INTRODUCTION TO COMPUTER SYSTEM DESIGN

Requirements

Program 1 requirements

Use Maven, HEROKU, GIT, Spark and GITHUB.

Write a web application to calculate the mean and standard deviation of a set of n real numbers.

Your program reads the n real numbers from a web page.

Use a linked list to store the *n* numbers for the calculations.

Thoroughly test the program. At least two tests should use the data in the columns of Table 1. Expected results are provided in Table 2.

Write a short article describing the architecture of the solution. Identify clearly abstractions of memory, communications channels and interpreters.

Column 1	Column 2		
Estimate Proxy	Development		
Size	Hours		
160	15.0		
591	69.9		
114	6.5		
229	22.4		
230	28.4		
270	65.9		
128	19.4		
1657	198.7		
624	38.8		
1503	138.2		

Table 1

Test	Expected Value		Actual Value	
	Mean	Std. Dev	Mean	Std. Dev
Table 1: Column 1	550.6	572.03		
Table 1: Column 2	60.32	62.26		

Table 2

Submitting your assignment

Submit the link to the project on Github and the link of the application running on Heroku.

The package should contain:

- The source code
- The Readme and license.
- A pdf describing your architecture
- The Javadoc.