

Homework 3 – News List

Tasks

- Use a RecyclerView (classical UI) or a LazyColumn (Jetpack Compose), respectively, to display the news items
 - Display the item title in the list
 - When clicking a list item, navigate to a details page
- On the details page show, the
 - Unique identifier
 - Title
 - Description
 - Image URL
 - Author
 - Publication date
 - Full article link
 - Keywords
- Load the RSS feed from the internet
 - Download the feed in the background.
 - Parse the RSS feed into Kotlin data objects.
 - Parsing must be done in the background.
 - The data object must contain all necessary items (see above). Make sure to use appropriate data types.
 - Implement both parts (downloading and parsing) in a news list view model class.
 - Implement an option for reloading the data.
 - Sort the news item list by date (newest on top).
- Use LiveData to update the UI automatically after the data is downloaded and parsed.

Remarks:

- The UI must be functional. The layout will not be graded as we will implement a refined layout in the next assignment
- Implement the application using classical Android UI or Jetpack Compose.

Grading

1. The title of all items is displayed within a RecyclerView or LazyColumn element – 10
2. When clicking a list item, navigation to a details page is triggered. Navigating back to the list works. – 10
3. The details page contains all required information. – 10
4. RSS feed is correctly downloaded from the internet. – 10
5. All required information is parsed into a Swift dataobject. The data types of the fields were selected appropriately. – 10
6. Downloading and parsing is implemented in the background. – 10
7. Reloading the data from the server is possible. – 10
8. The order of the news items in the list is correct. – 10
9. Downloading and parsing is implemented in a model object. The UI is updated through LiveData only. – 20