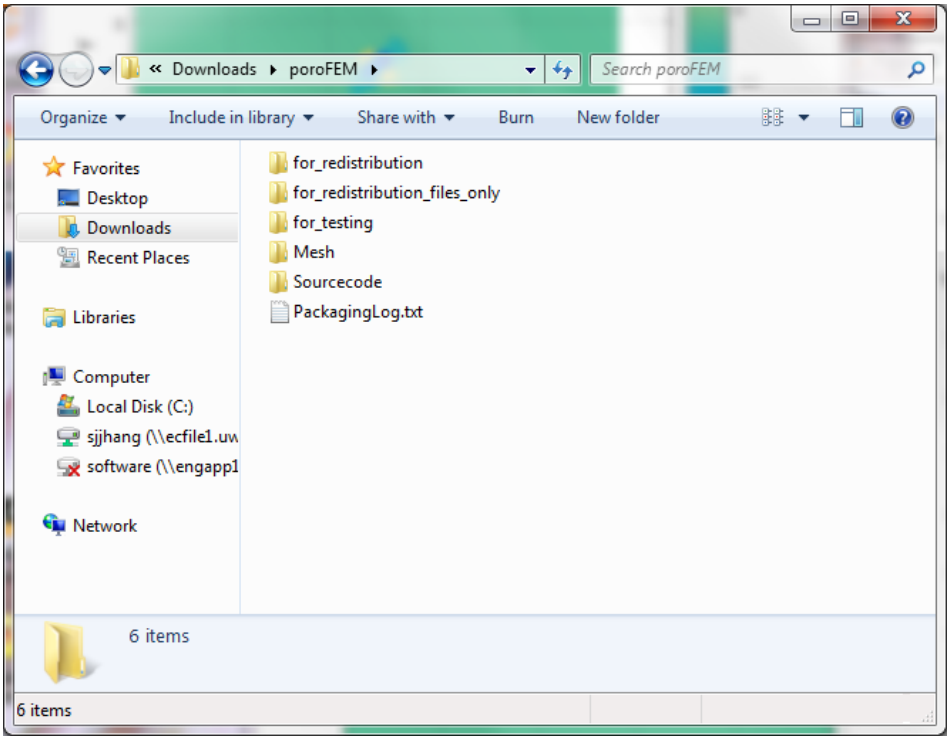
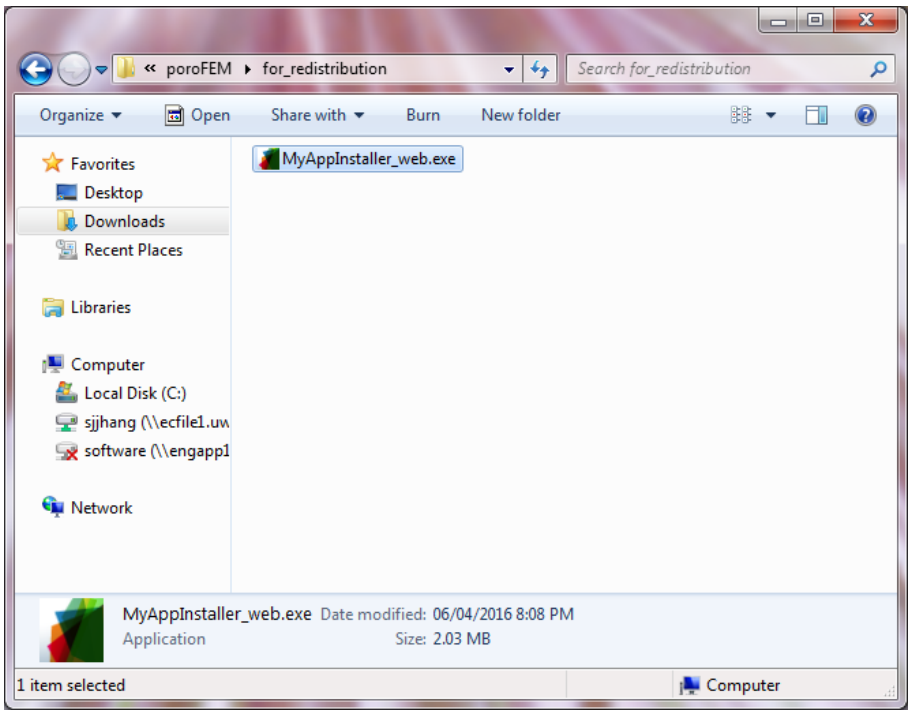
Poroelastic Finite Element Method Model
Software Walkthrough

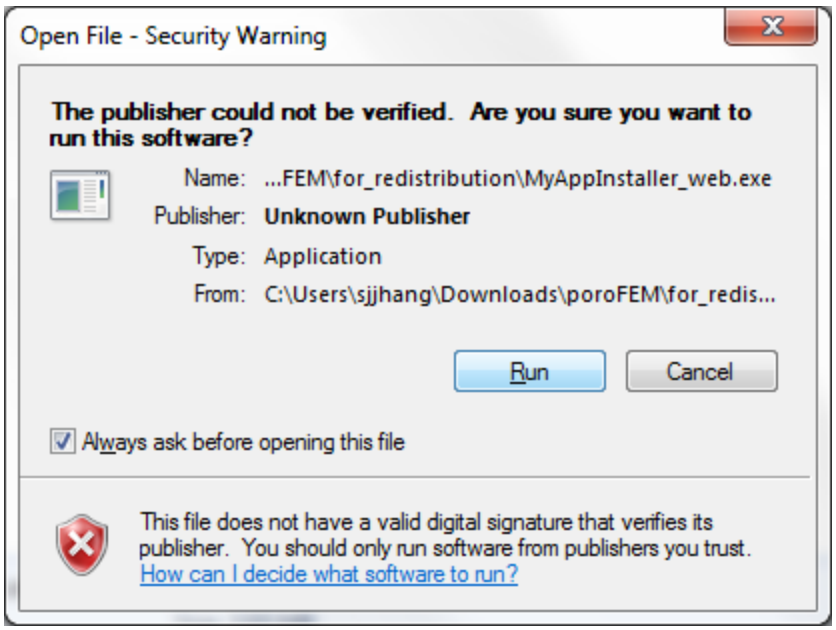
Step 1: Download "poroFEM.zip" and extract all files.



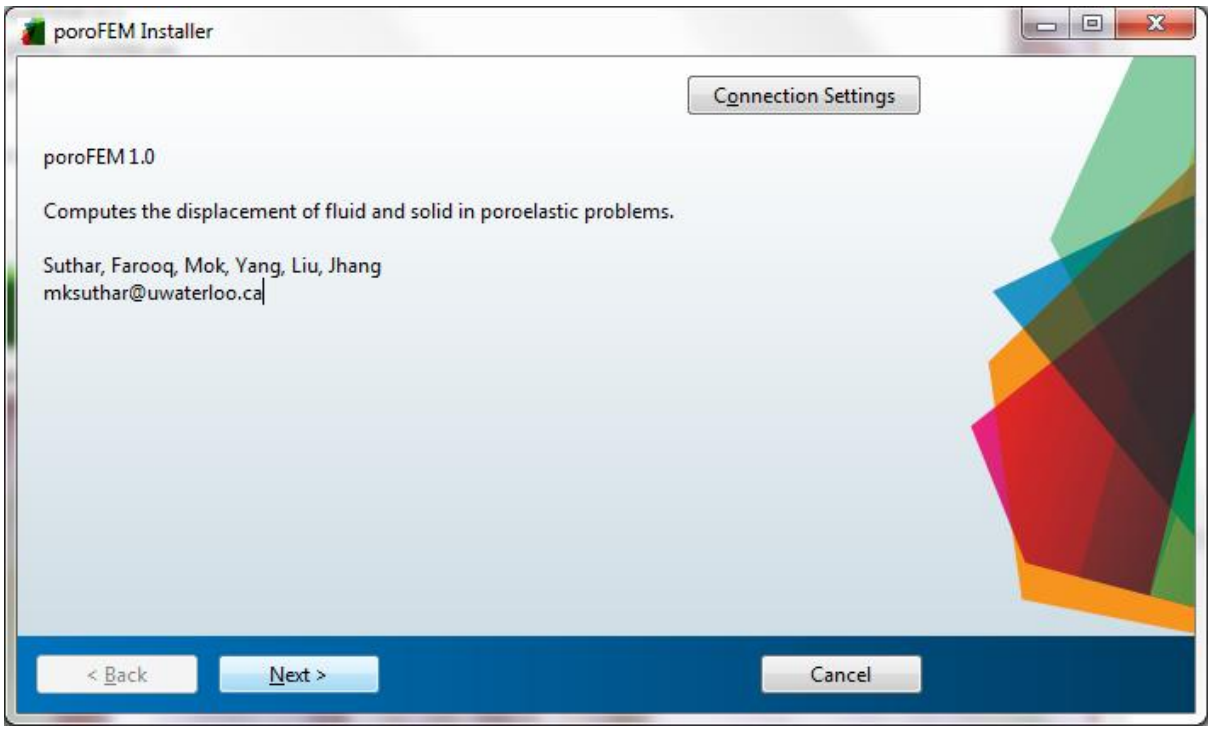
Step 2: If MATLAB is installed on the user's computer, skip to **Step 11**.
If the user does not have MATLAB installed, select the "for_redistribution" folder and run the "MyAppInstaller_web.exe"



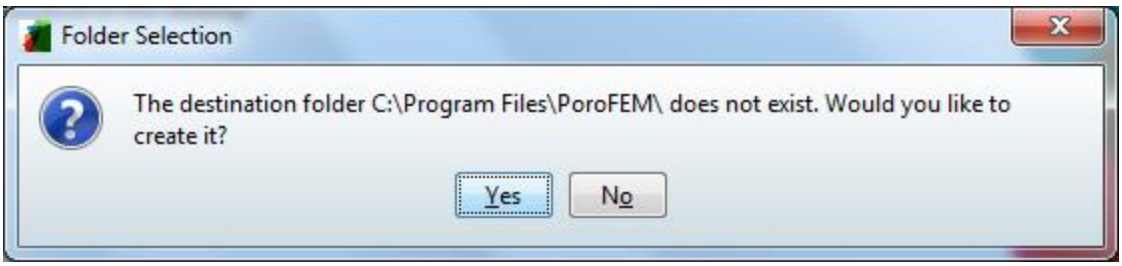
Step 3: Click on “Run” and let the application load



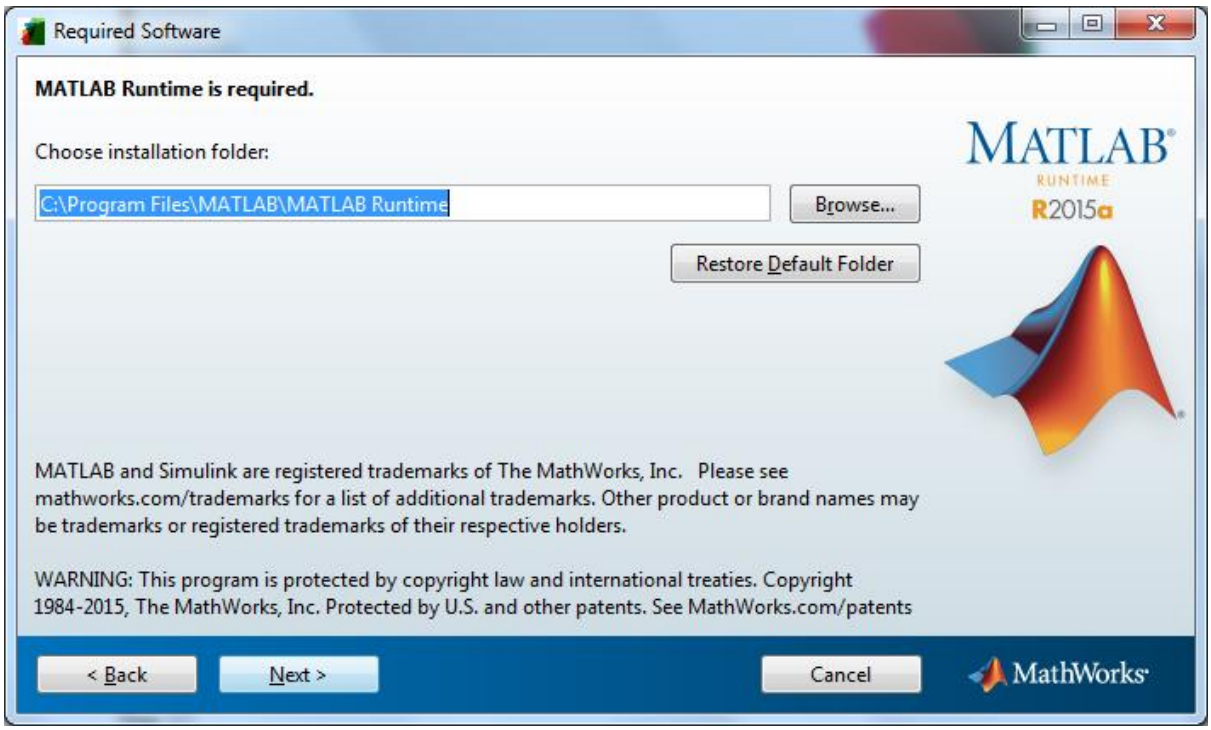
Step 4: A new window should appear. Click on “Next”



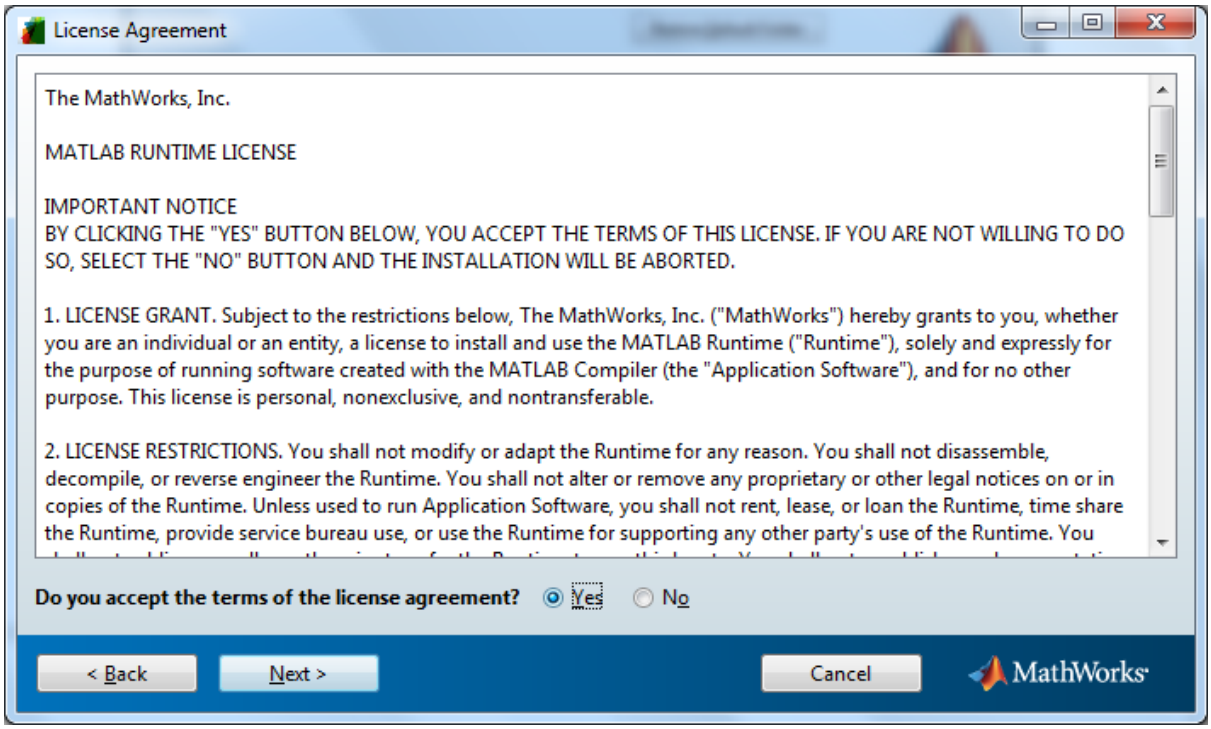
Step 5: Select “Yes” to confirm the creation of a new folder.



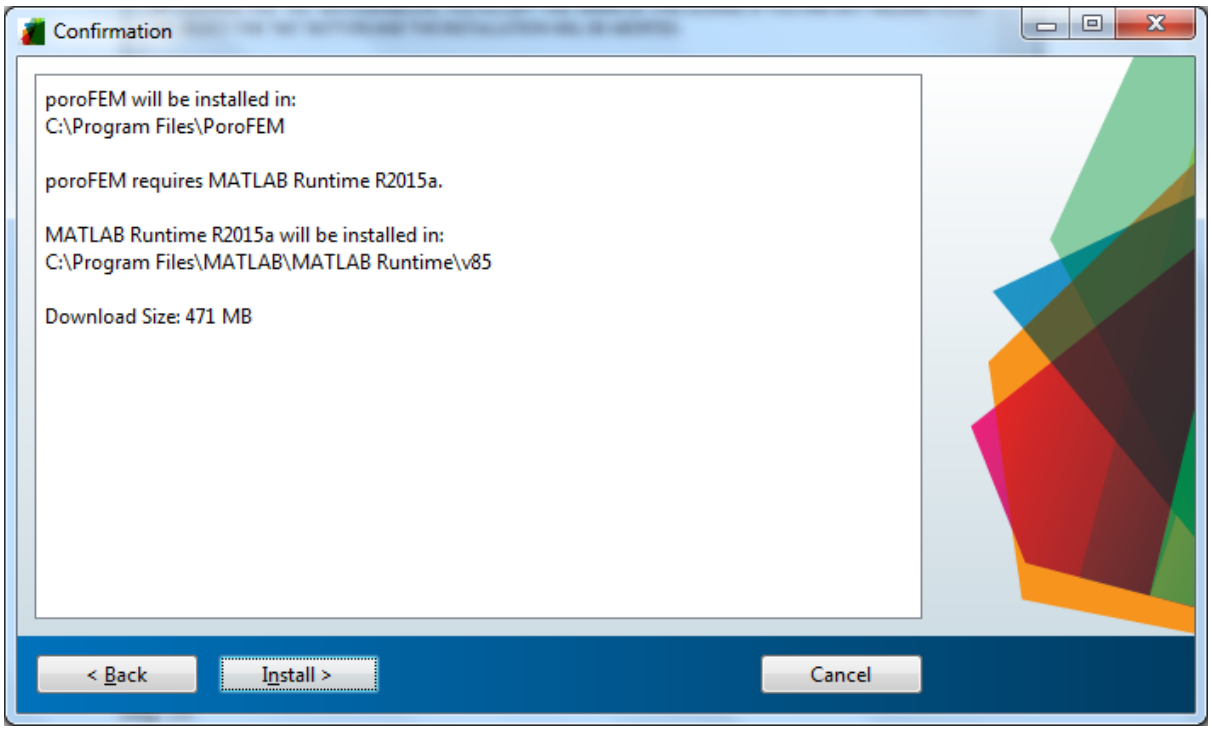
Step 6: Choose the installation folder and select “Next”



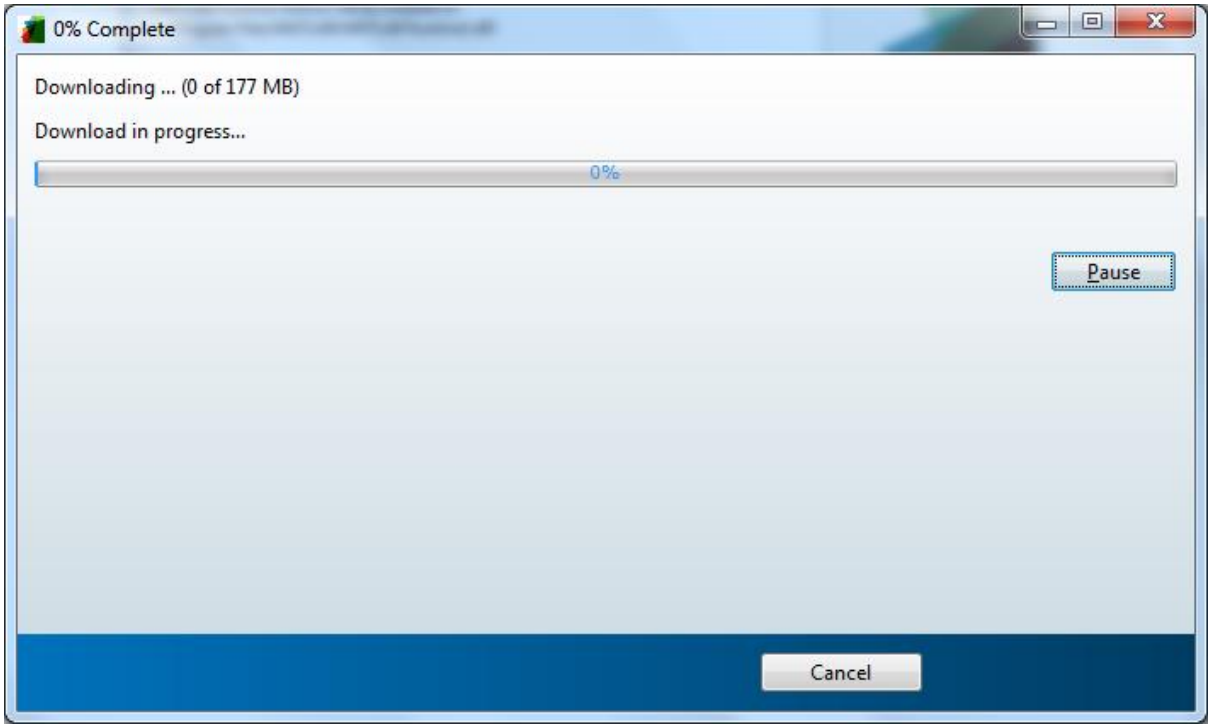
Step 7: Read the license agreement, Select “Yes” to agree then “Next” to proceed with the installation.



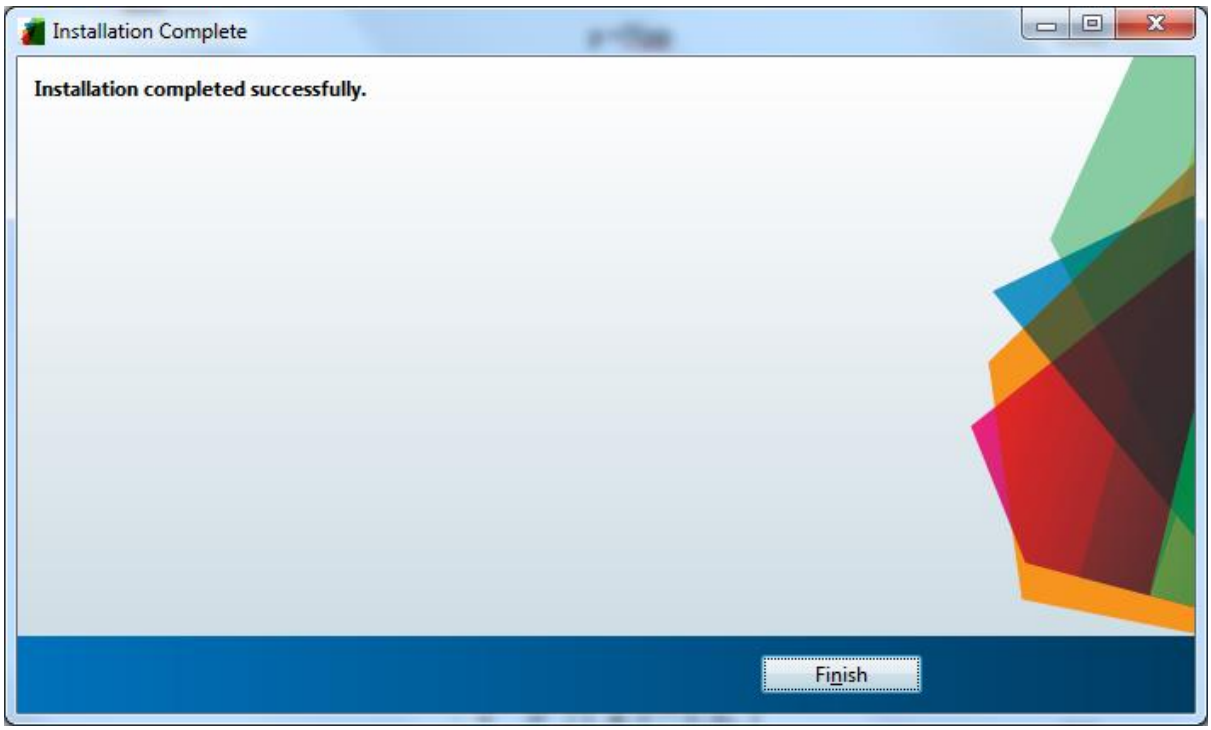
Step 8: Confirm the installation of poroFEM by selecting "Install"



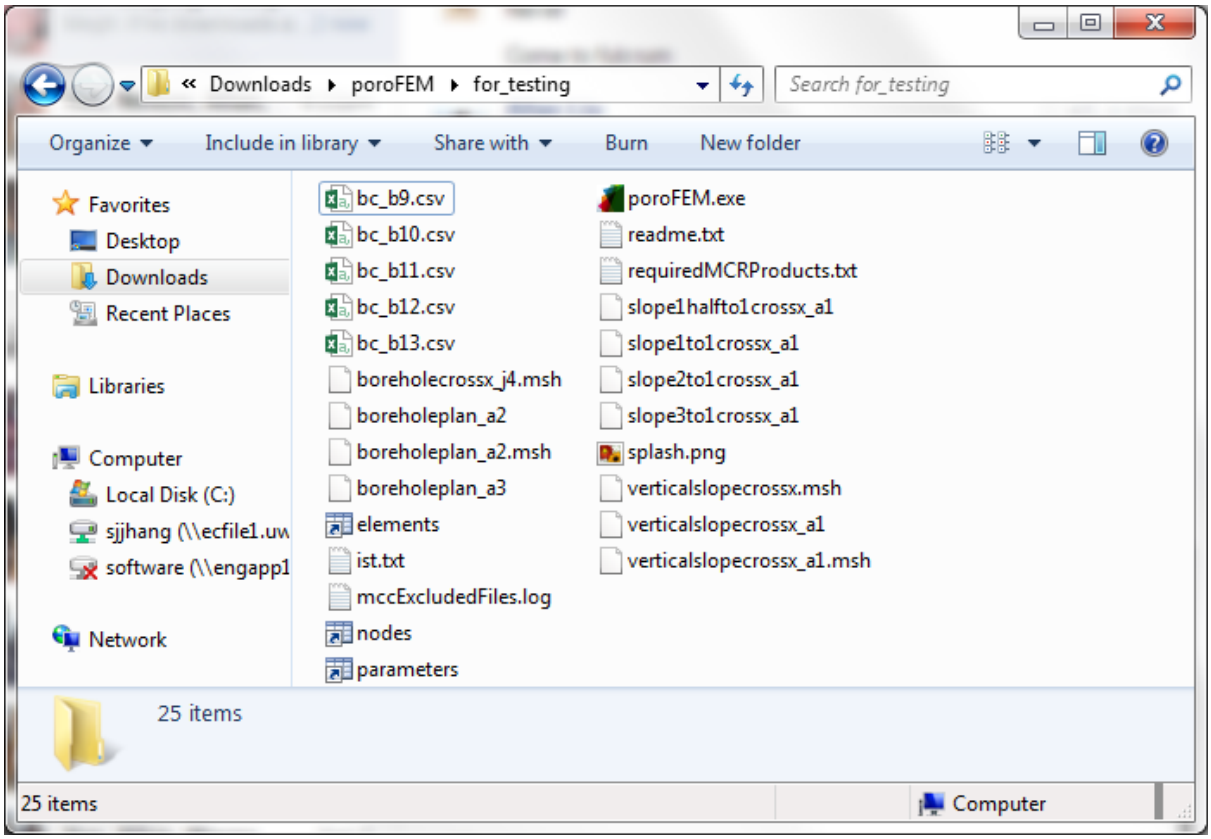
Step 9: Allow the program to install to the computer drive. This may take a while.



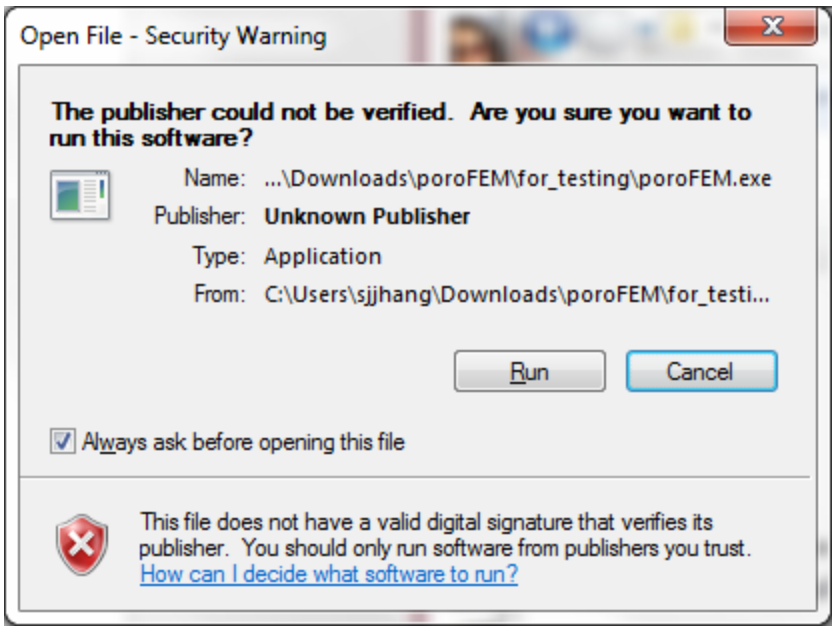
Step 10: The installation has completed. Select Finish and continue to Step 11.



Step 11: Once the user has installed poroFEM or currently has MATLAB installed, return to the original poroFEM folder which was extracted in Step 1. Run "poroFEM.exe"

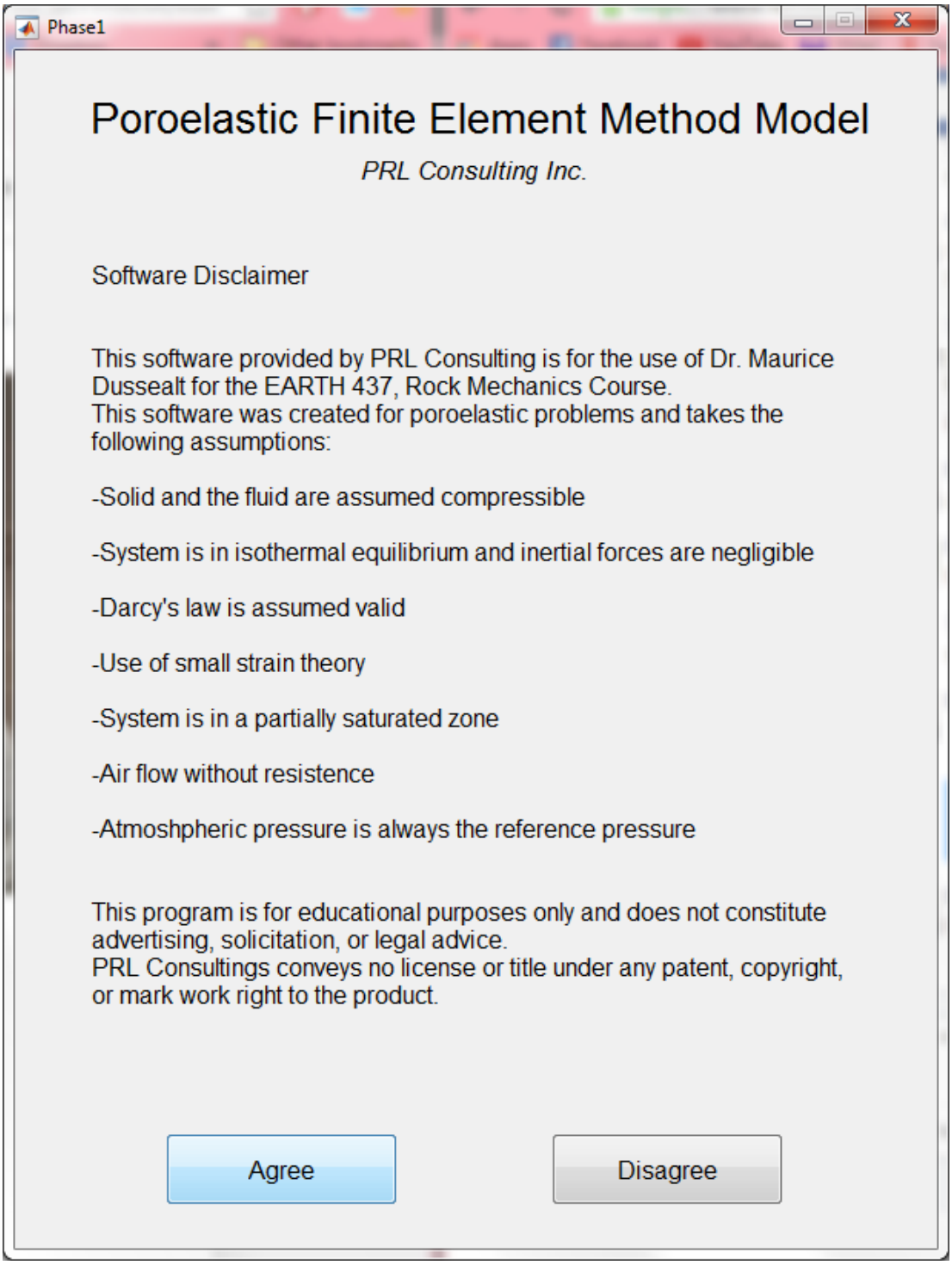


Step 12: Allow the software to run.

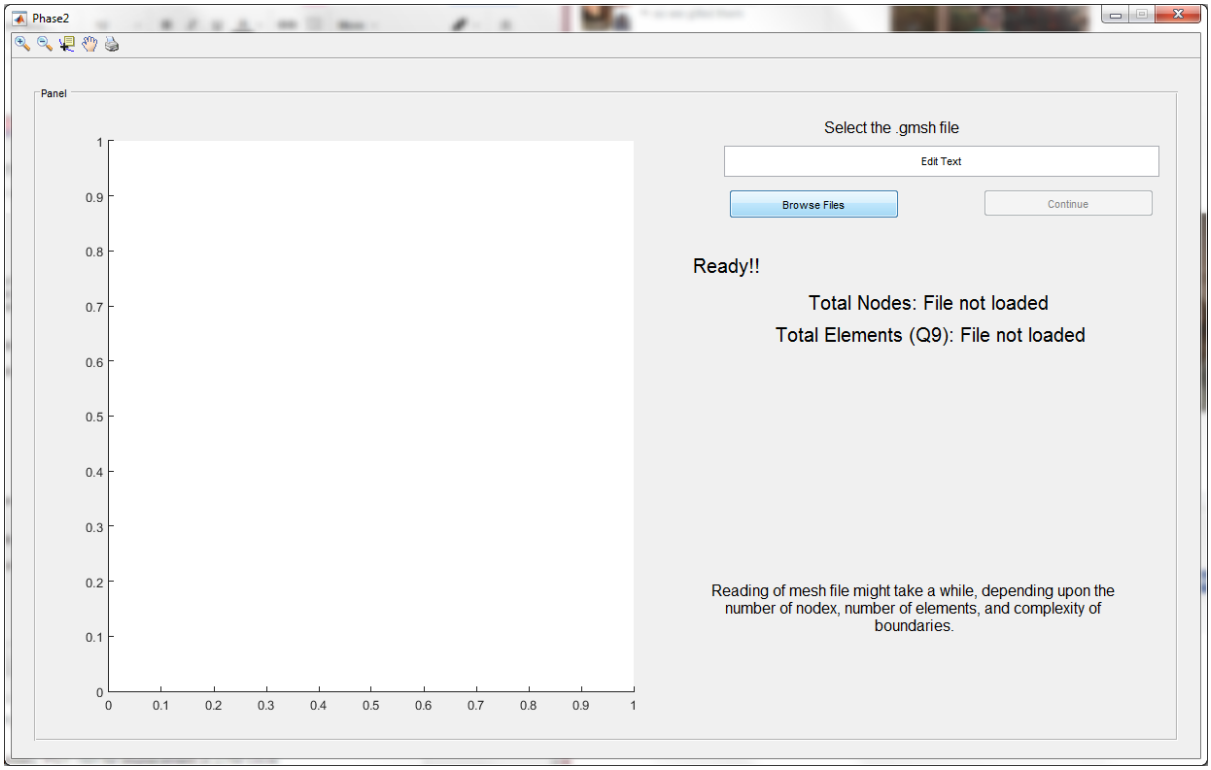


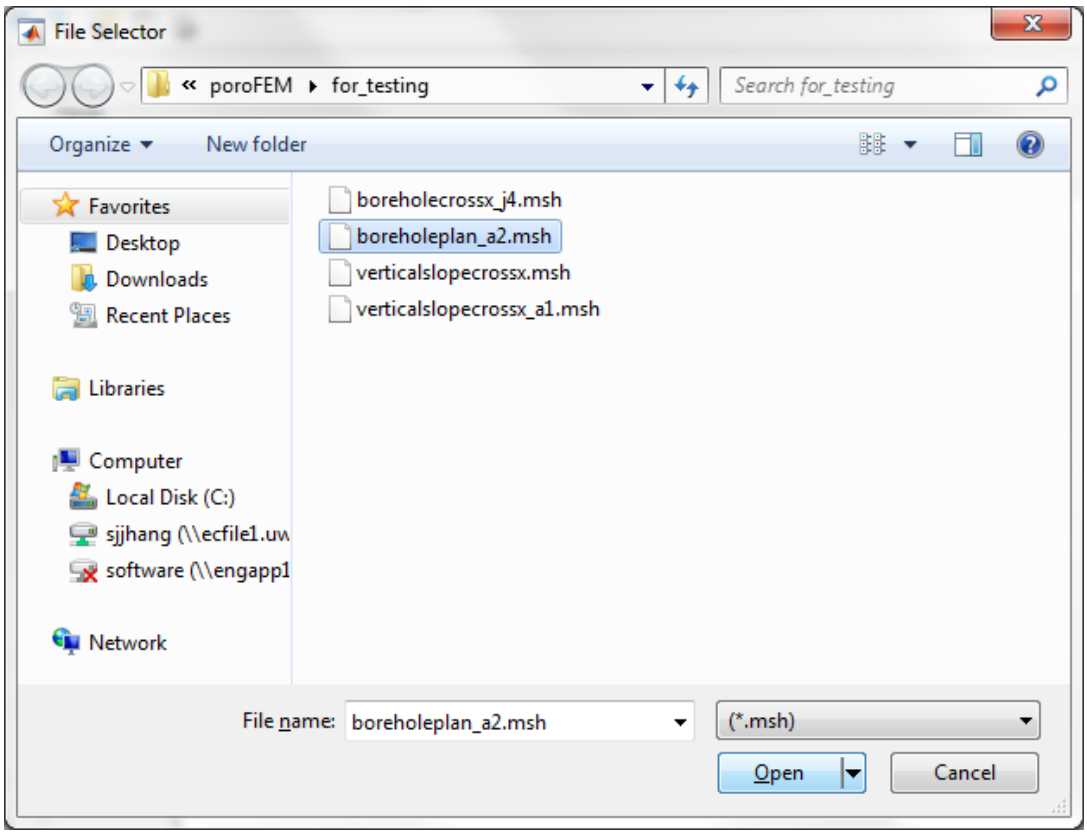
Step 13: The program has started running once the group photo of the developers appear as Shown below.

Step 14: A new window which lists the disclaimer appears. Read the provided information then select "Agree"

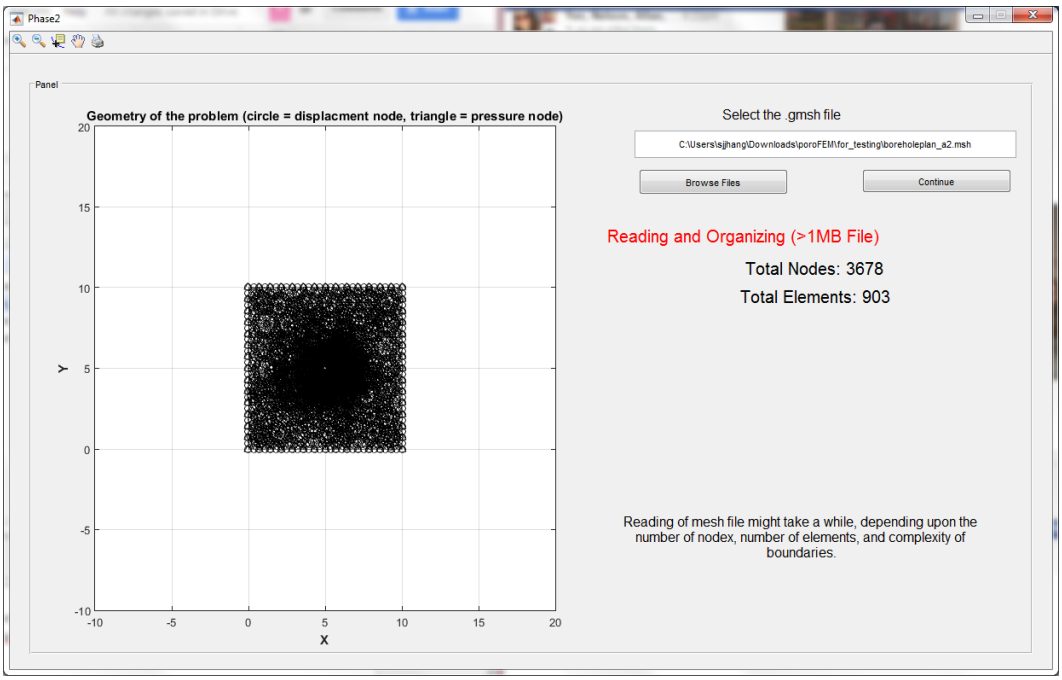


Step 15: In the Phase 2 window, select the gmsh file by "Browse Files"

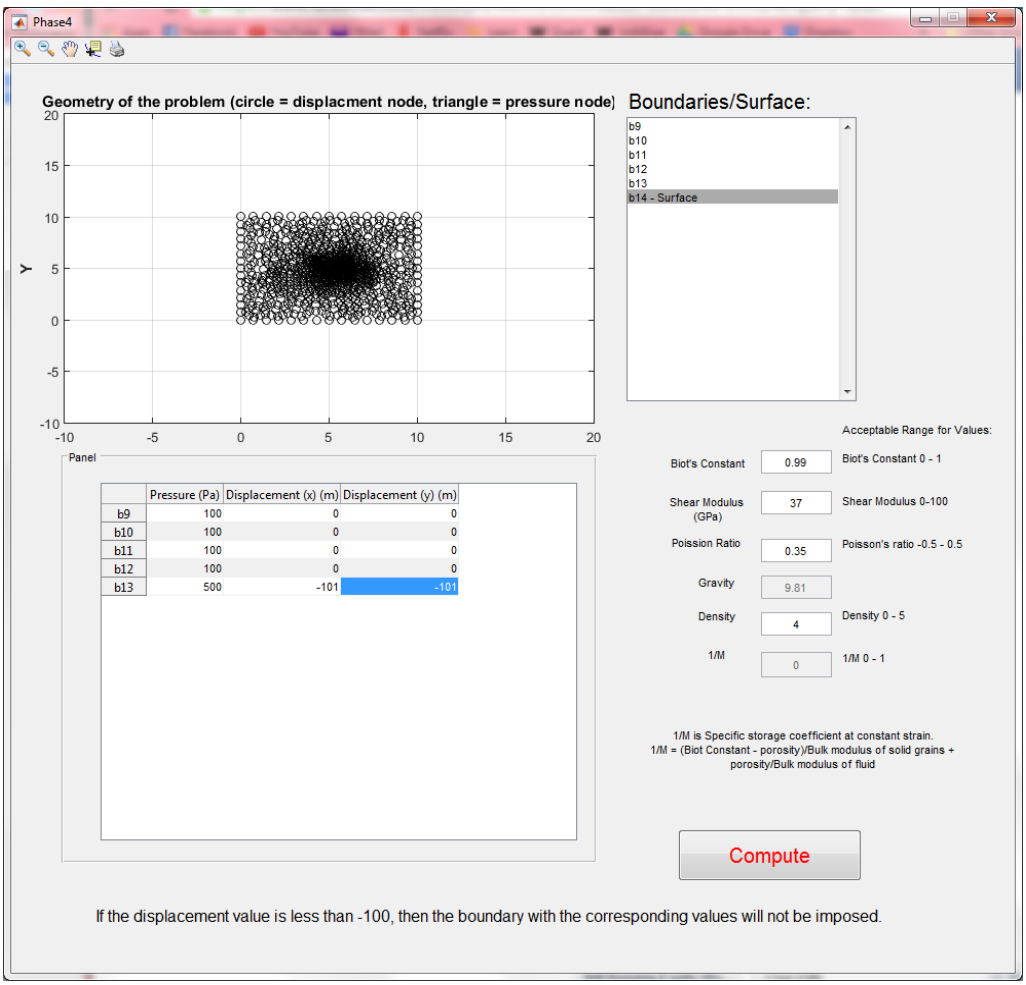




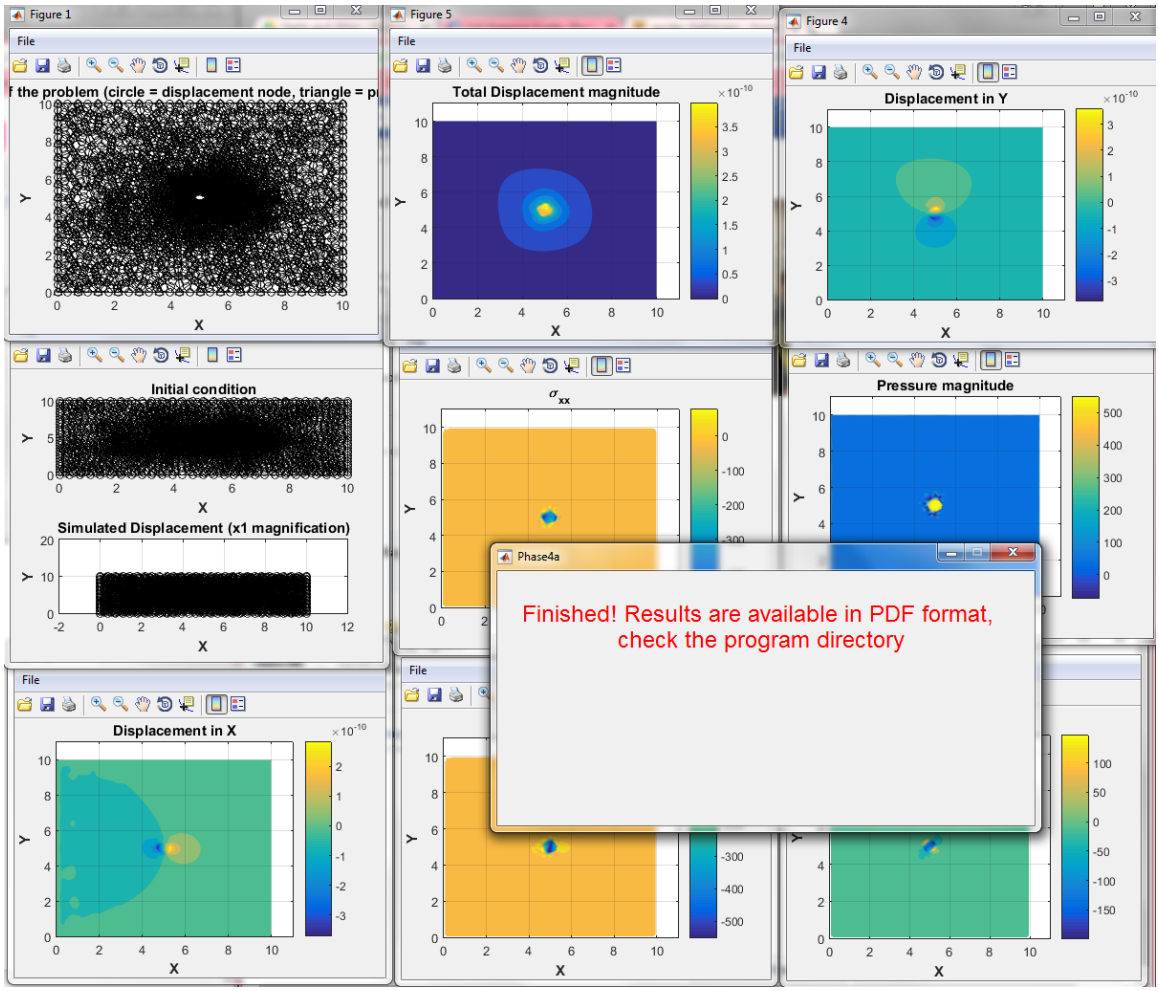
Step 16: The geometry of the gmsh file should appear as follows. Click "Continue"



Step 17: A new window appears which lists the various parameters needed for analysis. The top of the window illustrates the boundary positions and the bottom of the window requires the user to enter the parameter values. Enter values and select "Compute"



Step 18: Allow the program to run. Once complete, a series of figures should appear along with a window stating the analysis is complete.



Step 19: The PDF's of these figures can be found in the original poroFEM folder. They are stored in a new folder called results, followed by the time it was downloaded.