9News iOS App Assessment

By Aruna Sairam

Key Points:

- Re-usability
- Separation of concerns
- Testability
- Consistency
- Conformance to Apple Human Interface Guidelines

Compatibility:

• Please run in Xcode 13.x (Xcode 14 has a few known issues – mentioned at the end)

Architecture:

- MVVM + Manager + Service
- Coordinator for navigation

Manager:

- Creates and owns a 'Service'
- Layer on top of 'Service' to parse JSON into 'Model' Objects
- Decides whether to retrieve data from the 'Service', 'Memory' or 'Cache'
- Reusable and Testable

Service:

- Communication between a single endpoint
- Does not associate with 'Model'. It is not aware of 'Model'.
- Used only by Manager
- Reusable and Testable

Extra Features: (apart from the requirements of the task)

- Have added menu on the navigation bar to sort the articles by 'Newest to oldest' and 'Oldest to Newest'
- Compatible with both iPhone and iPad, the cells will adjust their size based on the device. Can be viewed in any orientation
- Along with sorting, I have also added 'time elapsed' tag on each cell, that says how long ago an article was published
- Compatible with both dark mode and light mode, and have added
- Have added 'Progress Bar', 'Web Page Title', 'Refresh', 'Share', 'Navigate Forward' and 'Navigate Backward' buttons in the Website View Screen.

 Have added 9news logo on Launch Screen, Home Screen Custom Navigation Bar, and App Icon

Unit Tests:

- 100% Unit test coverage
- Have written the test cases to both 'success' and 'failure' scenarios of each function
- Have written comments in documentation style before each test case
 (Clicking on the function will show it's documentation on the right-hand side)
- Have used mock JSON files for 'news article (asset)' mocks.

UI Tests:

- Tests for News List Collection View
- Tests to check for 'Thumbnail', 'Headline', 'By Line', 'Abstract' and 'Elapsed time'
- Test to check '9News logo on the navigation bar'
- Tests for Web View Screen
- Tests for UI elements in Web View Screen
- Tests for interaction and navigation between Collection View and Web View

Known Issues (Xcode bug):

- There is a bug in Xcode, which says "[Security] This method should not be called on the main thread as it may lead to UI unresponsiveness." In the console. It is a known bug in Xcode and has been reported in Apple Developer forums. We can ignore this message in the console.
- Xcode 14 also has problems running UI Tests sometimes, hence please use Xcode 13.x

Git:

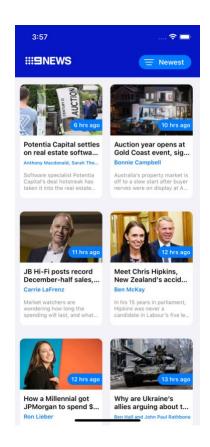
The feature branches have been merged into 'main'. The 'main' branch is up-to-date.

Repository link

https://github.com/arunasairam/NineNews.git

iPhone and iPad screenshots in next pages

iPhone Screenshots









iPad Screenshot





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For almost two decades the owners, and then other senior executives, agreed to levy identical commissions on the sale of art and other items, making it difficult for

