

Task Document - Python GUI Task

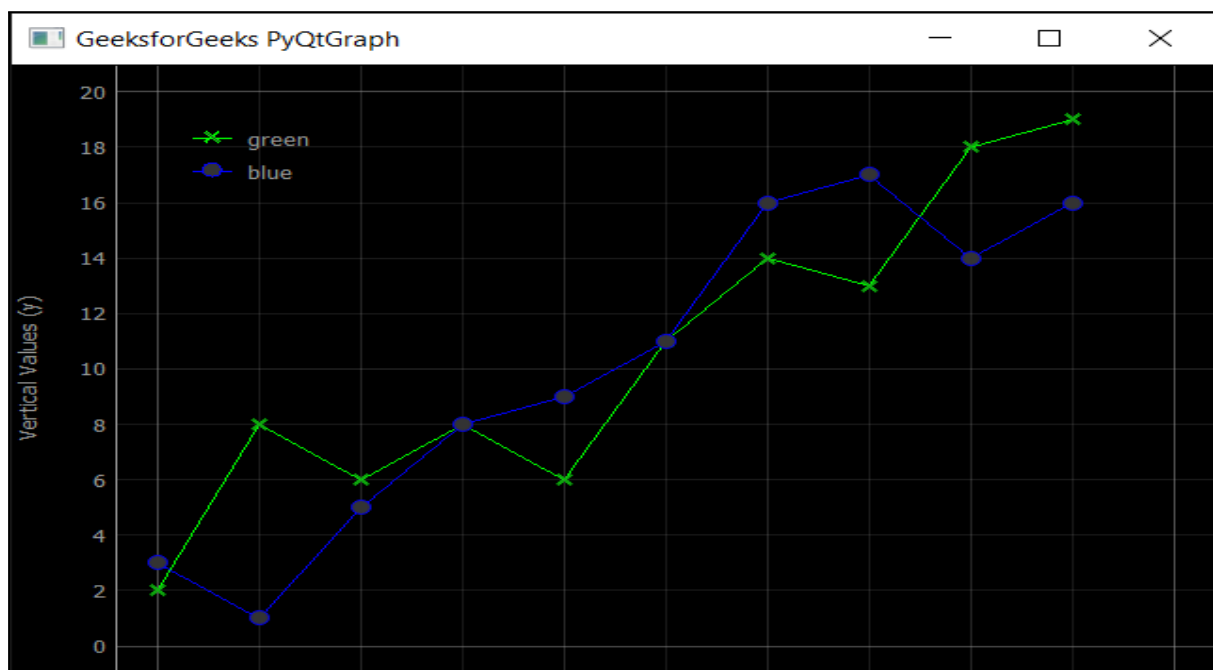
Task 1: Display Graph Using CSV Data

Objective:

Develop a PyQt5 application that serves as a tool for loading and visualizing data from a CSV file. The application will utilize the pyqtgraph library to generate an interactive plot with the take samples (3000) as the x-axis data and five additional columns as the y-axis data. The focus is on creating a user-friendly interface that allows users to load CSV files seamlessly and provides real-time feedback during the loading and plotting processes.

Requirements:

1. Utilise PyQt5 for the GUI components.
2. Use pyqtgraph to display the graph.
3. Include functionalities to load a CSV file.
4. Implement proper error handling for file loading and data extraction.
5. Ensure the GUI is user-friendly and provides feedback during file loading and plotting.
6. An example **graph** and **.csv file** is attached here for your reference.



Submission Guidelines:

- Provide well-documented Python script for the application.
- Include comments explaining the code logic and design choices.
- Create a one public git repository and upload your scripts and documents then share your repo link via mail.

This task evaluates your ability to design a user-friendly GUI application, handle file operations, and dynamically visualize data using pyqtgraph. It also assesses your error-handling skills and attention to providing informative feedback to the user. Good luck!