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Big Data System Engineering with Scala
Spring 2022
Assignment No. 6



Task

Analyzing Movie Rating

- Analyze a movie rating dataset
 1. Read the movie data from a CSV file
 2. Calculate the mean and standard deviation of rating for all movies
- Write unit tests for the program

Solution/Unit test (screenshot)

A. Unit Test

```
14 spark = SparkSession
15   .builder()
16   .appName("MovieAnalysis")
17   .master("local[*]")
18   .getOrCreate()
19 spark.sparkContext.setLogLevel("ERROR")
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```

Run: MovieAnalysisSpec

Tests passed: 2 of 2 tests - 10 sec 165 ms

Test Results

Test	Duration	Result
MovieAnalysisSpec	10 sec 165 ms	Passed
Spark	10 sec 165 ms	Passed
should test mean	0 sec 165 ms	Passed
should test std_dev	0 sec 165 ms	Passed

Using Spark's default log4j profile: org/apache/spark/log4j-defaults.properties

22/03/22 20:22:09 WARN Utils: Your hostname, Jackie-Ultimate-MacBook-Pro.local resolves to a loopback address: 127.0.0.1; using 10.0.0.49 instead (on interface en0)

22/03/22 20:22:09 WARN Utils: Set SPARK_LOCAL_IP if you need to bind to another address

WARNING: An illegal reflective access operation has occurred

WARNING: Illegal reflective access by org.apache.spark.unsafe.Platform (file:/Users/jackie/Library/Caches/Coursier/v1/https/repos1.maven.org/maven2/org/apache/spark/spark-unsafe_2.12/3.2.1/spark-unsafe_2.12-3.2.1.jar) of method java.lang.ProcessImpl.start0()

WARNING: Please consider reporting this to the maintainers of org.apache.spark.unsafe.Platform

WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations

WARNING: All illegal access operations will be denied in a future release

Project Source

<https://github.com/eikcaj16/CSYE7200/tree/Spring2022/assignment-analyzing-movie-rating>