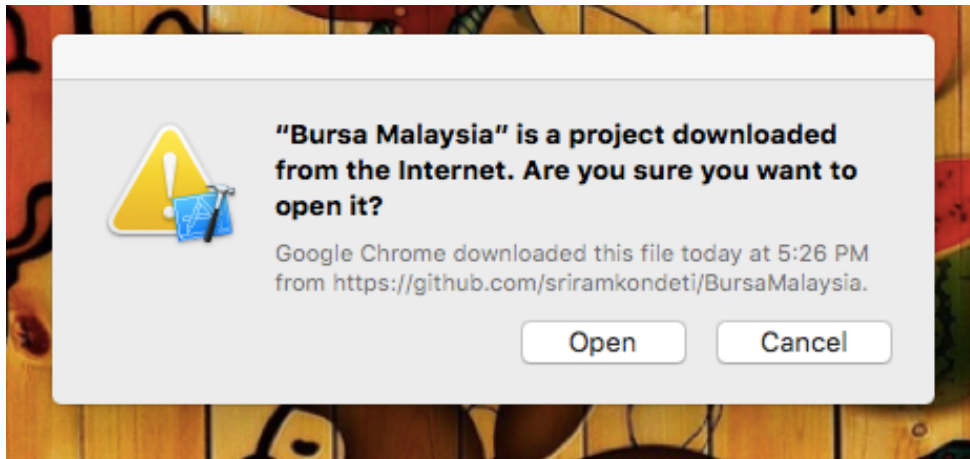# Bursa Malaysia – iOS App

Project Guide - V1.0

Contents

- Steps to Build, Run the app in the Simulator.

- Assumptions and Challenges faced in this Scenario.

- Further Enhancements.
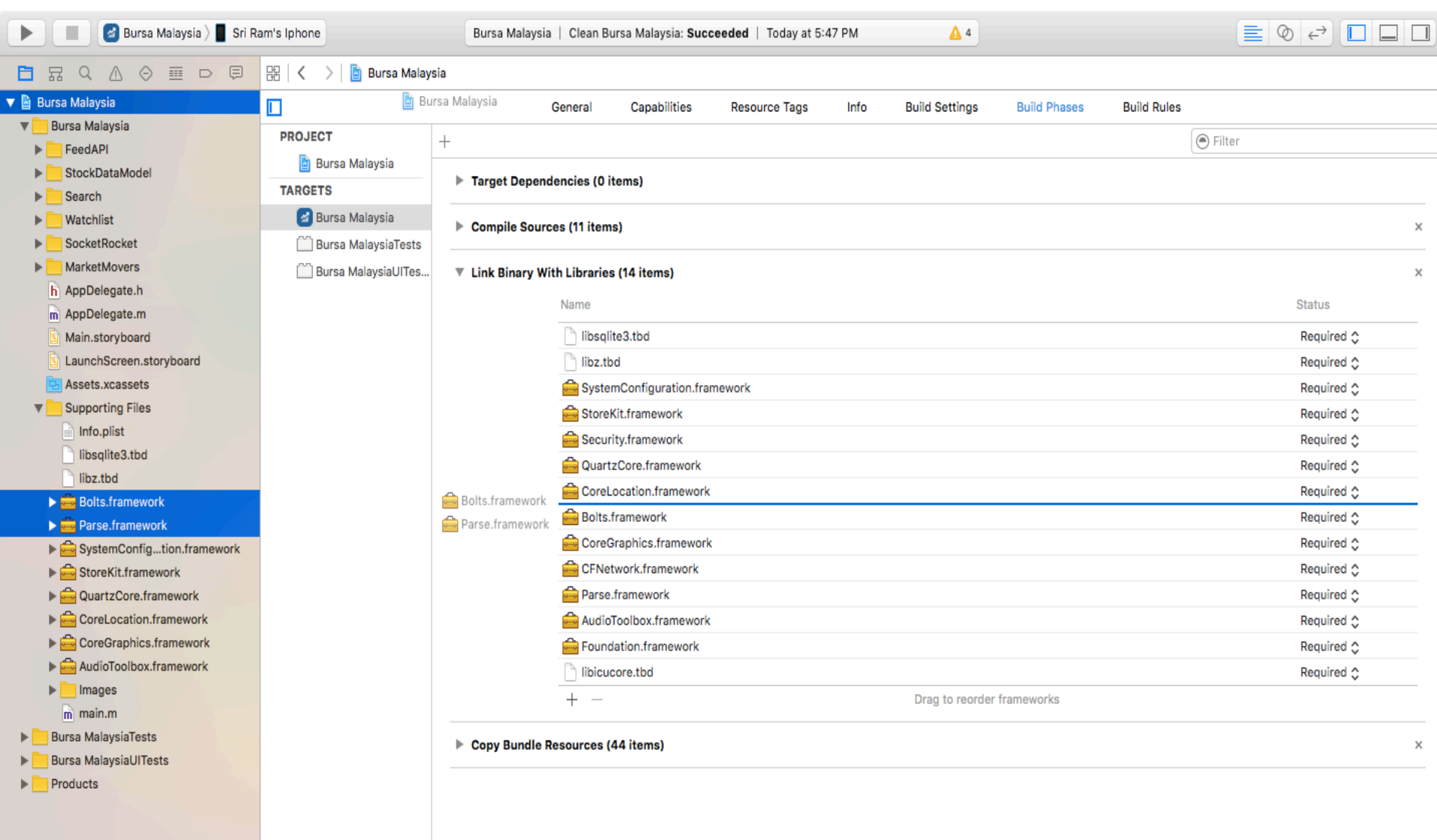
- Java Script Hosted on Cloud.

Steps to Build, Run the app in the Simulator.

- Step 1: Double Click on "Bursa Malaysia.xcodeproj".
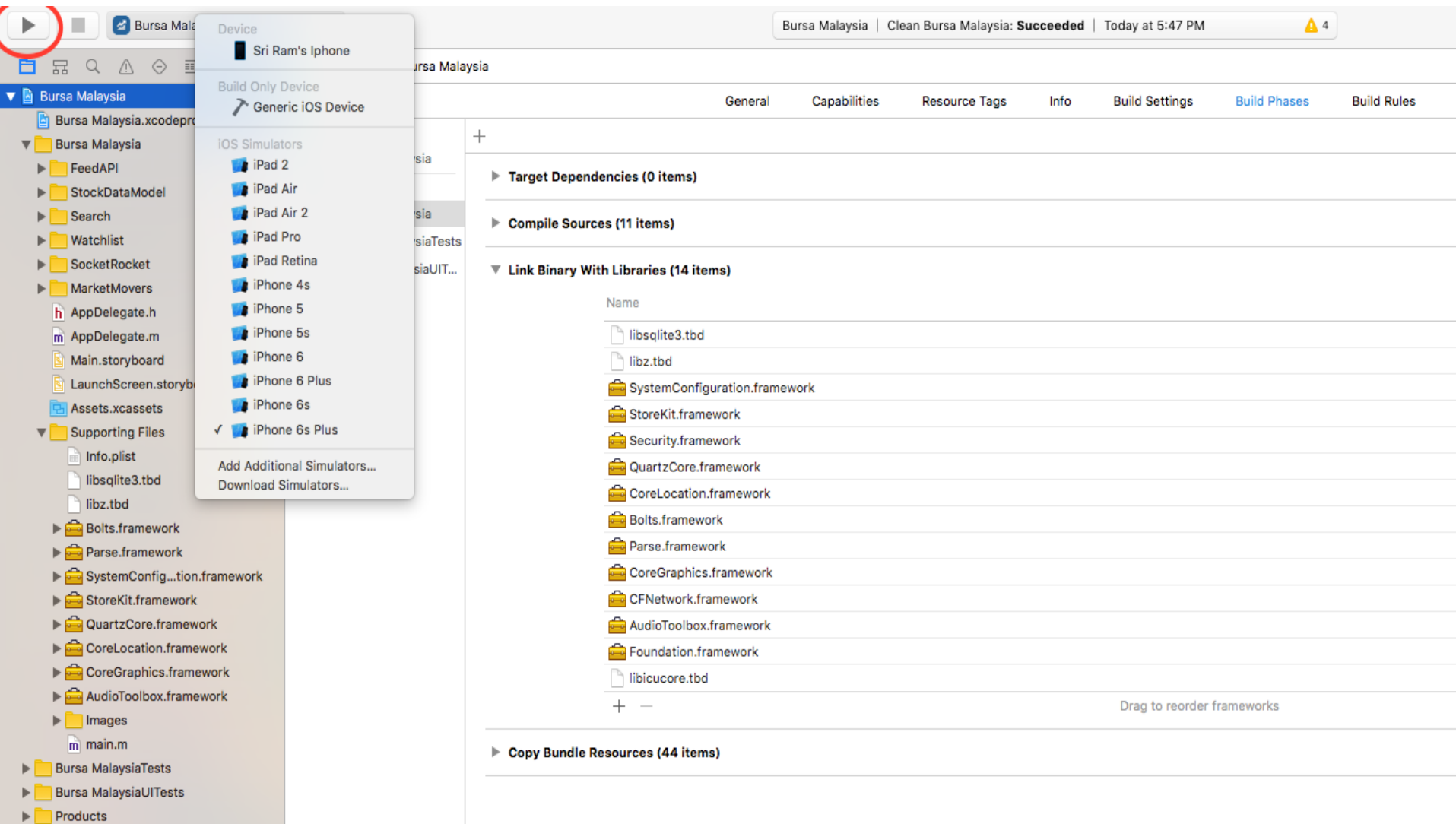 - As Prompt appears as below. Click "Open".

  - The Project will be Opened in Xcode editor.In case the Xcode is not installed, please download it from Xcode.

- Step 2: **This is Important**. Expand Project Tree>Navigate to Supporting files>find "Parse.framework", "Bolts.framework'>Drag them to "Link Binary with Libraries" of Build Phases tab. The Below image can guide you how.

- Step 3 : Select the iphone 6s Simulator from the drop down list and click on the highlighted button to Run the app in the simulator.

That's it. The App starts running in the Simulator

Assumptions and Challenges faced in this Scenario

- Challenges:

  - <u>Yahoo API</u>: The API documentation was not clear, also there weren't many online resources helping in this regard.

    - <u>Solution</u> : Used **Bursa Malaysia REST API** which provides UAT stock feed to the developers. The Request and Response will be in Json, which makes it easier to parse and use it project with out any further modifications.

  - <u>Microsoft Azure Cloud:</u> Requires Credit card info to sign up and access all the features. Pay as you go Model. Will be charged once the free quota is finished.

    - <u>Solution:</u> Used **Parse Cloud service**, which is Open Source, supports Push notifications to achieve Price alert feature. Using java script, the parse can be configured to check stock prices against user stored stock prices in the cloud and trigger the push notification to the User if the desired price is reached.

Further Enhancements

- Scrolling Stock Ticker

  - Display Scrolling stock ticker at top/bottom of the screen, to make user keep track of watchlist items throughout his navigation in the app there by avoiding him/her to open watchlist page every single time he wants to view the stocks.

Further Enhancements (Contd)

- Stock Blinking:

  - The Price fields background lights up to alert the user that the stock value has been Changed. The color of blink defines whether the price has been Decreased/Increased.

- Stock Details:

  - Present complete details of stock counter once clicked.

- Real time Update:

  - Bursa Malaysia API is capable of Pushing real time data to Users each time their stock counter is updated. If enhanced, the app updates its content every 15ms making it real time feed.
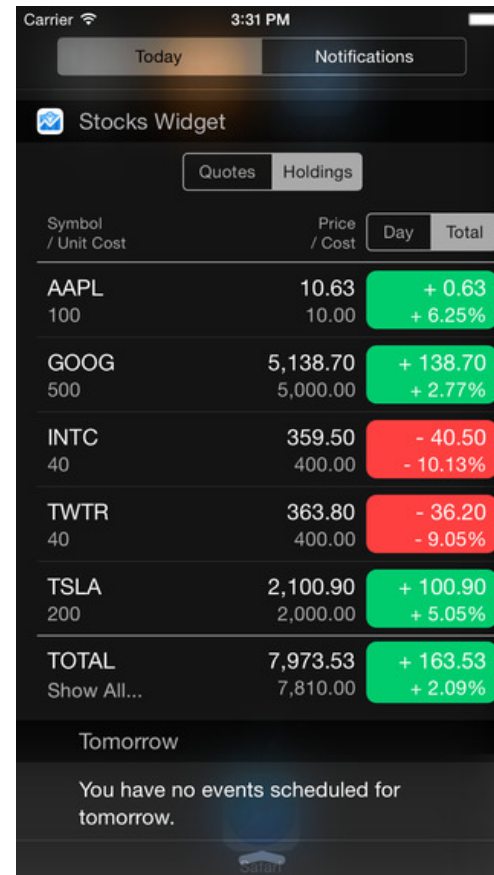
Further Enhancements (Contd)

- Stock Charts:

  - The app can be enhanced to show historical chart for the selected stock, which helps the user to analyze the stock performance over time.

- Watchlist Organization:

  - Multiple Watchlists can be created by user, which helps him/her to organize them as per the stock exchange (KL, HK, JK).

- Multiple Exchange:

  - Bursa Malaysia Supports KL, MY, HK, SG and few other exchanges. The app can be enhanced to switch between exchanges and view stock feed from that desired exchange.

Further Enhancements (Contd)

- Apple watch Support:

- Apple widget Support:

Java Script Hosted on Cloud

- A Java Script file has been created to achieve the Price alert feature via Push notification to the user. This script has already been deployed on the Parse cloud and will alert the users if the desired price is reached.

- To access main.js file, navigate to below location in the project folder.

  - /BursaMalaysia-master/ParseCloud/cloud/main.js

Thank You