

USER'S MANUAL

Quadratic Spline Interpolation,
Polynomial Regression, and
Simplex Method

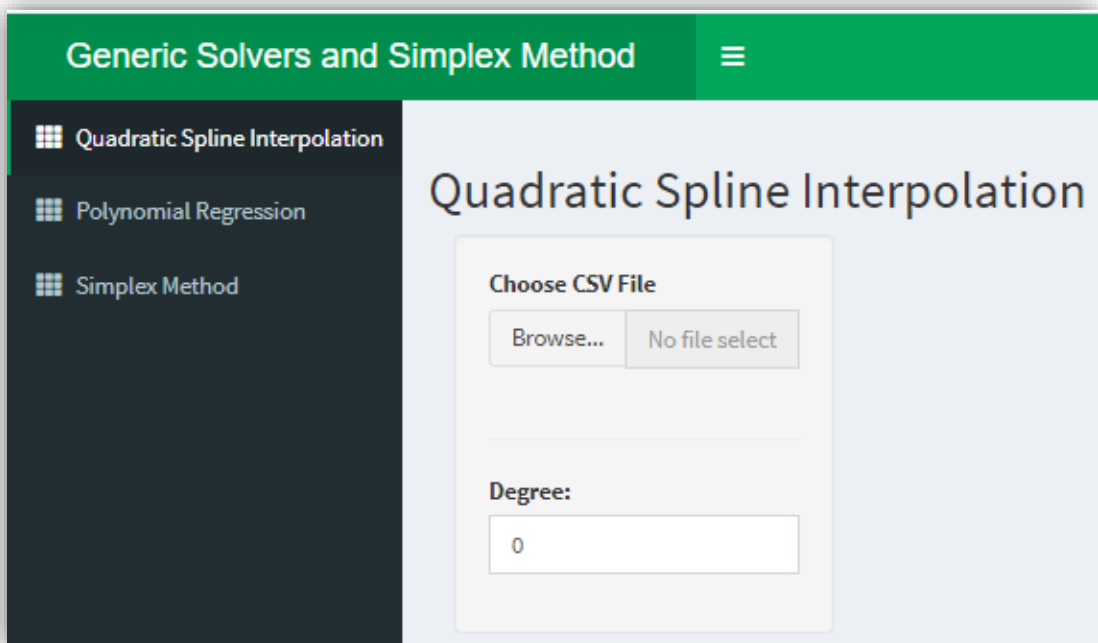
How to operate:

1. Make sure you have RStudio installed in your device. RStudio is a free software; you can download it for free or paid from <https://rstudio.com/products/rstudio/download/>
2. Extract the *.zip file.
3. Read the *.txt files for additional libraries that may be needed to fully and properly run the application.
4. Follow the instructions provided and run the application.

Quadratic Spline Interpolation (QSI) and Polynomial Regression

- ⇒ To use the feature, create a *.csv file, containing x and y inputs (i.e. a list of pairs of x and y values) or use the provided file that comes along with the compressed file .
- ⇒ In the right tab panel, select Quadratic Spline Interpolation (by default, the application starts in the QSI screen/tab) or Polynomial Regression, depending on your choice.
- ⇒ Choose your file by interacting with the Choose CSV file feature.
- ⇒ Enter a number in the field provided below.

If the above instructions are executed correctly, the current screen will display the solution. For reference, see image below:



Simplex Method

- ⇒ To use the feature, fill up the tables provided in the screen.
- ⇒ In the right tab panel, select Simplex Method.
- ⇒ Fill tables one and two by navigating through the 2 tabs in the current screen. Make sure to save after completing each field.
- ⇒ After saving inputs for tables 1 and 2, click on the Solution Table tab.

If the above instructions are executed correctly, the current screen will display the solution. For reference, see image below:

