User Documentation

Application: Simple Graph Calculator and Plotter

1. Introduction

The Simple Graph Calculator & Plotter is a desktop application that allows users to visualize mathematical functions such as Sin, Cos, and Sinc.

Users can customize function parameters and export the resulting plots in vector formats like SVG or XAML.

2. Features

Plot mathematical functions: sin(x), cos(x), and sinc(x).

Adjust parameters: Amplitude, Frequency, Phase.

Customize X-axis range using Start and End values.

Select export format (SVG or XAML) and save the plotted graph.

Automatically save and reload last used parameters.

3. Getting Started

Launch the application by running the SimpleGraphCalculator.exe file.

Select the function type from the dropdown list.

Enter values for Amplitude, Frequency, and Phase in the input boxes.

Set the Start and End range for the X-axis.

Click 'Plot Graph' button to generate the graph.

4. Exporting the Graph

Select the desired export format using the Vector type dropdown.

Click 'Export' button to download vector format.

Select a destination and filename in the save dialog.

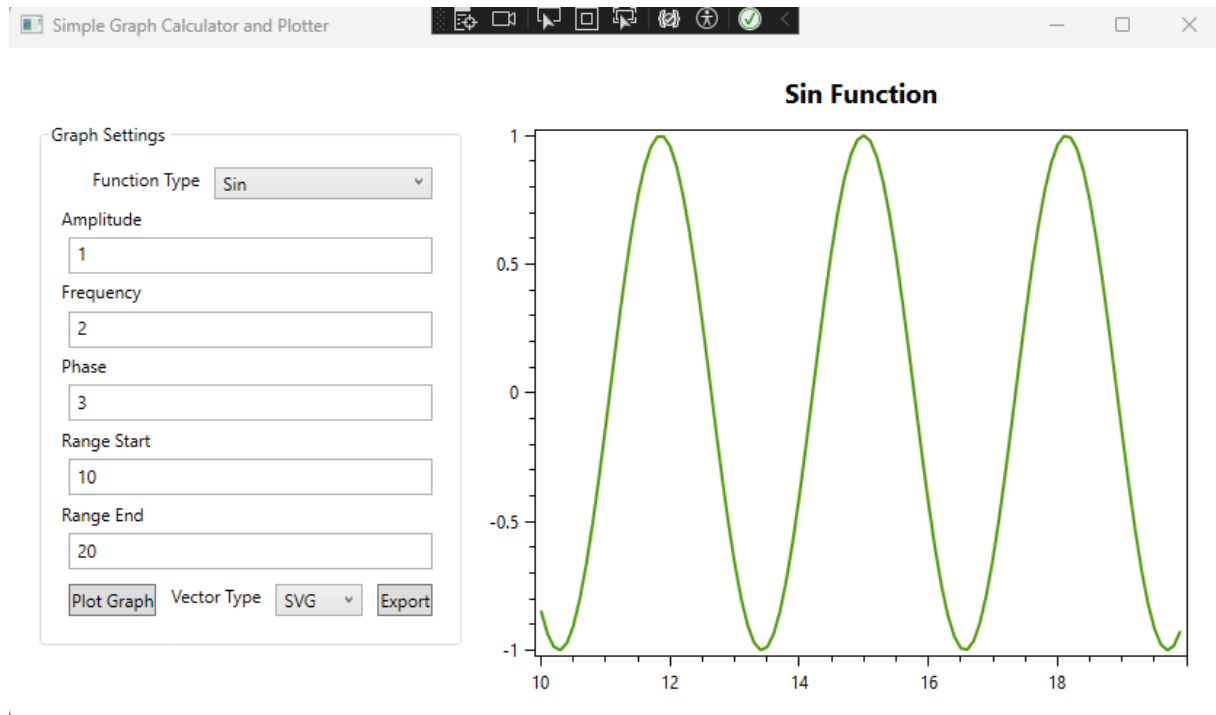The graph will be saved in the selected format (SVG or XAML).

Figure: Simple Graph Calculator and Plotter

5. Input Validation

Only numerical (double) values are allowed in input fields.

An error message will appear for invalid ranges (e.g., Start >= End).

6. Settings Persistence

Last used parameters are automatically saved in a "param_settings.json" file.

When re open the application, previous parameters configuration will be restored.

7. System Requirements

Windows OS with .NET Framework 4.8 or later.

Approximately 50MB of free disk space.

8. Deployment

Run .exe file from the bin/debug or Release folder.

No installation required.

9. Known Limitations

Limited to predefined trigonometric functions.

Did not suppress dll and xml files into Debug or Release folder due to restriction policy.

10. Support

For issues or feature requests, please contact or visit the GitHub repository
https://github.com/RizwanRumi/Simple_graph_calculator

Contact

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