

NewsLog

Team 4

Paul Heldring

Misha Malik

Dhruv Subramanian

Joe Nathan

Austin Dewey

Stephen Motherwell

Akshit Kandi

Problem

There is a limited scope for readily available filtered news, we want to expand this idea to a broader range of news stories to attract users with a variety of interests.

Background Information

Many people are interested in only certain sections or certain topics found in the news. The desired topics are not always available in one location and users don't always know where to look in order to find information of interest. The problem results in frustration and a general lack of interest for the news due to a cluster of irrelevant information as it pertains to the user's interests.

The idea behind the application is to gather news article from different sources such as New York Times, CNN, NBC, BBC, TMZ etc and based on the user's previous likes and subscriptions displaying the selected articles on user's news feed.

News today both on the internet a The target user is anyone who is interested in keeping up with current news covering topics based upon a user's selected interest(s).

Functional Requirements

User Accounts

1. As a user, I would like to be able to create an account.
2. As a user, I would like to be able to delete my account,

3. As a user I would like to have the option of accident-proof deletion of my account e.g. Type “delete” before account is removed.
4. As a user I should be able to change my password.
5. As a user, I would like to be able to recover my password in a safe way.
6. As a user, I would like the option to remain signed in.
7. As a user, I would like to be able to login with my username or email address

News Search

8. As a user, I would like to search news based on keywords e.g. (Donald Trump, iPhone 6).
9. As a user, I would like to see less news stories on a certain topic.
10. As a user, I would like to search news based on a certain category e.g. (Politics, Technology, Agriculture)
11. As a user I should be able to reset my preferences.
12. As a user I would like to read more articles based on what I like to follow and what I've liked or disliked.
13. As a user, I would like to be able to define my initial interests.
14. As a user, I would like to reset my likes and dislikes
15. As a user, I would like to swipe right/left based on my approval/disapproval of an individual article presented to me.
16. As a user, I would like to read more related articles from different sources.

News Library

17. As a user, I would like to save a story to read it later.
18. As a user, I would like to have a library to read saved stories.
19. As I user I want to have the option of receiving alerts/updates about breaking news.
20. As a user, I would like to read an article immediately when it is presented.
21. As a user, I would like to be able to switch between news feeds based on previous interests.
22. As a user, I would like to be able subscribe to articles from specific publications and authors.
23. As a developer, I want to limit the user library size.
24. As a user, I would like to be able to manually clear my library.
25. As a user, I would like to have an automatic “cleanup” of my library.

Shared interests

26. As a user I would like to be able to share stories to social media, phone messaging, or other integrated apps via my device.
27. As a user I want to follow what other coworkers and friends news feeds.

App Use

- 28. As a user, I would like to have a tutorial of the application's features.
- 29. As a user, I would like to change the appearance of the application. (if time allows)
- 30. As a user, I would want to see the news articles organised in a short, and concise manner in my news feed.
- 31. As a user I would like to have a feature in which the selected articles are presented, in full, one at a time to the user
- 32. As a user, I would like to see visual feedback when I swipe on an article.
- 33. As a user, I would like the option of autoplay on embedded videos in articles.

Developer Needs

- 34. As a developer, I would like to receive user feedback.
- 35. As a developer, I would like to be able to delete user accounts.
- 36. As a developer, I would like users to be able to report crashes with an attached bug report.
- 37. As a developer, I would like to request access to user's swipe and browsing information

Nonfunctional Requirements

Architecture

The application will receive news feed, generated from RSS files, according to an algorithm that will be used to manage the delivered articles. The database will be adjusted per user according to interests, likes, and dislikes. The application will integrate a UI which will present news stories to the user in a queue style allowing news story adjustments based on user interaction with the like and dislike functionality.

The article management system will be built using a Java framework integrated with a backend database supported by MBaaS. To support the UI, we will use the Java based Android SDK, with possible integration of XML for RSS support.

Performance

The news feed should respond to an article swipe by loading a new article header into the view within 500ms, and ideally in less than 250ms. Clicking to expand an article should

result in the full article appearing within 2 seconds of the click. The overall performance goal will be to create a seamless UI in which the user does not experience any noticeable lag.

Security

Security of user account information will not be a high risk issue, the account information will only be linked to user interests and temporary keyword considerations as it applies to our algorithm for filtering the news. The privacy of the user is maintained by only sharing user information with the user's "friends". Furthermore every user will have a password of their choosing that must be used to access their account. The most at-risk flaw in the current integration is the passing of hyperlinks from our RSS interpretations into user news feeds. To help prevent such issues, we will warn users upon account creation to avoid the use of links within our app.

Hosting and Development

The application will be hosted using Android devices of team members as well as Android Emulators that are included in Android Studio. We will develop the front-end of the application using Android studio to write Android and Java code.

Appearance

This application will have a visually pleasing layout that appeals to our target demographic of students, and young adults. The transitions between functions will be seamless, and smooth. The application will have an intuitive layout that is simple to use, and is also ideal for non technical users.