## CalculadoraWeb

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August 2020

#### 1 Introduction

This proyect is a web page that calculates the standar deviation and the mean of a number list typed by an user in the page. This is an extention of a simple calculator constructed with Java with same functionalities using an own linked list implementation to keep the numbers to be operated. In this moment CalculadoraWeb is deployed on Heroku to run the app since everywhere.

## 2 Tools required

To be able to run correctly this app its necessary to have the next tools otherwise the program won't work correctly on a local mode

- Java 8 (Programming Language)
- mvn (Dependency Management)
- git (Versionament)
- Browser (Web browser to see the web app)

# 3 Desing

This app was building using a packet desing where every part is stored in a different package (LinkedList, Calculator, Sparkweb) to have good programming practices. LinkedList package offers the list and his complements to work correctly. Calculator package is the logic part of the program making use of the linked list and having direct interection with the framework (spark java). At last Sparkweb receive get petitions from client side and return the value given by the logic part (calculator).

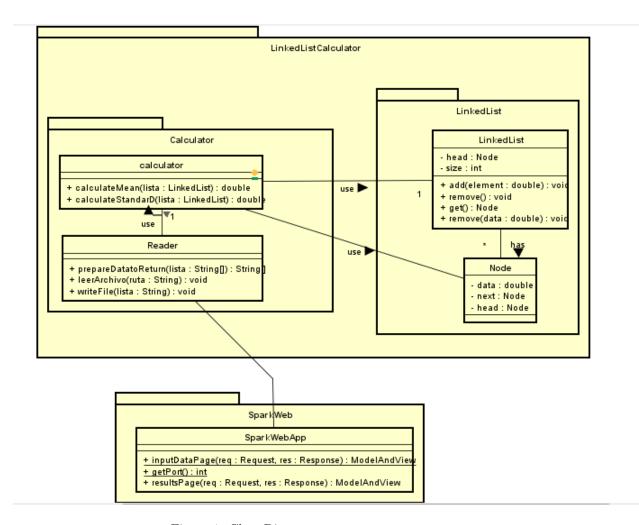


Figure 1: Class Diagram

### 4 Execution

To be able to run this program you have to download my github repository using the command:

git clone https://github.com/EdKillah/CalculadoraWEB after that you can access to the folder containing the proyect and running in your favorite IDE or using cmd with the following commands:

- mvn package
- java -cp target-1.0-SNAPSHOT
- edu.escuelaing.arep.sparkweb.SparkWebApp and opening any browser and going to localhost:4567

Another alternative is using my heroku deploying going to the next link:

 $\bullet \ https://calculadoraweb-spark.herokuapp.com/$ 

# 5 Conclusion

Making use of a struct algorithm like linked list it could be possible to make a statistic calculator with the mean and standar deviation functions to process a number list stored in a the linked list, all this using a web framework to have a first contact with it, to provide a new expansion like web apps.