

## **Team 4 Sprint 2 Planning Document**

NewsLog - Filtered News Per User Interest

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### **Sprint Overview**

Now that we are done with our first Sprint phase, that included the basic functionality of fetching articles from sources and presenting them on the the client UI, we will attempt to present articles based on the user's preference. We were able to over achieve in a few portions of the previous sprint, however we have realized other issues that will need to be handled during this sprint or the next. Also, we will focus on improving the UI and implementing more features for overall application functionality.

The main goals of the second sprint are:

1. Setting up the database and server on a single machine to reduce request processing delays.
2. Increased functionality of database to manage user registration and article fetching.
3. Presenting the user with a stream of news articles as opposed to only one article.
4. Implementing further user options to improve usability.
5. Using the data collected from usage patterns of various users to make inferences about their future preference.

Below, we cover further details regarding our Sprint Two plans. We will describe the user stories that we want to cover during our second sprint by labeling detailed tables with the functional requirements that will be completed by the tasks described per table. The tables will break down the project tasks required for proper implementation of our sprint goals. To designate a sense for the workload per task we have included a time category to label our expected time cost per task.

**Scrum Master:** Paul Heldring

**Scrum Meeting Schedule:** 12:30PM MWF and 2PM Sun

### **Risks/Challenges:**

1. Manipulating current infrastructure to handle intelligent functionality.
2. Implement additional features on the backend so that the different parts work well together.
3. Collaborating within a similar code-base, ensure teammates are coordinating and branching to prevent git conflicts.

## Current Sprint Detail

### Functional User Stories

As a user, I would like to be able to recover my password in a safe way.

As a user, I would like to reset my password.

As a developer, I would like to be able to delete user accounts.

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.

As a user I should be able to change my password.

As a user, I would like to change the appearance of the application.

As a user, I would like the option to remain signed in.

Task Description	Est Time (Hr)	Owner(s)
Encrypt the password information on the client side before sending to the server	20	Dhruv, Paul, Joe, Austin
Implement user management functionality. Password reset, interest reset, and account deletion.	15	Paul, Joe, Stephen
come up with a procedure to validate a user before resetting the password	15	Joe, Austin
Make the corresponding changes in the database.	25	Dhruv, Austin
Make a button that will allow the user to change the application color theme.	2	Misha
Implement button functionality that changes color styling of the application.	10	Misha, Stephen
Create user management feature which allows the user to remain signed in, implement this in android caching system.	10	Paul, Stephen, Joe

**Acceptance Criteria:** The UI allows the user to recover his/her password by validating the identity through other means( email, text etc.). We also want to make user options more inclusive of what the user will need in order to perform necessary NewsLog actions.

### Functional User Stories

As a developer, I would like the database and server to be on the same machine.

As a user, I would like to receive articles related to a specific category.

As a developer, I would like usernames to be unique.

As a user, I want news articles to be presented based on my likes and dislikes.

Task Description	Est Time (Hr)	Owner(s)
Fix the category alignment which corresponds to the URL	10	Akshit, Stephen
Add more sources to obtain news articles	15	Askhit, Stephen
Create a buffer of articles on the client side for the user to read before new articles are fetched. The server side should send 20 articles at a time to the client.	10	Paul, Akshit, Joe
Optimize fetching and retrieval time of articles (server to client)	20	Paul, Akshit, Joe, Misha
Implement an intelligent function that tracks user keywords and manages the current likes to fetch more relevant articles	12	Paul, Misha,Akshit

**Acceptance Criteria:** This story will be a success if the category and URL's correspond in a meaningful way.

### Functional User Stories

As a developer, I would like to make sure the information in the database is valid.

As a developer, I would like there to be no duplicate usernames.

As a user, I would like to receive articles related to a specific category.

As a developer, I would like keywords to be paired with their respective categories and keywords.

Task Description	Est Time (Hr)	Owner(s)
Ensure that there are no duplicate usernames.	2	Austin
Establish a connection between keywords and categories	10	Austin

Establish a connection between keywords and users	6	Austin
Optimize database to ensure faster retrieval	10	Austin, Joe
Optimize database to have faster storage time	15	Akshit, Misha

**Acceptance Criteria:** This story will be a success if calls to the database are efficient, if user data is unique, and if categories and users correspond to their respective keywords.

### Functional User Stories

As a user, I would like to see visual feedback when I swipe on an article.

As a user, I want a menu button that will be featured throughout the application to allow me to navigate to

Task Description	Est Time (Hr)	Owner(s)
Implement a smooth curl activity transition. The curl activity on webviews is not currently available in Android and will require vast customization to be implemented for our purposes.	35	Joe, Stephen
Add a menu button to the corner of every Android page	25	Dhruv, Misha
Dynamically add menu options as is required on each activity.	15	Misha, Dhruv
Implement the sign out feature in the menu button options.	8	Misha

**Acceptance Criteria:** Currently we have a bare bones UI, to consider this story a success we would have to implement a complete system to increase usability and general functionality as it applies per application page. The main goal would be the menu button which allows for easier navigation and general interactive features.

### Remaining Backlog

## **Functional**

### User Accounts

### News Library

1. As a user, I would to to read articles for later on.
2. As a user, I would like to have a library to read saved stories.
3. As I user I want to have the option of receiving alerts/updates about breaking news.
4. As a user, I would like to be able to switch between news feeds based on previous interests.
5. As a user, I would like to be able subscribe to articles from specific publications and authors.
6. As a developer, I want to limit the user library size.
7. As a user, I would like to be able to manually clear my library.
8. As a user, I would like to have an automatic “cleanup” of my library.
9. As a user I want to follow what other coworkers and friends news feeds.

### App Use

10. As a user, I would like to have a tutorial of the application’s features.
11. As a user, I would like the option of autoplay on embedded videos in articles.

### Developer Needs

12. As a developer, I would like to request access a user’s swipe and browsing information
13. As a developer, I would like to receive user feedback.
14. As a developer, I would like users to be able to report crashes with an attached bug report.

## **Non-Functional**

## **Architecture**

Moving forward, our database and server will be stored on the same machine as opposed to separate machines. This is for convenience and performance. This will complete our backend architecture, as for front end we are going to make the UI and general usability more robust which will most likely only leave rather trivial bugs and features remaining in our final sprint.

## **Performance**

Performance in this stage will be completed as we have allocated time to increase performance for the most time consuming part of our application process, news retrieval and management for the user.

## **Security**

Encrypting client side will be important for account security with emails and passwords passing between the server and client. Our solution for this problem would be to have a public key the client side uses to encrypt the data and a private key on the server side to decrypt. We will have completed our implementations required for security minus the possibility of outlying flaws we haven't considered.

## **Hosting and Development**

Although certain details will not be completed during this sprint, we will complete all requirements regarding server database storage and client-server communication. Merging the server and the database together will be an important step to allow easy server maintenance.

## **Appearance**

A key focus in this sprint is buffing up appearance and interaction feedback for the user. We are also implementing a theme option for the user which will complete the appearance features for our application.