First steps

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1 Introduction

This small guide will help you install and run all provided examples and provide some info about how to add your own project(s).

Getting started:

- Introduction for Windows users (section 3)
- Introduction for macOS users (section 4)
- Introduction for Linux users (section 5)

Available documentation (located in *<ProjectDirectory>/Documentation*):

- HTML (recommended)
- PDF

Other:

- Fist of all good luck and have fun :)
- If you have any feedback I'd love to hear any suggestions :)

2 General

This library uses some third Party libraries and tools:

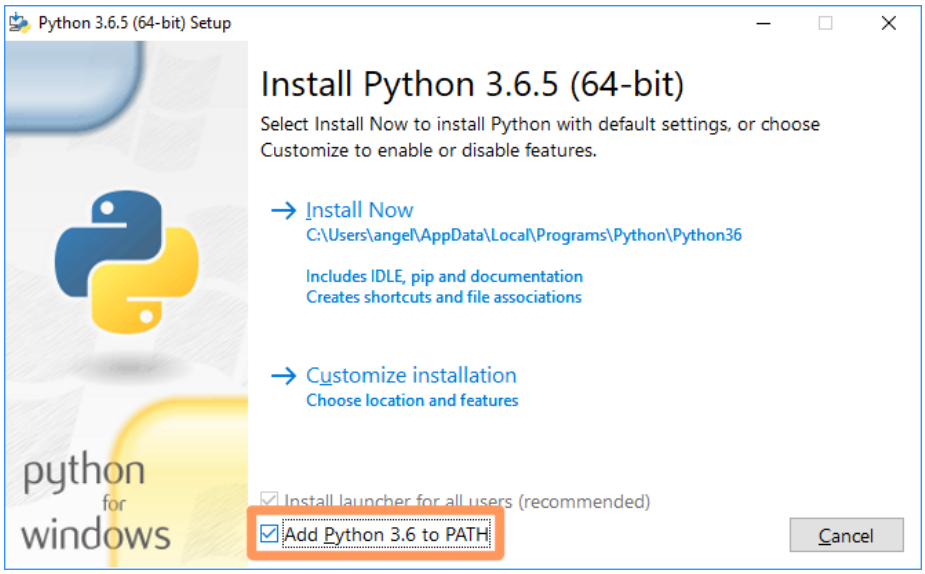
- GLM (GL mathematics for vector and matrix operations)
- OpenCV (ComputerVision library for 2D graphics)
- Glut/Freeglut (3D, currently only OpenGL 1.x is used)
- BigInt (Lib for very long int values, C# equivalent BigInt)
- Swig (tool for generating a Python to this library)

3 Windows

Insatllation:

- Install VisualStudio 2017 or VisualStudio 2017 Redistributable (64-Bit):
  - Provided: VC_redis.x64.exe
  - Link:
    `https://www.visualstudio.com/downloads/`

- Install Python (3.6.5 tested):
  - Provided: python-3.6.5-amd64.exe
  - Link, 64-Bit version required!:
    `https://www.python.org/downloads/release/python-365/`
  - **IMPORTANT:**
    You have to add Python to your *PATH*-Variables



- Test your installation

4 Mac

Installation:

- To install dependencies run: **'mac_installDependencies.sh'**
- To test your installation:
  - Open a console
  - Change directory into *<ProjectDirectory>/PythonSolutions*
  - Start the example file by running: **'python computerGeometry_example.py'**

5 Linux

Installation:

- To install dependencies run: **'linux_installDependencies.sh'**
- To test your installation :
  - Open a console
  - Change directory into *<ProjectDirectory>/PythonSolutions*
  - Start the example file by running: **'python computerGeometry_example.py'**