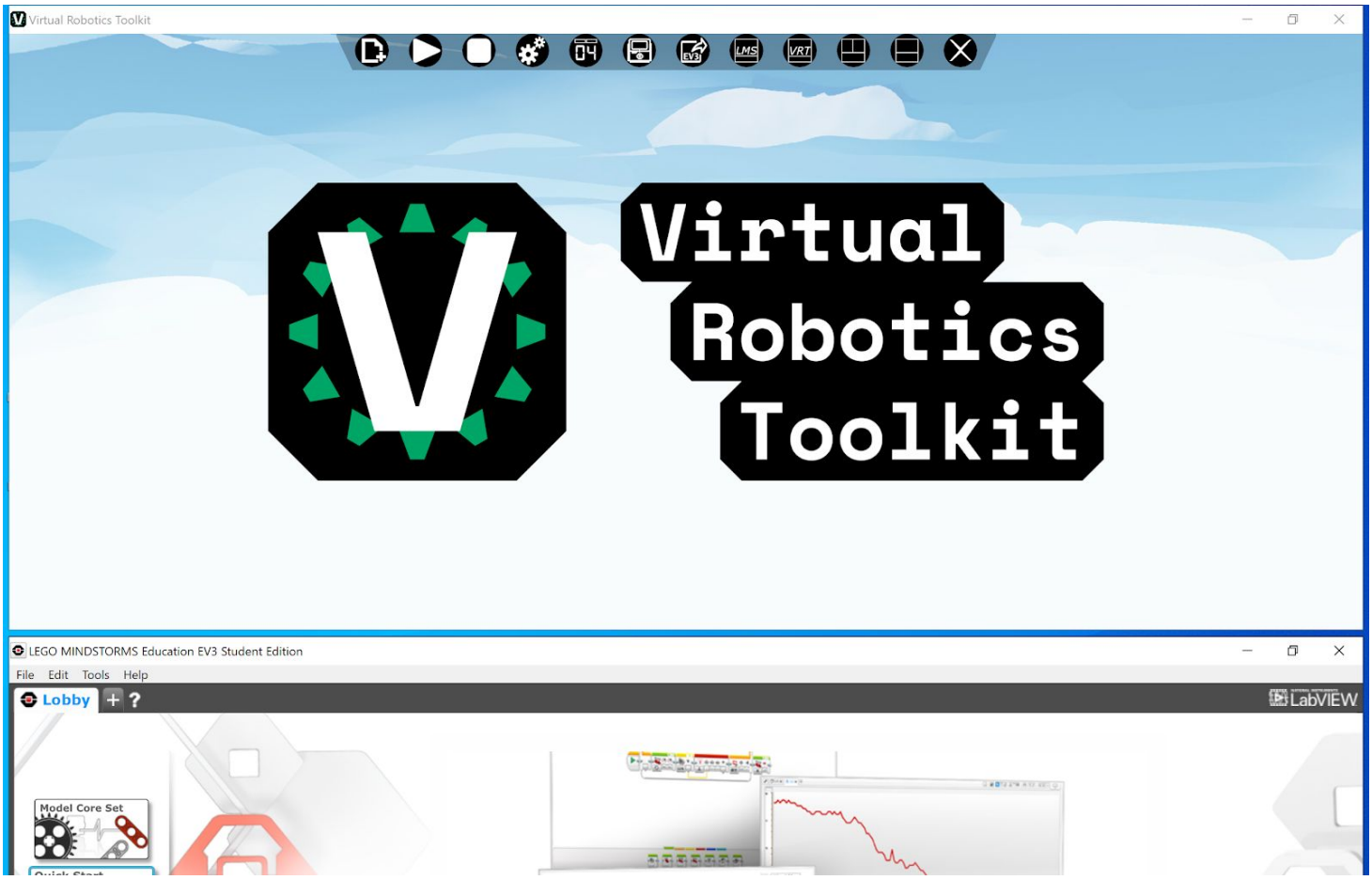
12. Open the Virtual Robotics Toolkit executable. From the Email, enter your license key and click “OK”.



13. If everything was successful, click “OK”.



14. Virtual Robotics Toolkit main screen should open. This will also open LEGO EV3 Mindstorms.

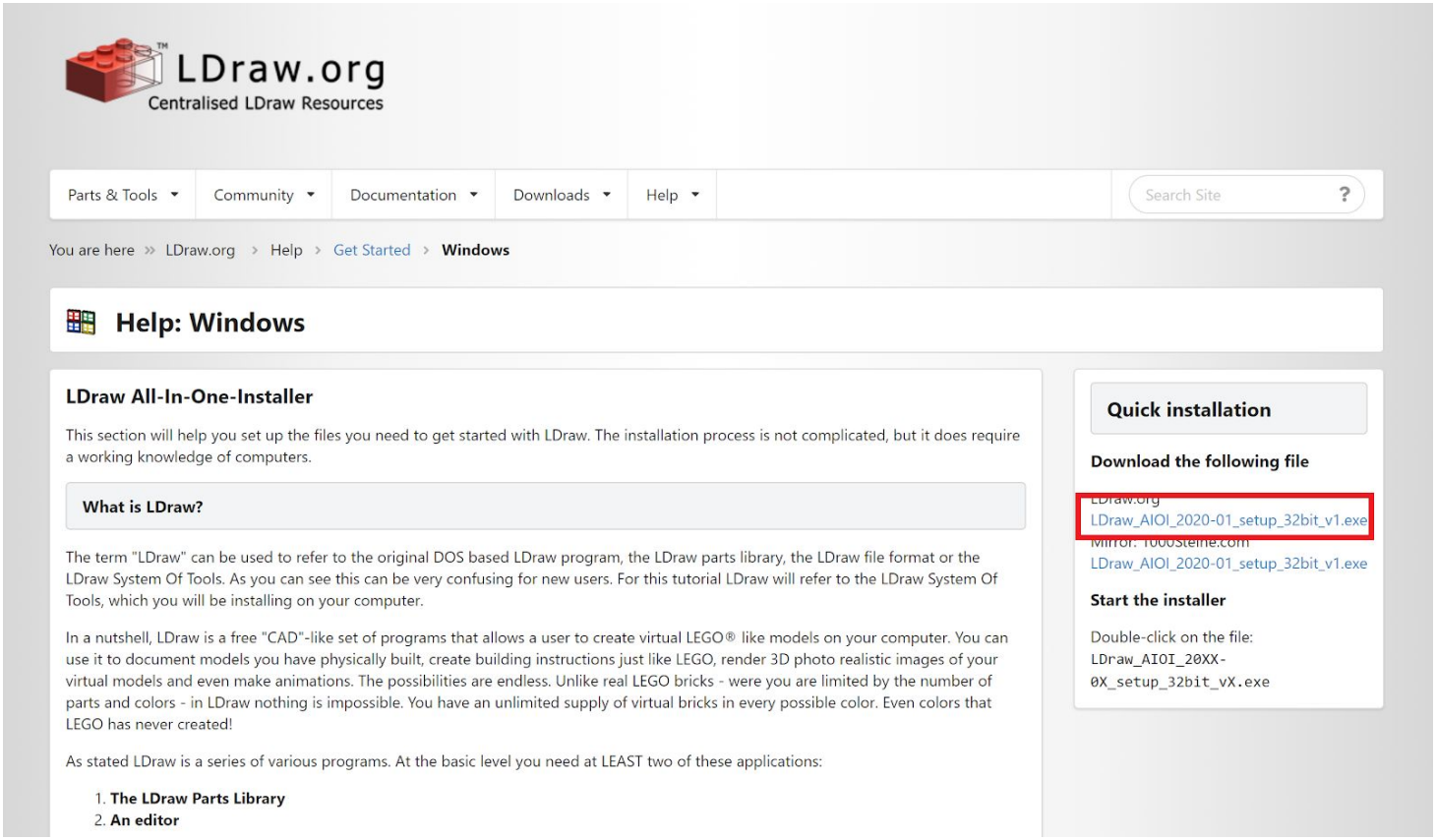

Virtual Robotics Toolkit
Virtual
Robotics
Toolkit
LEGO MINDSTORMS Education EV3 Student Edition
File Edit Tools Help
Lobby
LabVIEW
Model Core Set

LDraw Library

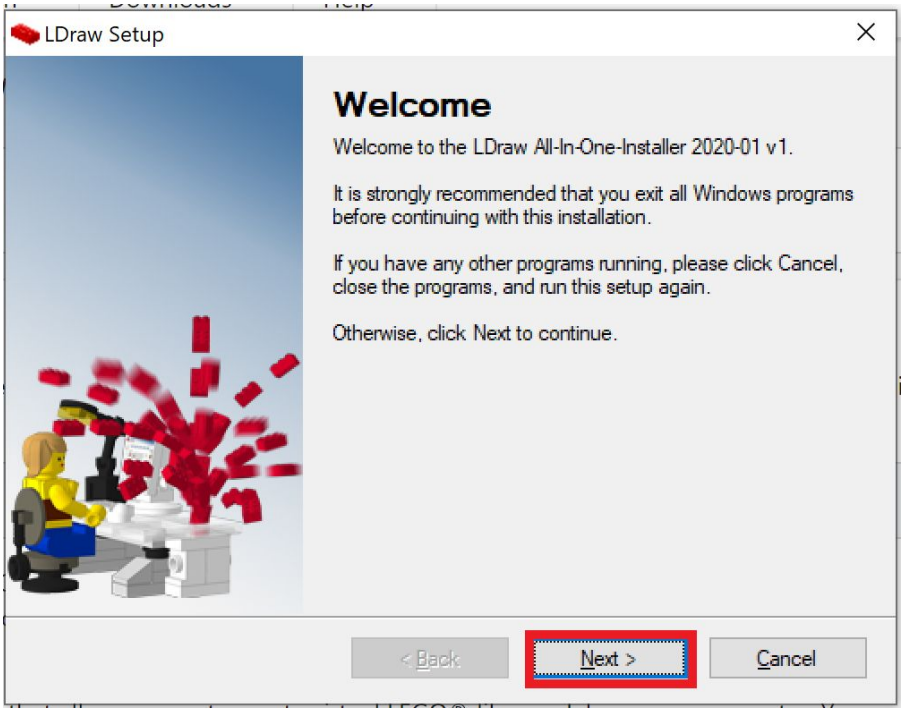
1. Go to the website:

https://www.ldraw.org/article/104.html

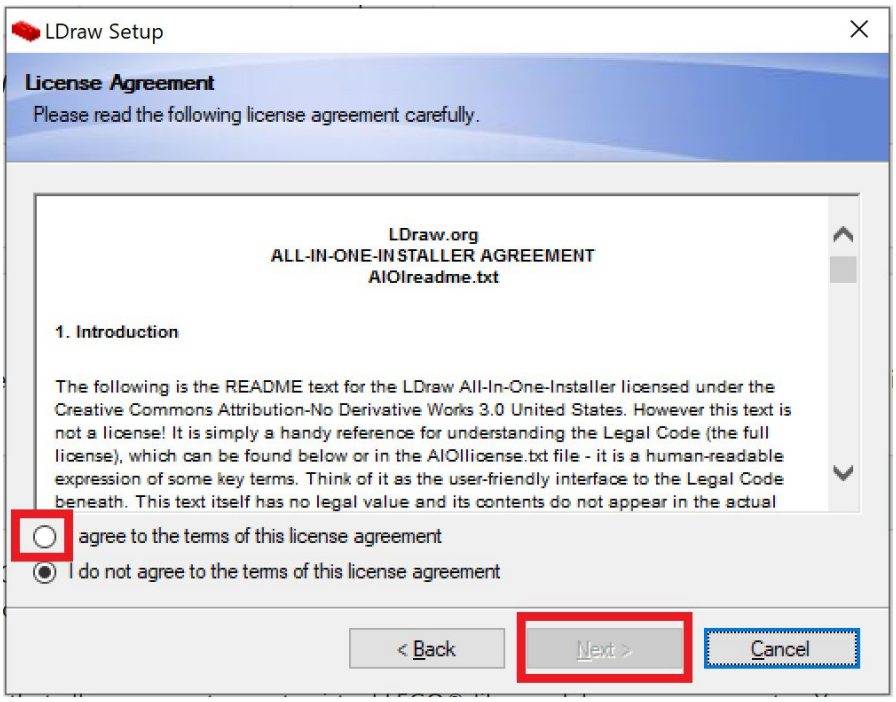
2. Click the LDraw_AIOI (All In One Installer) to download



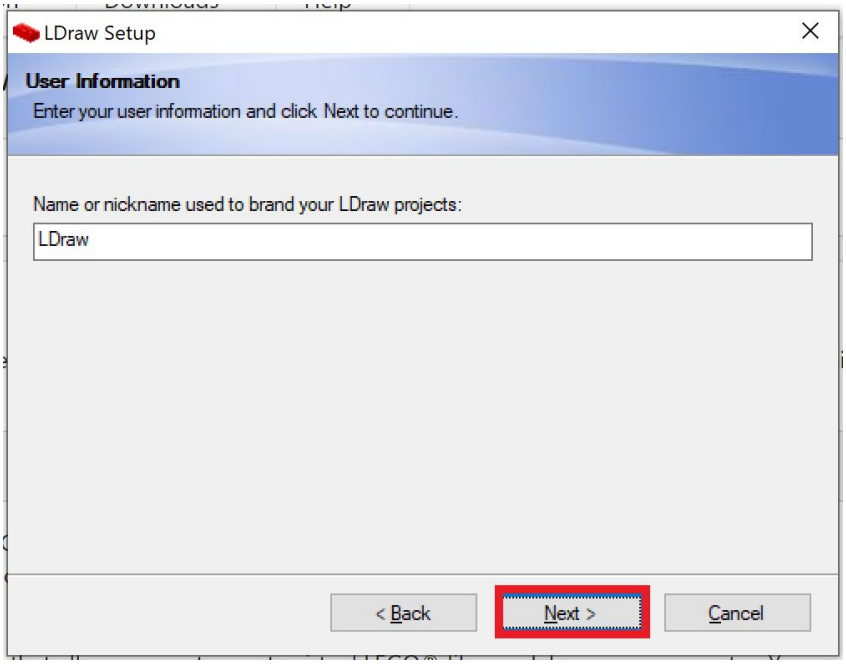
3. Run the Installer. On the Welcome screen, click “Next”.



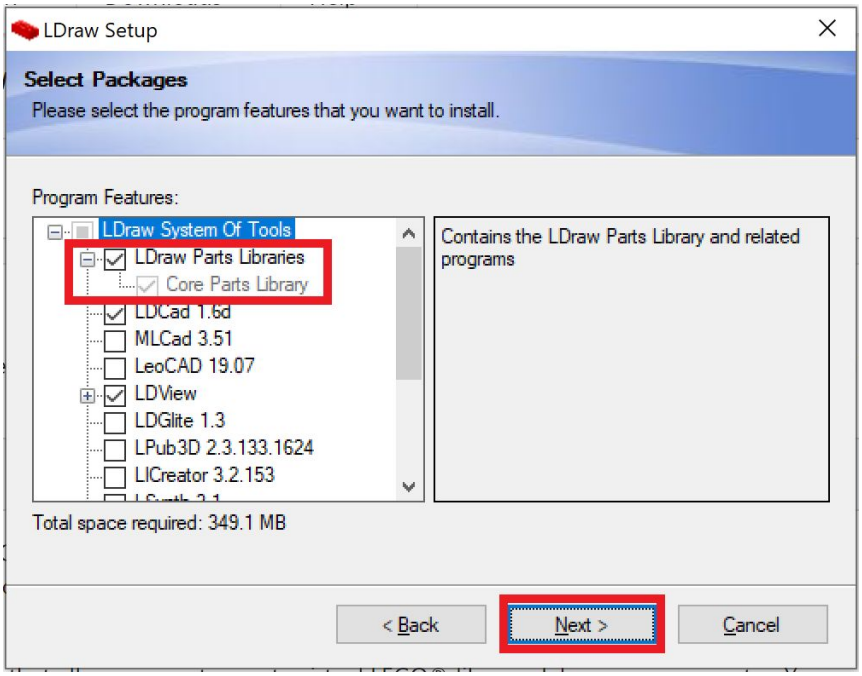
4. Click the button to agree to the terms, and click “Next”



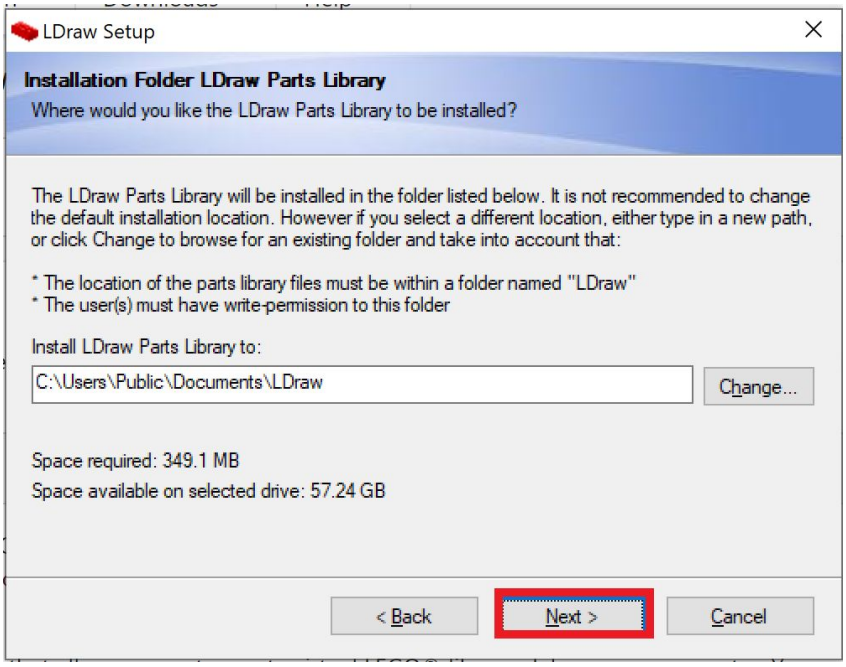
5. Optional, choose a nickname for your projects. (I left this as default). Click “Next”.



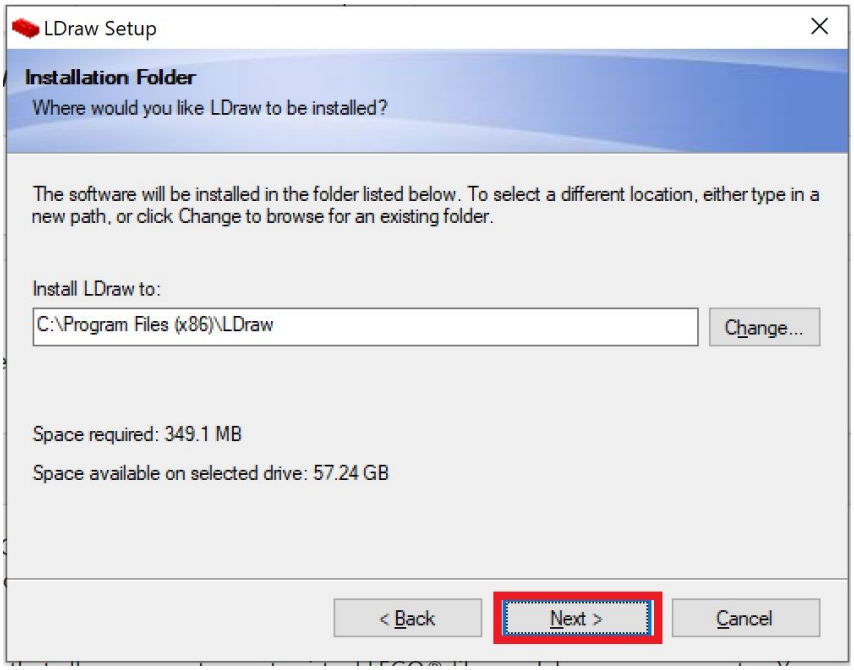
6. IMPORTANT! Make sure LDraw Parts Libraries and Core Parts Library are selected! Add any optional libraries you may like to install. (I left this as default). Select “Next”.



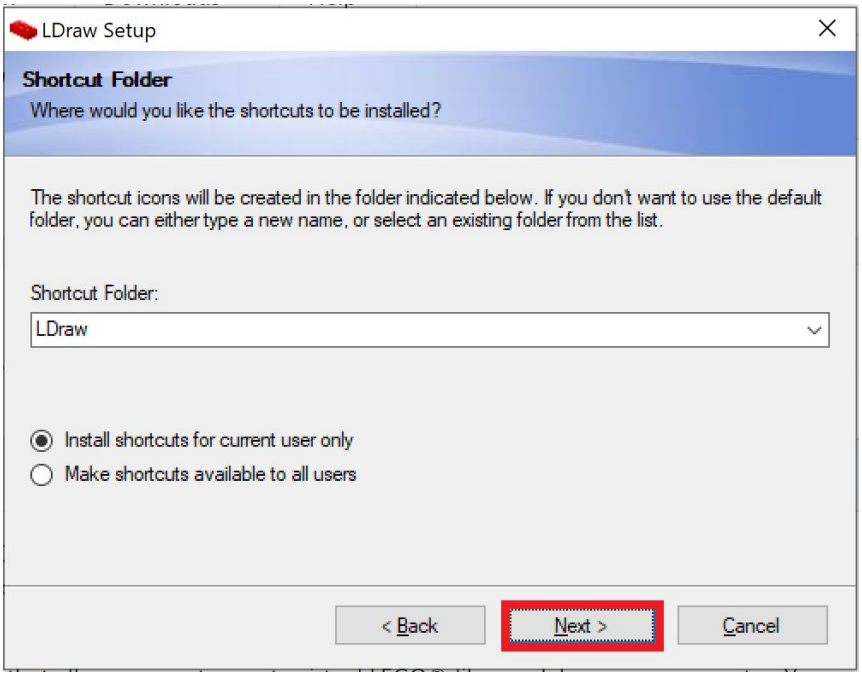
7. Optional, you can specify where to install the LDraw Part Library. (I left this as default). Select “Next”.



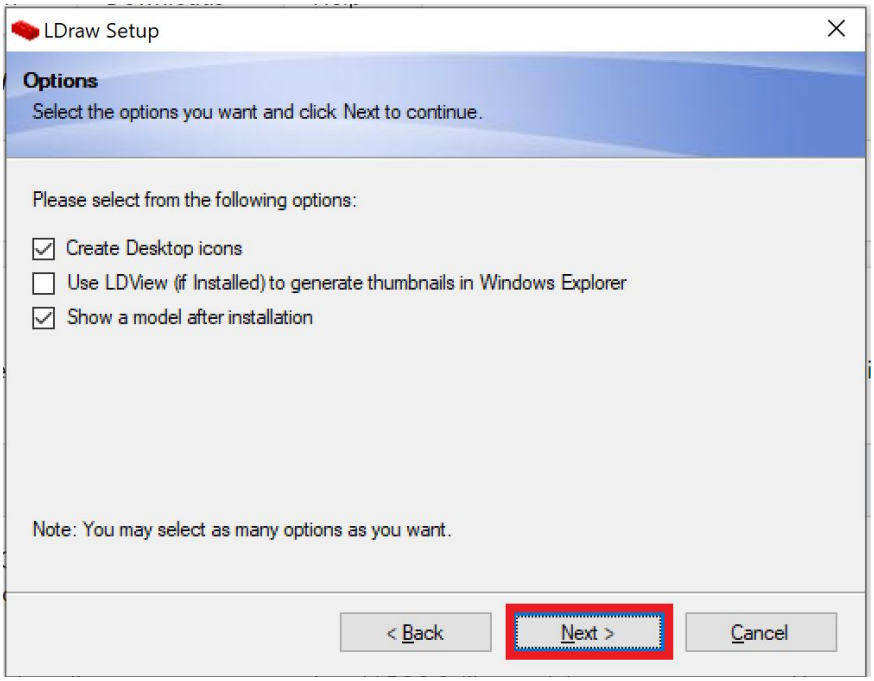
8. Optional, you can specify where to install the LDraw program. (I left this as default). Select “Next”.



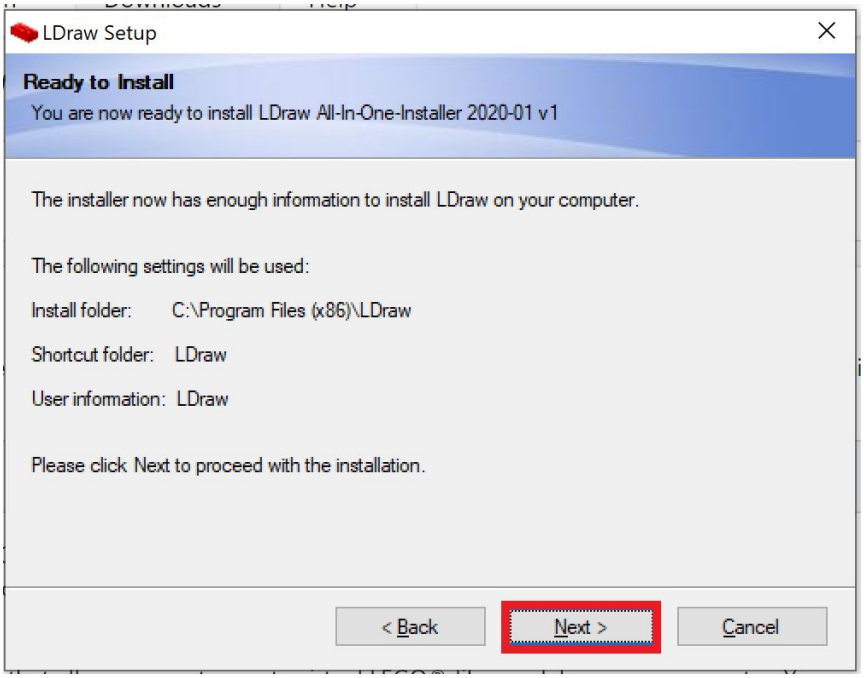
9. Optional, you can choose a name for the shortcut folder and availability. (I left this as default). Click “Next”.



10. Choose any of the listed options for icons and running LDraw. Click “Next”.



11. Click “Install” to begin the installation. This may take a while, on a Microsoft Surface, this took about 15 minutes.



12. With the LDraw Parts library installed, you should now be able to import all pieces of your robot from Lego Digital Designer into Virtual Robotics Toolkit! (Guide coming soon!)

13. There are always LEGO bricks getting added and updated. If you are having trouble loading pieces of your robot, there is a download and instructions for some of the later bricks available here:

https://www.eurobricks.com/forum/index.php?/forums/topic/137193-more-up-to-date-ldrawxml-lddldraw-conversion-file/