

Westpac Android Developer Programming Test

Overview

This test requires the candidate of the Android developer role to write a simple Android app with best coding practises.

Please read this document carefully before you start programming.

App Specification

This is a simple "News" view app. The app will fetch a JSON feed from server:

<http://mobilatr.mob.f2.com.au/services/views/9.json>

present a table view for news titles, and will switch to a web view for the news content when a cell row is selected.

A sample screenshot is provided for the basic layout of the app:

Refresh

News

Low rates and \$A will boost economy: RBA

Reserve Bank deputy Philip Lowe says a falling Australian dollar, low interest rates and improving business confidence will help rebalance the economy.

**James Sutherland won't be...**

James Sutherland will keep his job as chief executive of Cricket Australia even if the Test team loses

WCB wants more info from Murray Goulburn

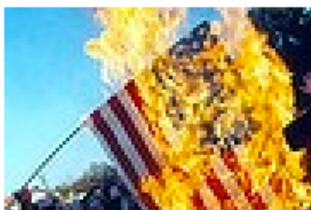
Warrnambool Cheese says it needs more details of a takeover bid by Murray Goulburn which is one of three suitors for WCB.

Postecoglou not interested in fanfare

Departing Melbourne Victory coach Ange Postecoglou insists his focus this week has solely been on winning his side's meeting with Brisbane Roar

**Homebake mudslinging con...**

When the first Homebake event was held in Byron Bay in 1996, it was famed for its muddy conditions -

**'Down with USA' conferenc...**

The chant "Death to America" has enjoyed a long run on the Iranian stage. But it has been getting a little

RBA earnings still historically low

Low interest rates are keeping the central bank's

The app needs to:

1. Have a **Refresh** button on top right, and will refresh the news when pressed.
2. Should show/dismiss proper UI progress/waiting elements when loading contents from web.
3. Show the

`headline` from JSON feed as title,
`slugLine` from JSON feed as subtitle in cell.

The JSON feed may or may not have an image URL. If it does, download and display the image in cell; otherwise, text should take the empty space.

4. When a cell is tapped, switch to a web view that shows the HTML page of the designated URL (the `tinyUrl` field in JSON).
5. The news items are to be sorted by date, newest on top (check the `dateLine` field in JSON)

Evaluation Criteria

This is a small project which can be completed around half day for an experienced developer, however please **code this app as if it is going to be released in App Store**.

Industrial grade code quality is expected. The project will be evaluated against the following scales:

1. Code quality. Code should conform to the Android JellyBean coding and design guidelines.
2. Should be properly commented. Methods, properties, etc... Use correct comments.
3. Code design. Object Oriented design patterns should be adequately used; no over-engineering.
4. Runtime performance. App with this level of complexity is expected to run smoothly on SGS1 and upwards.
5. Memory, caching and http requests should be properly managed.
6. User experience. Should be bug, glitch and crash free; UI should be running smooth and responsive.
7. All **Basic Technical Requirements** are fulfilled. Bonus points for implementing **Advanced UI and Animation tweaks**

Basic Technical Requirements

These requirements are mandatory.

App is Universal

The app is a Universal app that runs on phones and tablets in landscape and portrait modes and UI looks at its best. Think of the UI design guidelines stated in Android development guidelines for landscape mode.

Lazy Load the Thumbnail Image

Thumbnail image (if any) should be lazy loaded, which means it is only loaded when it needs to be displayed.

Only Android SDK and Google libraries should be used

Do NOT use any third party libraries – neither for UI nor for the backend.

Optional Technical Requirements

These requirements are optional; however completing them gives you an evaluation bonus.

Use GIT for Source Code Control

Use a local GIT repository as the source control while you program this app. When submitting the source code, please submit it along with its `.git` repository.

.