Stock Price Notification App

Program should be able to:

Monitor a number of stocks provided by the user

* add two price levels per stock ticker, low and high, which the device will notify if either level is reached on any stock by audible/visible push notification
* ~~poll an online stock data source at a specified interval for JSON containing current price (data source hard coded)~~ Interval cannot be done with background fetch, dropping this feature. App will perform fetch opportunistically per background fetch capability.
* App will poll while in the background as well as in the foreground

Persistent state (data model) of this application contains two entities:

* Stock Object containing:
  + the stock ticker
  + Low price
  + High price
  + Last poll data containing
    - Result
    - Timestamp
  + Number of times this stock has been polled
  + Date created
* ~~Interval to poll the server for all the stocks in our collection.~~

First we will define the UI and its elements.

The Main page will serve as a status page containing:

Button at the top right to open the Add page

List of the stock objects, with each field displayed horizontally

Each stock object on this page will have an option to delete it.

The Add page will contain ticker, low and high fields and a button to add the stock.

Upon clicking “Add”, Add page will add a stock to the data model.

The table view should have custom cells with custom fields

Main page UI should show the latest price of the stock as fetched from the web