Trade Republic iOS Challenge

Submitting the Challenge

We are trying to empower Diversity and remove any personal bias through our review process. In order for us to succeed, please do not include any personal information that will allow us to identify you into your project. (file headers, project settings and git history). Please also remove your name from automatically generated file headers and git history.

Introduction

The goal of this coding challenge is to create a list of stocks and their respective prices that are updated in real time. In order to receive live updates for each stock, we have built a very basic WebSocket server that sends mock data every time a price changes.

To subscribe to updates for a certain stock, simply send a message in the following format:

{"subscribe":"<ISIN>"}

Similarly, sending an unsubscribe will stop the flow of updates:

{"unsubscribe":"<ISIN>"}

An ISIN is a number that uniquely identifies a stock (e.g. The ISIN for Apple is US0378331005). Once subscribed, the server will return updates in the following format:

{"isin":"US0378331005","price":240.32,"bid":240.31,"ask":240 .33}

You can safely ignore the bid and ask prices as we will only use the price property. The WebSocket lives at ws://159.89.15.214:8080/ .

The Task

   – Pick 10 or more stocks of your choice that you want to display in the list. These can be hardcoded into the App.
   – The list should be either a UICollectionView or UITableView
   – Each cell should contain the name of the stock on the left and the updating price on the right
   – The prices should be formatted using a NumberFormatter with the currency style
   – Avoid hard-reloading (reloadData()) the entire list when a price changes.
   – Feel free to use any 3rd party framework that you find useful for the task
   – Do not use SwiftUI
   – Make sure your Git History is well structured and easily readable
   – Write Unit-Tests where you think it is necessary
   – Include any relevant notes for the reviewers and potential improvements of your App in the ReadMe

To get a better idea of what the list could look like, you may refer to this [example](#).

Please zip your project and upload it to greenhouse using the link included, or, simply send it back via email.