

Coding Challenge

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Github repository	https://github.com/jaswanthm/TheNews.git (Please send me an email, if you'd like to be invited to the repository)
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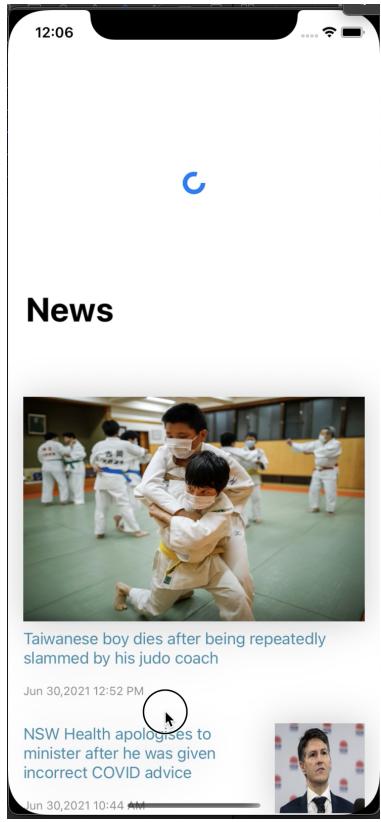
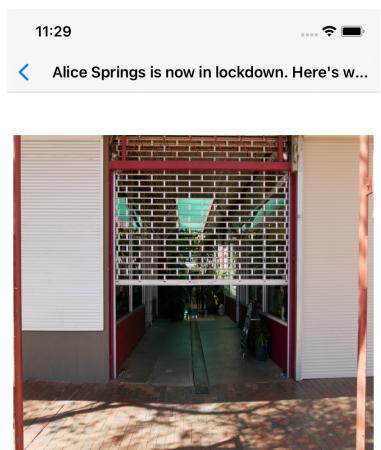
Overview

The News is an iOS mobile app that was developed using SwiftUI as part of the coding challenge for the Tech Lead - Mobile role at ME bank.

Acceptance Criteria

Acceptance Criteria	Status	Comments
Consume the ABC news RSS feed (converted to JSON) from the following URL: https://api.rss2json.com/v1/api.json?rss_url=http://www.abc.net.au/news/feed/51120/rss.xml	Done	<p>11:29</p> <p>News</p>  <p>Taiwanese boy dies after being repeatedly slammed by his judo coach</p> <p>Jun 30, 2021 12:52 PM</p>  <p>NSW Health apologises to minister after he was given incorrect COVID advice</p> <p>Jun 30, 2021 10:44 AM</p>  <p>'Never wanted this fight': Promoter lashes Zerafa for pulling out of Tszyu fight</p> <p>Jun 30, 2021 9:12 AM</p>  <p>'Huge wave of anxiety' as mum, daughters quarantine – but husband doesn't – after Delta c...</p>

<p>The feed contains a series of articles, with titles, thumbnails, timestamps, etc, and many extraneous fields. Show these article summaries in a list as depicted in the design.</p> <ul style="list-style-type: none"> a. a. Each article has an image to be shown in the list item. b. b. For regular articles, show the thumbnail from the items/thumbnaill path. For the large top article, show the items/enclosure/link image. c. c. The image should be loaded asynchronously. d. d. Show the title from the items/title field. e. e. Show the date from the items/pubDate field, formatted as depicted in the design. 	<p>Done</p>	
<p>Select fonts and colors that approximately match the design. It does not need to be exact, only consistent.</p>	<p>Done</p>	
<p>The app must layout well on any screen size, but don't build a custom UI for tablets.</p>	<p>Done</p>	

Implement pull to refresh.	Done	 <p>12:06</p> <p>C</p> <h2>News</h2>  <p>Taiwanese boy dies after being repeatedly slammed by his judo coach</p> <p>Jun 30, 2021 12:52 PM</p> <p>NSW Health apologises to minister after he was given incorrect COVID advice</p> <p>Jun 30, 2021 10:44 AM</p>
On clicking a single item, show a new screen of your design that shows all the previous information plus the content from items/content	Done	 <p>11:29</p> <p>◀ Alice Springs is now in lockdown. Here's w...</p>  <p>Alice Springs is now in lockdown. Here's what you need to know</p> <p>How long will the Alice Springs lockdown last? Can you still buy takeaway? Which suburbs does it apply to? We answer your questions.</p> <p>Jun 30, 2021 7:48 AM</p>

Design Pattern

The app is implemented using SwiftUI which comes with MVVM. The app takes advantage of it and keeps the logic, views and models separate, allowing it to be tested thoroughly.

Given the complexity of the app, the state is directly managed via the News Items List which is a part of the viewmodel. But for more complex solutions, having an AppState would've been an apt solution.

Third party libraries

The app uses two libraries

1. URLImage - to display images from a URL
2. Alamofire - Networking library

Testing

Unit tests - There are unit tests written to test the following

- Parsing
- View model
- SwiftUI views using snapshot testing

CI/CD

Bitrise is used to set up a build pipeline for this iOS app. The tests run as part of the pipeline. My personal perspective is that tests are of no use if they don't give immediate feedback ie. Run on CI/CD.

A snapshot of the bitrise test report is attached below.

Tests iOS

🕒 48.0212 ms

7 PASSED

Test Cases

Test Cases

All Statuses

Test Artifacts

TEST CASE	DURATION	
NewsCardTests	14.0257 ms testNewsCard()	▼
NewsDetailsTests	6.022 ms testNewsFeaturesCard()	▼
NewsFeatureCardTests	6.4016 ms testNewsFeaturesCard()	▼
NewsViewModelTests	5.6102 ms testEmptyData()	▼
NewsViewModelTests	5.1609 ms testNilData()	▼
NewsViewModelTests	5.1782 ms testSuccessFetchDataAndParsing()	▼
NewsViewModelTests	5.6226 ms testSuccessParsing()	▼