SWE 311

Lab 1 – Introduction

Section 52

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Task Contribution:

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| Task | Contribution |
| Requirement | Rasheed, Sadiq and Fahad |
| Design | Rasheed, Sadiq |
| Implementation | Sadiq, Rasheed |
| Testing | Fahad |

Requirements:

* Coded in Java
* Must be a single .java file
* Load fetched data of a given stock
* Ability to ask for a price on a specific day
* Ability to calculate the simple moving average on a given time interval
* Ability to calculate the exponential moving average with typical smoothing factor on a given time interval
* Calculate the dividend yield
* The ability to select default time periods (the past 5, 10, 100, 365 days) to calculate the simple/exponential moving averages

Assumptions:

The annual dividend = the sum of the quarterly dividends of the year

The typical smoothing factor = 2

Design:

Command line interface with input choices 1, 2, 3 (Ask price, Calculate simple, etc.)

Graphical user interface

Description automatically generated

Class Record and divRecord are used for handling the csv entries as objects.

Class DataFrame is the class that handles the calculations and has an Arraylist of type record and an ArrayList of type divRecord that are used to save the csv entries in their respective objects.

We also use csvReader import to help us with csv file reading.