Team 1259 Paradigm Shift

2020 Jun 17

Setting up for robot code development and desktop simulation.

You will need a PC (desktop or laptop) with a fairly new processor and available disk space. If in doubt, ask a mentor.

WPI Lib install including Visual Studio Code

Latest version 2020.3.2

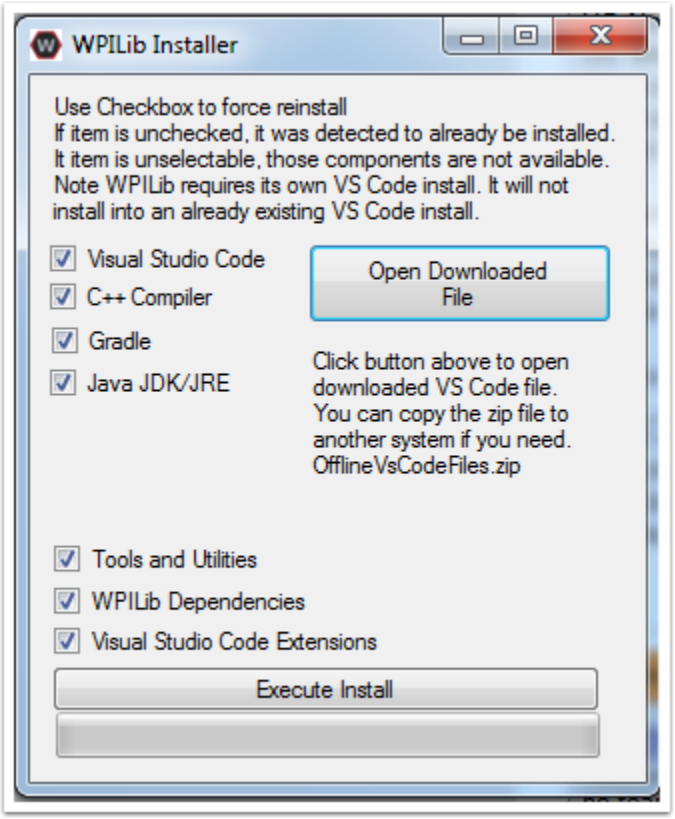
Download (assuming Windows 10)

https://github.com/wpilibsuite/allwpilib/releases/download/v2020.3.2/WPILibInstaller_Windows64-2020.3.2.zip

Unzip to download folder

Run WPILibInstaller_Windows64-2020.3.2.exe

Install VS code first (the Open Downloaded file is labeled Download VS Code or something similar)



Detailed Instructions

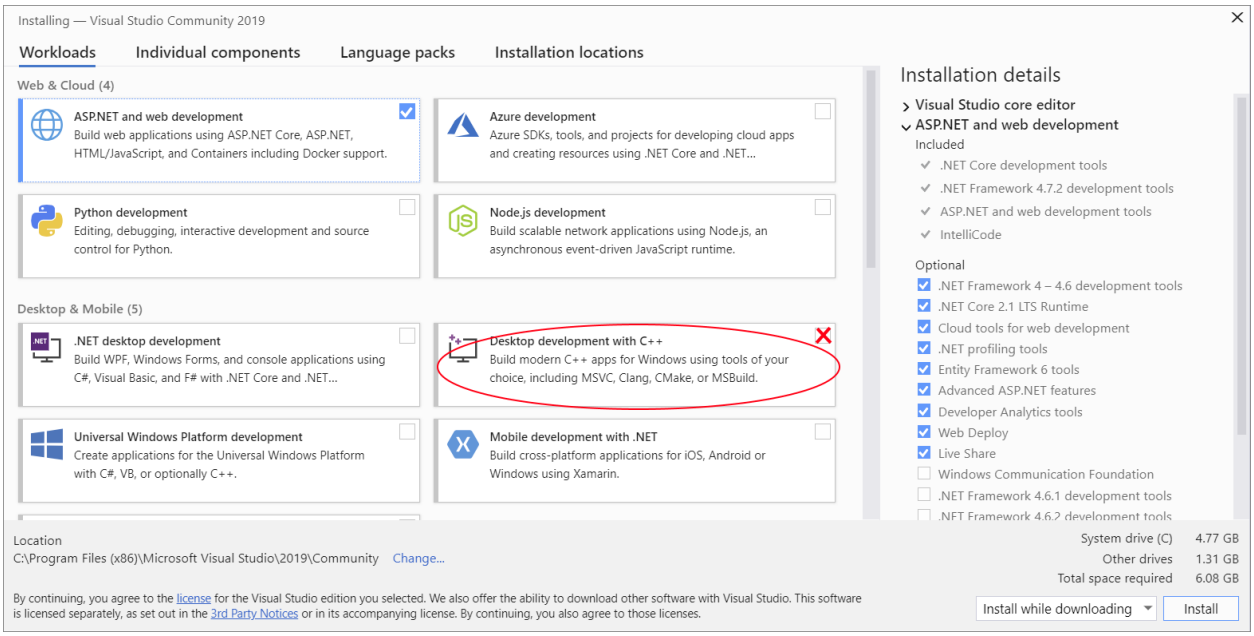
https://docs.wpilib.org/en/stable/docs/getting-started/getting-started-frc-control-system/wpilib-setup.html

Visual Studio 2019 community edition

https://visualstudio.microsoft.com/downloads/

Run vs_community_<a bunch of numbers>.exe

Select at least Desktop development with C++. You can install other tools if you want. You can always install them later. Visual Studio 2019 is pretty good at figuring out what you want to do and grabbing the tools you need on demand.



Detailed Instructions

https://docs.microsoft.com/en-us/visualstudio/install/install-visual-studio?view=vs-2019

Cross The Road Electronics (CTRE) Phoenix framework

Links

http://www.ctr-electronics.com/hro.html#product_tabs_technical_resources

Download

https://github.com/CrossTheRoadElec/Phoenix-Releases/releases/download/v5.18.3.1/CTRE.Phoenix.Framework.v5.18.3.1.zip

Unzip to download folder

Run CTRE Phoenix Framework v5.18.3.1.exe

Driver Station log viewer DSLOG Reader 2

Download

https://github.com/orangelight/DSLOG-Reader/releases/download/v2.0.0/DSLOG-Reader.2.exe

Instructions

https://github.com/orangelight/DSLOG-Reader/blob/master/Help.md

Run DSLog-Reader2.exe

Log files from Duluth 2020 will be placed in the team Google drive (will update with a link when done).

Other links

We had wanted to do this for 2020:

“The obvious first question that arises is why? Why log your robot debug info to a USB drive instead of to the console or to the roboRIO? Well, as it turns out, there are many benefits to storing your logs on an easily removable drive which could make debugging problems at competitions significantly smoother for your team. In this article, I’ll be detailing the good, the bad and the ugly as it relates to this type of logging.”

https://medium.com/southeugeneroboticsteam/logging-frc-robot-data-to-a-usb-thumb-drive-c5d237afb71b

Unfortunately no details in the article.