My stocks' analysis

Practical Assignment #2 Report

U.PORTO

FEUP **FACULDADE DE ENGENHARIA**
UNIVERSIDADE DO PORTO

Master in Informatics and Computing Engineering

Mobile Computing

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1 Architecture

As shown in Figure 5, we created a intermediary server, using *Node.js* and *Express* framework, to communicate with *barchart [1]* service. We tested the *Xamarin* application in the *Android* and *Universal Windows (UWP)* platforms.
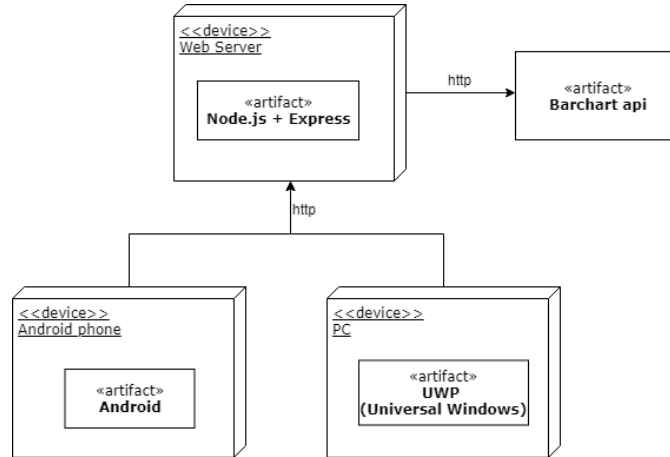

Figure 1: Deployment diagram

2 Features

Feature	Description
Stock analysis	Show a **stock evolution graph** of one or two companies. Besides that, it is possible to choose a 7 or 30 quotes extension
Current quotes	Show the **current quotes and percent change** of all the companies.

3 Performed scenario tests

All the tests were made manually along the development phase. The scenarios tested were:

1. run the application in Android phone and PC devices

2. run the application when the server is down showing the corresponding errors responses

3. use one or two companies to stock evolution graph

4. prevent the use of zero companies to stock evolution graph

5. use 7 and 30 quote extension on stock evolution graph

4 Illustrated guide of the use cases

This section explains the functionalities of the app and how to use them.

4.1 Navigating the app

The navigation menu can be acessed by clicking on the menu button on the top left of the screen. The navigation menu presents 2 options to choose from: "Stock's analysis" and "".
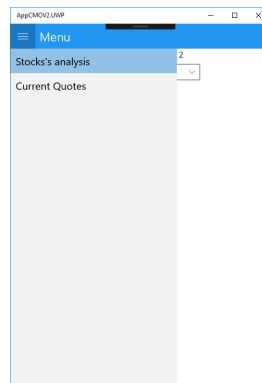

Figure 2: Navigation Menu

4.2 Checking the company stocks analysis

The stocks page is first shown when the app is opened but can be acessed again by clicking the "Stock's analysis" button on the navigation menu.

Figure 3: Initial Stocks Page

The presented page possesses 2 dropdowns to select companies, a dropdown to select the timeframe, and a submit button to retrieve the information.

By clicking on the submit button the information is retrieved and a graphic is shown. The graphic automatically adjusts itself to the values, calculating its bounds and divisions accordingly.
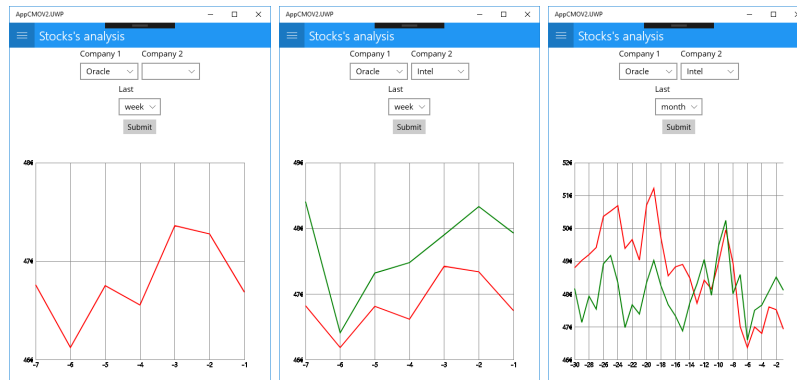
Figure 4: Left: One company stocks for the previous week; Center: Two companies stocks for the previous week; Right: Two companies stocks for the previous month

4.3 Checking the current quotes

The current quotes page can be acessed again by clicking the "Current Quotes" button on the navigation menu. HELDER
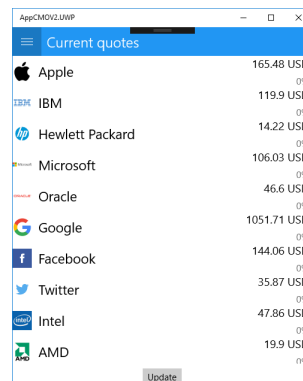

Figure 5: Current Quotes Page

To each company, the current quotes are shown as well as the percent change of the quote (the percent difference between the last traded price and the previous close). In the bottom, there is a button to update the values.

References

[1] Barchart ondemand — market data apis. [Online]. Available: https: //www.barchart.com/ondemand