

SWE 307 – 2024 BIG DATA PROJECT - 1 DESCRIPTION

Due date: 24.10.2024 Thursday, in class.

In this project, you are asked to implement a **Java Spring-Boot** web application that calls one of the **R** plot functions over GraalVM. Your application will read a line from CVS file and send the selected column data to R-function to plot a dynamic graph on the browser.

What is required from you is as follows:

- 1) Use only one column from given CSV file (swe307_pro1.csv), such as first group will use only **Col-1** data. There are 100 rows (100 data) in the file, and this file will be opened, read by Java not R.
- 2) Your Java program will read one consecutive row every second from the file, and the double number read will be sent to the R function for plot as shown in the class.
- 3) Preferably use **xyplot()** from lattice library. In your plot, x axis will be integer from [0-99] and y axis will plot the double value sent from your Java program.
- 4) Your plot should be **line** type and the line color should be **dark brown**. Use **grid** in your graph (see Figure 1).

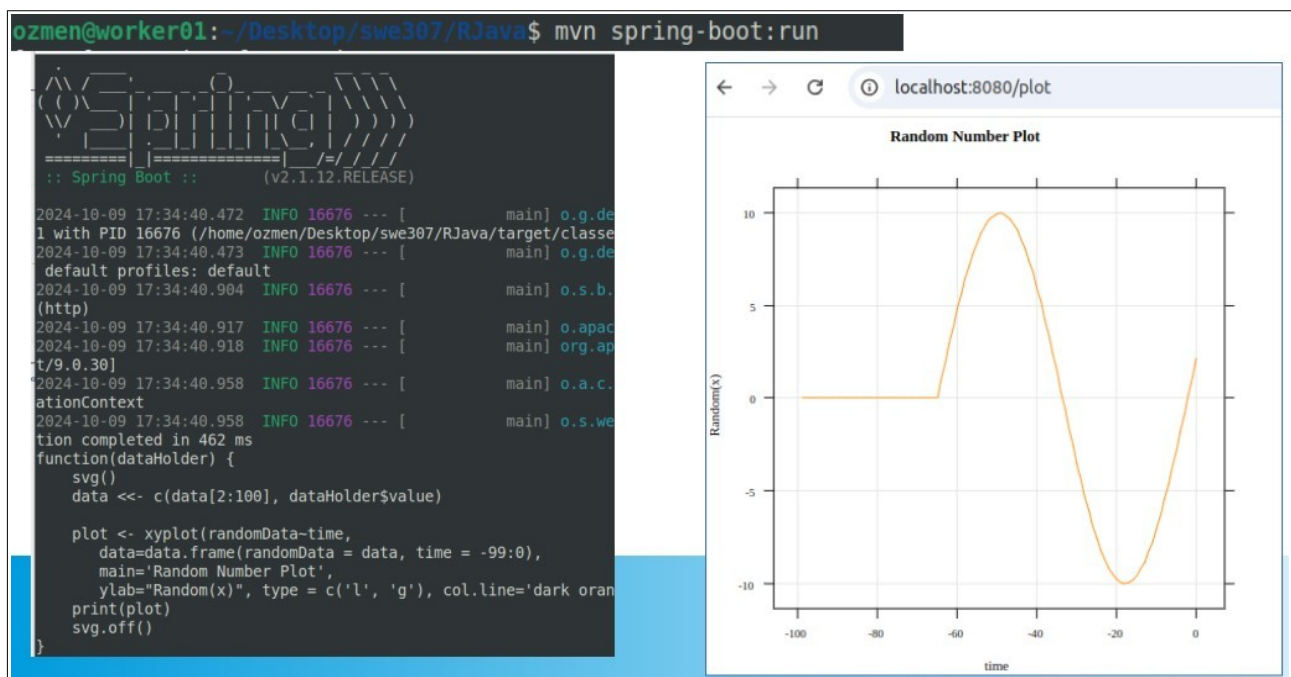


Figure 1. Data visualization on the web using Java and R.

PS: Example image files and csv files will be provided on Github repository, you can clone/download everything provided.

Link: <https://github.com/ozmen54/SWE307-2024.git>