Documentation of 461 Drawing Project

Longwood Spring 2021 CS Senior Seminar Students

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0.1   Preface

This compilation of documentation exists as a reference for students in the CMSC 461 Senior Seminar course at Longwood University. The Following code has been created by all the students of the class, and an attempt has been made to make a cross platform application that is useful and simple, and document it in a detailed manner.

System Dependencies

1.0.1   For Linux:

To get QT:

-

To get C++ & GCC:

-

To get Python3:

-

1.0.2   For Windows:

To get QT:

-

To get C++ & GCC:

-

To get Python3:

-

1.0.3   For MacOS:

To get QT:

- Go to https://www.qt.io click on "Download. Try."
- Scroll down and click on "Go open source"
- Scroll down and click on "Download the Qt Online Installer"
- Click "Download"

To get C++ & GCC:

- Open the terminal app
- Type g++ <filename>
- if prompted download mac's develper tools

To get Python3:

- Open terminal type: /bin/bash -c

  `"$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install.sh)"`

- At the bottom of your " /.profile" file type:

  `export PATH="/usr/local/opt/python/libexec/bin:$PATH"`

- type "brew install python"

JSON Protocol

Defined here is what a JSON Object should look like for sending and receiving shapes.

For circles:

```json
{
    "id": 1,
    "shape": "circle",
    "data": {
        "radius": "10",
        "center": {
            "x": 100,
            "y": 150
        }
    }
}
```

For rectangles:

```json
{
    "id": 2,
    "shape": "line",
    "data": {
        "start": {
            "x": 10,
            "y": 50
        },
        "end": {
            "x": 150,
            "y": 100
        }
    }
}
```