Step 1.) Download and install the Intel RealSense SDK 2.0. You need this to utilize the Intel depth camera we will be using throughout the scanning process. Intel RealSense SDK 2.0 – Intel RealSense Depth and Tracking cameras

Step 2.) Download and install DotProduct 3d as this is how we will be scanning environments. <u>DotProduct - Handheld 3D Scanning (dotproduct3d.com)</u>

Step 3.) Once both of those are installed, plug in an Intel RealSense D455 or D415, both are compatible with DotProduct 3d. Launch the Intel RealSense SDK 2.0 to ensure that the camera is working properly with your PC. Ensure that you have a USB 3.0 cable that is capable of data transmission. Connect the Intel RealSense camera to your computer with this cable. You should see something along the lines of this.



Step 4.) Open DotProduct 3d and ensure within the settings of the application that the correct camera is being used.

Step 5.) Begin the scanning process by clicking on the scan button.



Step 6.) Hover the camera over a region in your environment that you would like to scan. Look at your computer screen and check to see if that overall area has turned a darker green. Once a region turns green you have scanned that portion of the environment and are free to move on. Note that you will have to slowly move throughout your environment to ensure good quality scans.



Once you are satisfied with your scan press the following button to start building your pointcloud.



Step 7.) Continue to do this until you feel comfortable with the amount of pictures you have taken. Once you are done DotProduct will show you a pointcloud of what you had scanned :



Step 8.) Congratulations! You have just made your first pointcloud. Press the optimize button to increase the overall quality of the scan.