# **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:

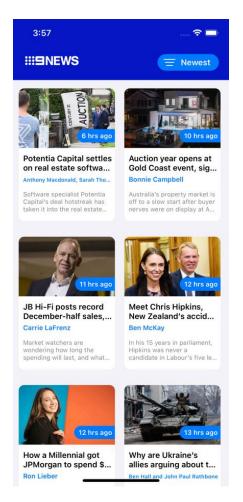
The feature branches have been merged into 'main'. The 'main' branch is up-to-date.

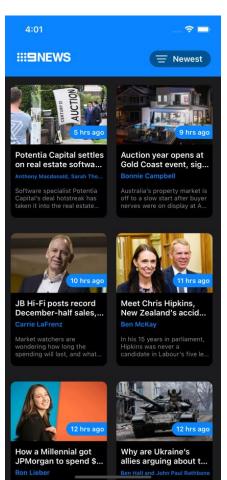
### **Repository link:**

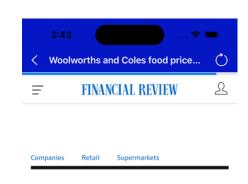
https://github.com/arunasairam/NineNews.git

### iPhone and iPad screenshots in next pages

## iPhone Screenshots





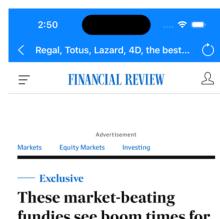


# Food inflation at Woolworths, Coles jumps to 9.2pc



Food prices at the two major <u>supermarket chains</u> <u>of Woolworths</u> and Coles climbed even higher in the December quarter to an average of 9.2 per cent across those three months, accelerating from an average of 8.2 per cent in the September quarter, research by UBS shows.





# These market-beating fundies see boom times for oil and gas



The investors who backed the fossil fuel producers that dominated returns last year say the structural case for owning commodities is just as compelling now because the market is simply too conservative in estimating future demand for oil and coal.



# iPad Screenshot





# Potentia Capital settles on real estate software group rex

Anthony Macdonald, Sarah Thompson and Ka..

Software specialist Potentia Capital's deal hotstreak has taken it into the real estate game, with the firm picking up a signific...



# Auction year opens at Gold Coast event, signals 'bumpy'...

#### **Bonnie Campbell**

Australia's property market is off to a slow start after buyer nerves were on display at Australia's biggest auction event, held o...



### JB Hi-Fi posts record December-half sales, earnings...

#### Carrie LaFrenz

Market watchers are wondering how long the spending will last, and what it all means for the future of the nation's larg...



Meet Chris Hipkins, New Zealand's accidental PM

#### Ben McKay

In his 15 years in parliament, Hipkins was never a candidate in Labour's five leadership ballots or even mentioned as...



# How a Millennial got JPMorgan to spend \$250m for... not much

#### Ron Lieber

Charlie Javice persuaded the global investment bank to pay big money for her college financial planning company. Whe...



# Why are Ukraine's allies arguing about tanks?

#### Ben Hall and John Paul Rathbone

Heavy fighting vehicles would give Kyiv a military advantage against Russia. Getting them off Germany, however, is not straig...



# Why Australian schools are failing

#### Glenn Fahey

The education system seems unable to turn new reform and funding inputs into better outcomes for school students. W..



# These Sydney suburbs just gave landlords an extra \$20,000

#### Nila Sweeney

Clovelly was the biggest earner for landlords, notching a \$381 rise in weekly rent to \$1828, handing landlords an extr...



# Banks prepare for deepest job cuts since the financial crisis

#### Owen Walker and Katie Martin

The lay-offs – which are expected to be in the tens of thousands across the sector – reverse the mass hirings banks made...









# Opinion

# Corporate Australia's dirty hidden secret

Business crime may be endemic across big companies, and law enforcement is doing little to stop it.



Twenty-three years ago, Christie's and Sotheby's auction houses <u>agreed to pay a fine</u> that today would be worth about \$1.2 billion.

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

