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College of Computer and Information Sciences

Information Technology Department

Course Title:	User Experience Design
Course Code:	IM6222
Course Instructor:	Dr. Amir Mohamed Talib and Dr. Shaza Abdelrahman
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Project Title:	**Feather Application**
Section	

Agreement:

1- **It was me and my team members NOT external party who performed this project.**
2- **I participated with the group members to accomplish this project (maximum of 3 students) effectively and almost equally.**
3- **This project is totally free from copy and any type of cheating from other students' works and projects.**
4- **This project is free from illegal copy from any resources and intellectual property breaches.**

Based on above I sign below and I accept any corrective action taken in case I breach or don't fulfill the above commitments.

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Chapter 1: Introduction

1.1 Project Introduction

Feather Application allows to publish and share your articles with users, and you can like articles users and follow them through the application and share articles with other applications.

1.2 Overview

Feather Application is a platform designed for users to publish and share articles with others. Users have the ability to like articles posted by fellow users, follow specific authors to stay updated on their latest publications, and share articles with other applications seamlessly. This application acts as a hub for writers and readers to connect, engage with content, and expand their reach within a community of like-minded individuals.

1.3 Problem Statement

In a digital age where content creation and consumption are increasingly prevalent, there exists a need for a platform that facilitates seamless sharing and discovery of articles among users. Current platforms may lack the specific features tailored for article publishing, liking, following authors, and easy sharing across various applications. This gap inhibits writers from reaching a wider audience and readers from efficiently discovering and engaging with quality content. Feather

Application aims to address these challenges by providing a user-friendly and feature-rich environment for users to publish, interact with, and share articles effectively.

1.4 Objectives

- **Develop a comprehensive platform, Feather Application, enabling users to publish and share articles seamlessly.**
- **Implement features allowing users to like articles, follow authors, and share content across different applications.**
- **Create a user-centric environment that fosters engagement and connectivity within a community of writers and readers.**

1.5 User Personas

- ❖ **Background: A freelance writer looking to showcase her work and build a following.**
- ❖ **Goals: Publish engaging articles, gain recognition for her writing skills, and connect with a community of readers and fellow writers.**
- ❖ **Needs: Easy-to-use article creation tools, feedback from readers, and a platform to promote her work effectively.**

1.6 User Research Findings

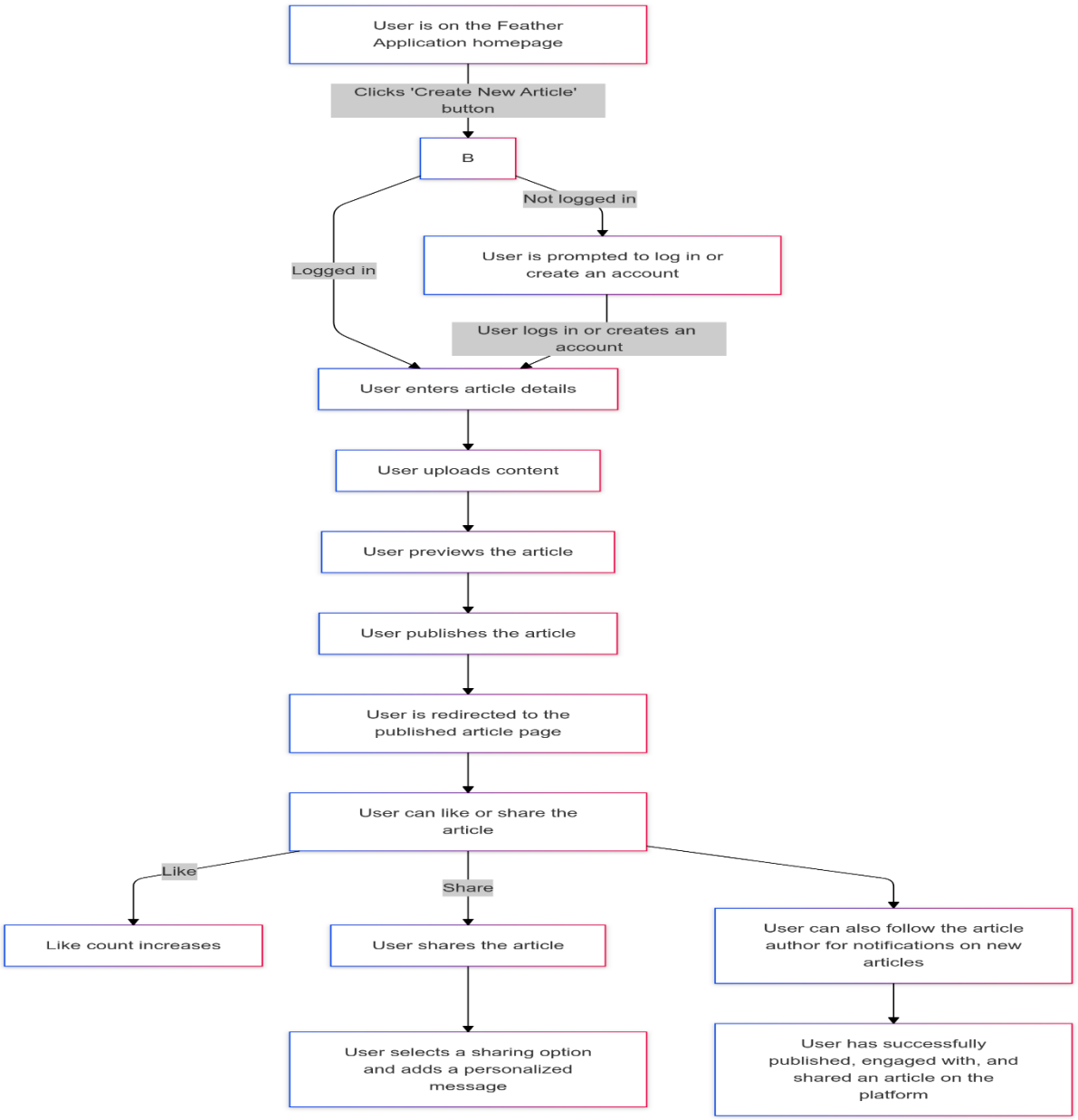
The user research findings report presents insights gathered from various research methodologies to understand user preferences, behaviors, feedback, and satisfaction levels regarding the Feather Application.

❖ Key Findings

1. **User Preferences:**
    - **Users gravitate towards articles on technology, lifestyle, and personal development.**
    - **Most users appreciate features that allow for personalized article recommendations based on their interests.**
2. **User Behavior:**
    - **Users tend to engage more with articles that have visually appealing layouts and engaging titles.**
    - **A significant portion of users access the platform multiple times a day to read and share articles.**
3. **User Feedback:**
    - **Users value the platform's intuitive interface and easy article sharing options.**
    - **Feedback suggests a desire for a more robust commenting and discussion system to enhance user interaction.**
4. **User Satisfaction:**
    - **Overall, users express high satisfaction levels with the platform's content quality and variety.**
    - **Some users mention a need for better search and filtering options to discover articles more effectively.**
5. **User Engagement:**
    - **Users actively like and share articles, indicating a high level of engagement with the content.**
    - **Following authors and receiving notifications on their new publications is a popular feature among users.**

Chapter 2: Ideation & Concept Design

2.1 User Flows



User Flow 1: Publishing an Article

Starting Point: User is logged into the Feather Application dashboard.
Step 1: Click on the "Create New Article" button.
Step 2: Enter the article title, content, and select relevant categories/tags.
Step 3: Upload images or multimedia content if necessary.
Step 4: Preview the article to check formatting and layout.
Step 5: Click on the "Publish" button to make the article live on the platform.

User Flow 2: Liking an article

Starting Point: User is browsing through articles on the Feather Application.
Step 1: Read an article that interests the user.
Step 2: Click on the "Like" button below the article.
Step 3: The like count increases, indicating the user's engagement with the article.

User Flow 3: Following an Author

Starting Point: User is reading an article by a particular author.
Step 1: Click on the author's name to view their profile.
Step 2: Click on the "Follow" button on the author's profile.
Step 3: Receive notifications when the author publishes new articles.

User Flow 4: Sharing an Article

Starting Point: User is reading an article they want to share.
Step 1: Click on the "Share" button below the article.
Step 2: Select the sharing option (e.g., social media, messaging apps).
Step 3: Add a personalized message (optional).
Step 4: Share the article with the selected platform.

User Flow 5: Commenting on an Article

Starting Point: User is reading an article and wants to leave a comment.
Step 1: Scroll to the comment section below the article.
Step 2: Enter the comment in the text box.
Step 3: Click on the "Post Comment" button to submit the comment.
Step 4: The comment is displayed below the article for others to view and engage with.

2.2 Technique Used to Come out with the Project Idea

- **MVVM Architecture : Model - View - ViewModel (MVVM) is the industry-recognized software architecture pattern that overcomes all drawbacks of MVP and MVC design patterns. MVVM suggests separating the data presentation logic(Views or UI) from the core business logic part of the application.**

- **Material Design : Material is an adaptable system of guidelines, components, and tools that support the best practices of user interface design. Backed by open-source code.**

- **Firebase : Google Firebase is a Google-backed application development software that enables developers to develop iOS, Android and Web apps. Firebase provides tools for tracking analytics, reporting and fixing app crashes, creating marketing and product experiment.**

- **Live-Data: Considers an observer, which is represented by the Observer class, that observes the data states.**

- **Lottie: Lottie is an open source animation file format that's tiny, high quality, interactive, and can be manipulated at runtime.**

- **Shared preference : SharedPreferences is an interface used for accessing and modifying preference data in Android.**

- **Recycler View : RecyclerView makes it easy to efficiently display large sets of data. You supply the data and define how each item looks, and the RecyclerView library dynamically creates the elements when they're needed.**

- **Work Manager : Solution for background persistent work when it remains scheduled through app restarts and system reboots.**

- **Coil Library : COIL is an acronym for Coroutine Image Loader. COIL is one of the famous image loading libraries from URLs in Android. It is a modern library for loading images from the server. This library is used to load images from servers, assets folder as well as from the drawable folder in Android project. The important feature of this library is that it is fast, ightweight, and easy to use. In this article, we will see How to Use this Image Loader Library in Android Apps.**

2.3 Information Architecture (Site Map or Flow Diagram)

Feather Application Information Architecture Overview:

1. **Home:**
    - **Feed: Displays articles published by users you follow.**
    - **Explore: Discover new articles based on categories or recommendations.**
2. **Articles:**
    - **My Articles: Manage articles you have published.**
    - **New Article: Create a new article.**
    - **Liked Articles: View articles you have liked.**
    - **Shared Articles: See articles you have shared.**

3. **Users:**
   - **Followed Users: List of users you are following.**
   - **Followers: Users who follow you.**

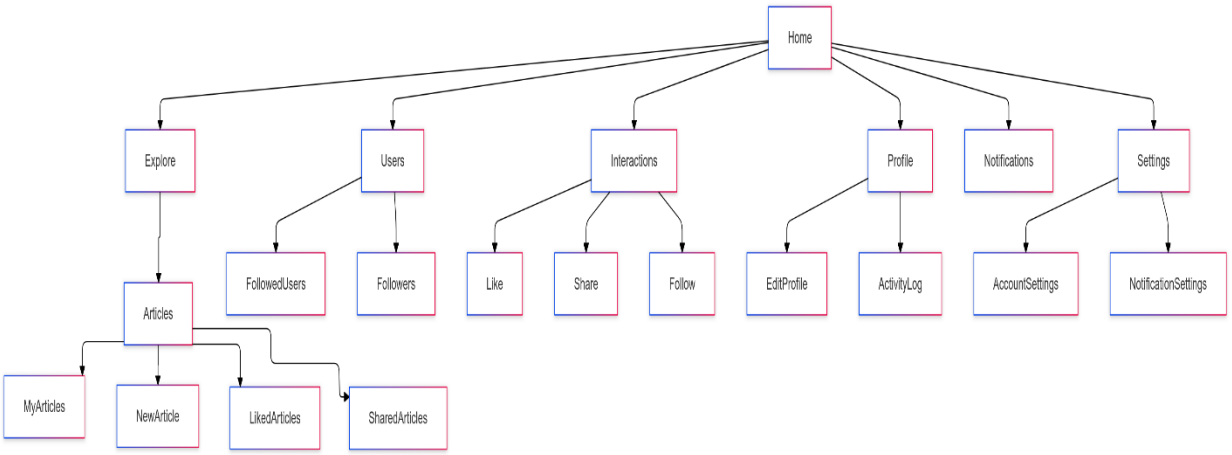
4. **Interactions:**
   - **Like: Ability to like articles posted by other users.**
   - **Share: Share articles within the Feather Application or to external apps.**
   - **Follow: Follow other users to receive updates on their articles.**

5. **Profile:**
   - **Edit Profile: Update your profile information.**
   - **Activity Log: View your recent interactions (likes, shares, follows).**

6. **Notifications:**
   - **Receive notifications for new likes, shares, and follows.**

7. **Settings:**
   - **Account Settings: Manage account preferences and security settings.**
   - **Notification Settings: Customize notification preferences.**

This information architecture overview outlines the key sections and functionalities of the Feather Application, including publishing and sharing articles, liking and following users, and sharing articles with external applications. It provides a structured view of how users interact with the application and the main features available to them.



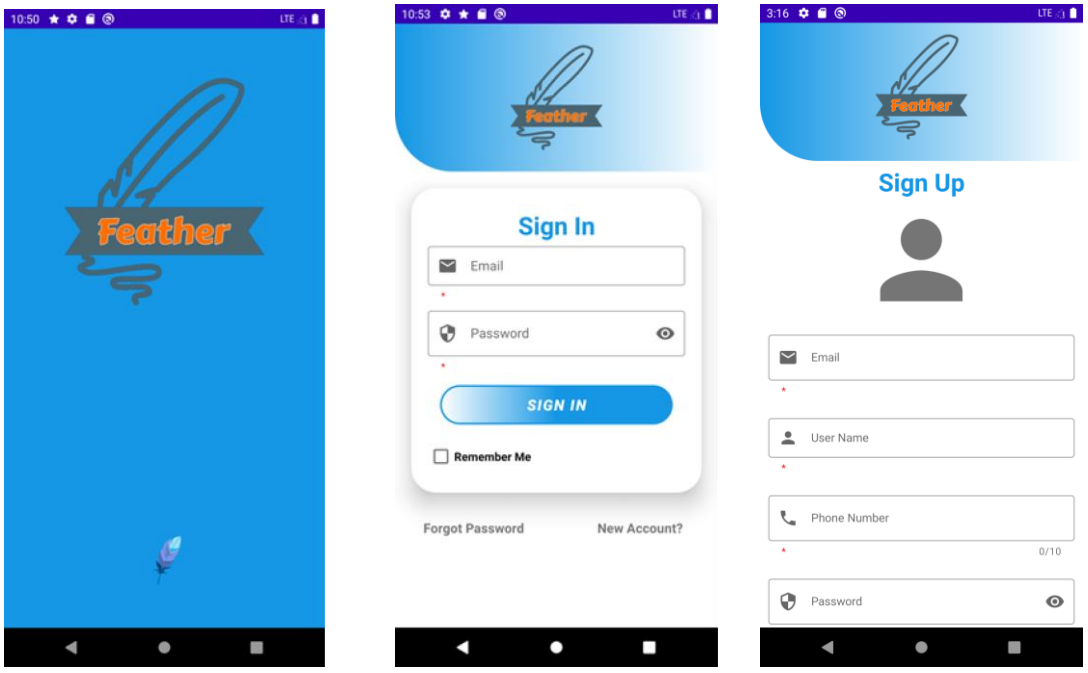
2.4 Conclusion

By creating clear and well-organized information architecture diagrams, designers and developers can effectively communicate and plan the structure of a website or application, leading to improved user engagement, navigation, and overall user experience. A well-thought-out information architecture is fundamental to creating user-centered designs that meet the needs and expectations of the target audience.

Chapter 3: Interaction Design & UI Design

3.1 High-Fidelity Screens

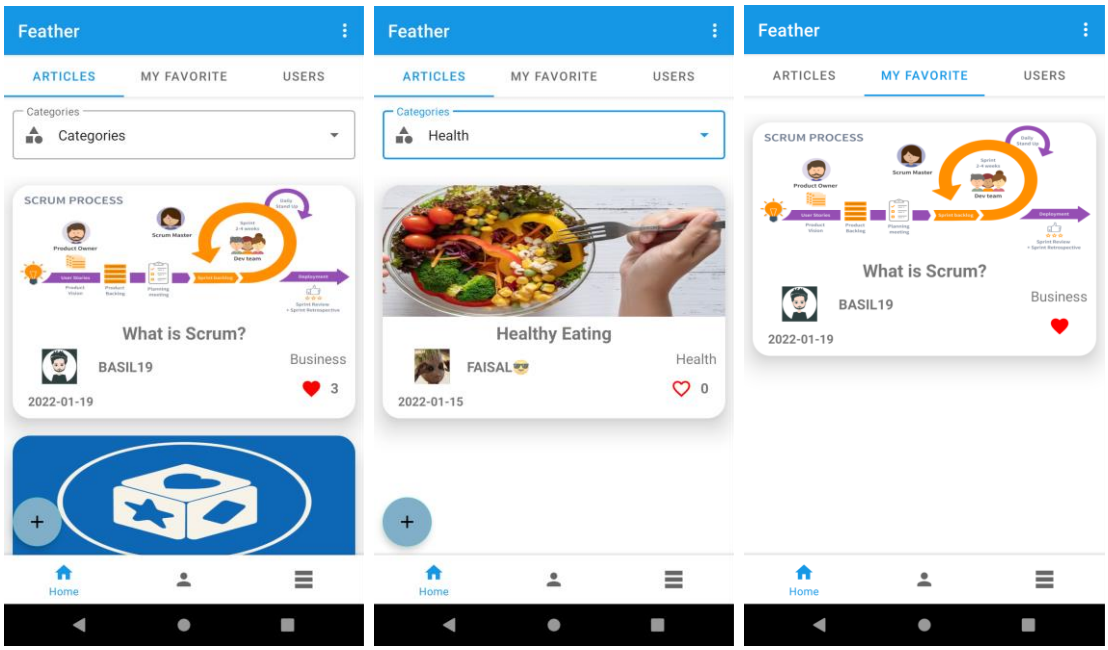
❖Start Interfaces



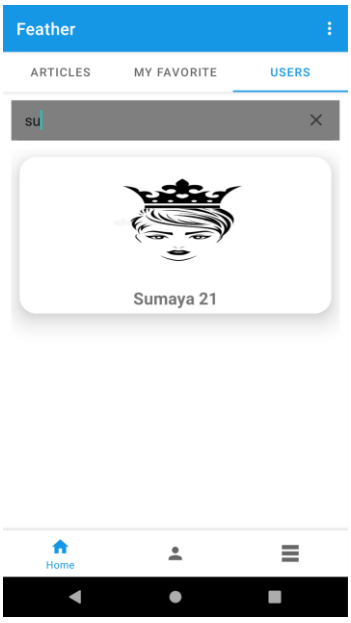
The start interfaces contain three interfaces:

- **The first interface is a splash screen that starts the application and in this interface the data is fetched.**
- **The second interface contains login data and forgotten password.**
- **The third interface contains user data in order to create a new account on the Feather application.**

❖Main Interfaces



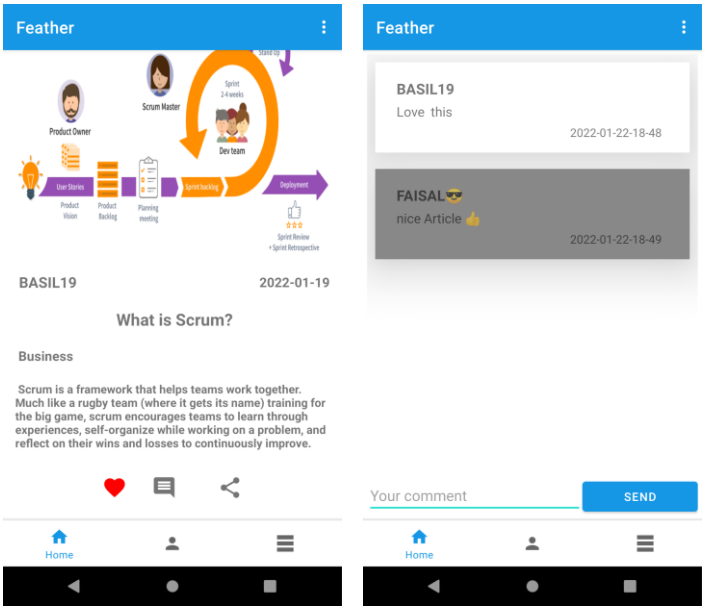
- **The main interface contains several functions. Through the main interface, you can browse articles, like them, and filter articles according to categories. Through the main interface, you can go to the settings and users' interface.**



- **Users Tab**

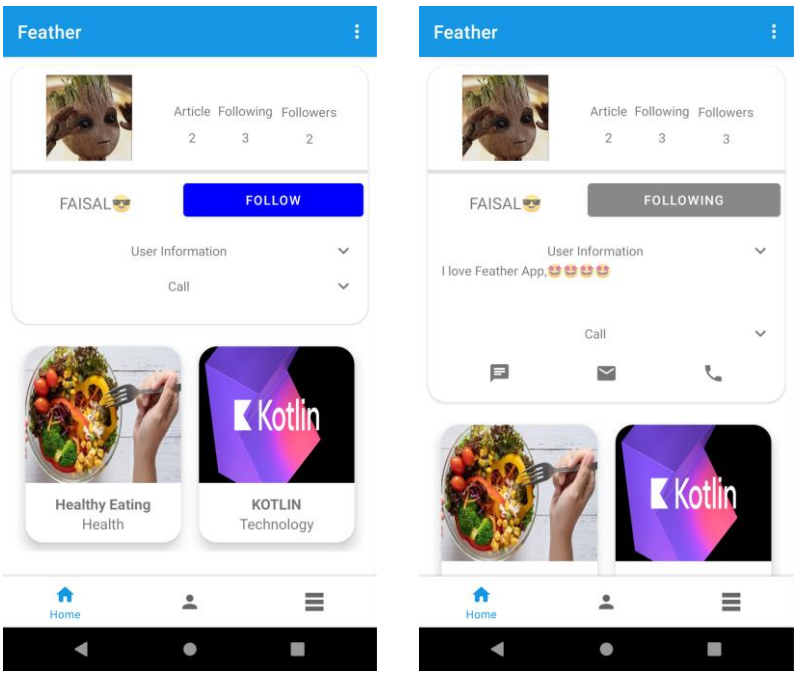
Through the "Users" tab on the main interface, you can search for users, follow them, view their articles, and publish them.

❖Articles Info Interfaces

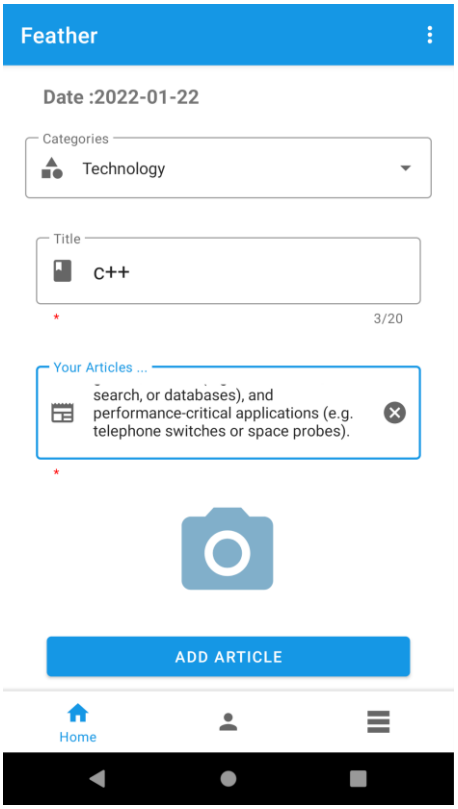


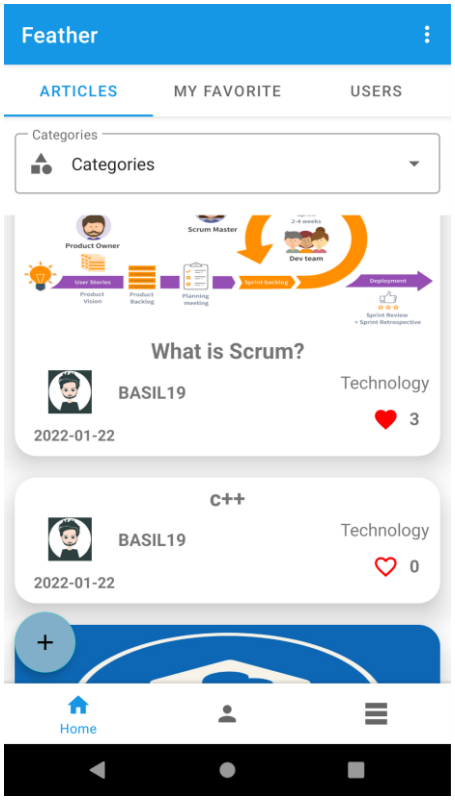
- **This interface contains the details of the article and you can like it, comment on it, follow the author of the article and read his previously published articles in his profile on the Feather application.**

❖Users profiles Interfaces



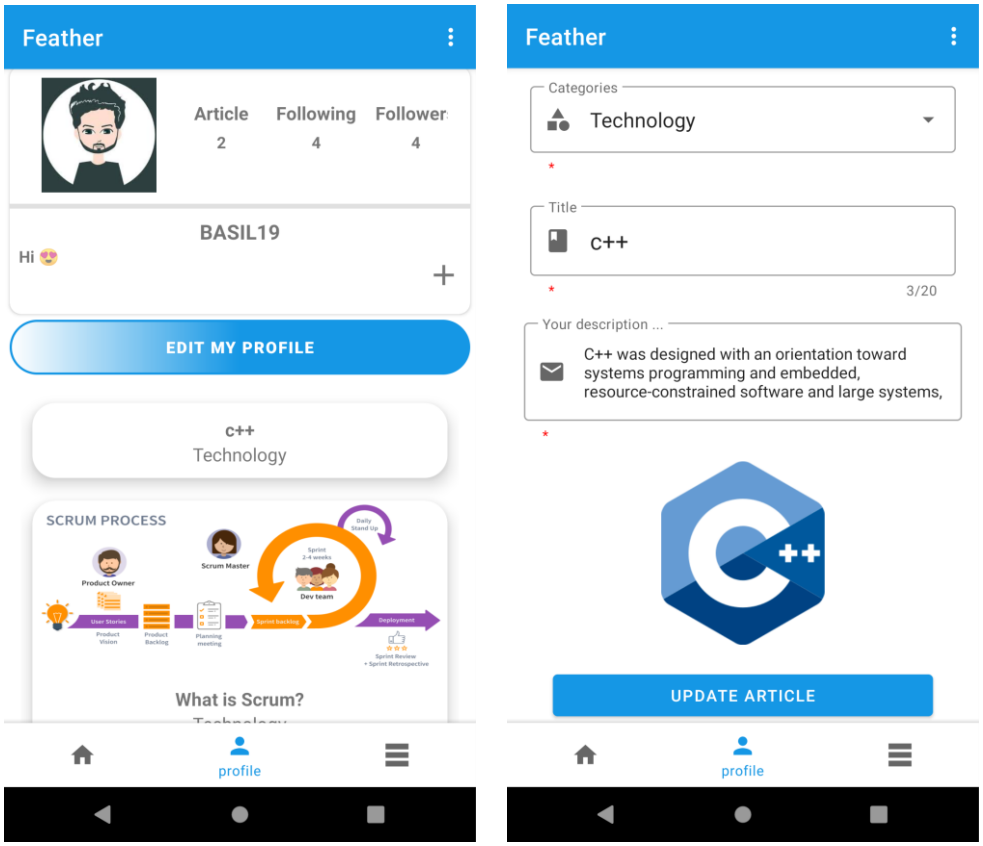
❖ Add Article Interface



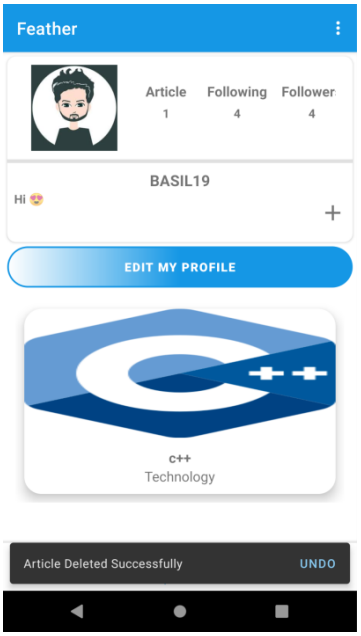


- **The article add interface contains several fields, which are the article title, article category, article content, article image if any, and a button to publish the article.**

❖ Edit Article Interface



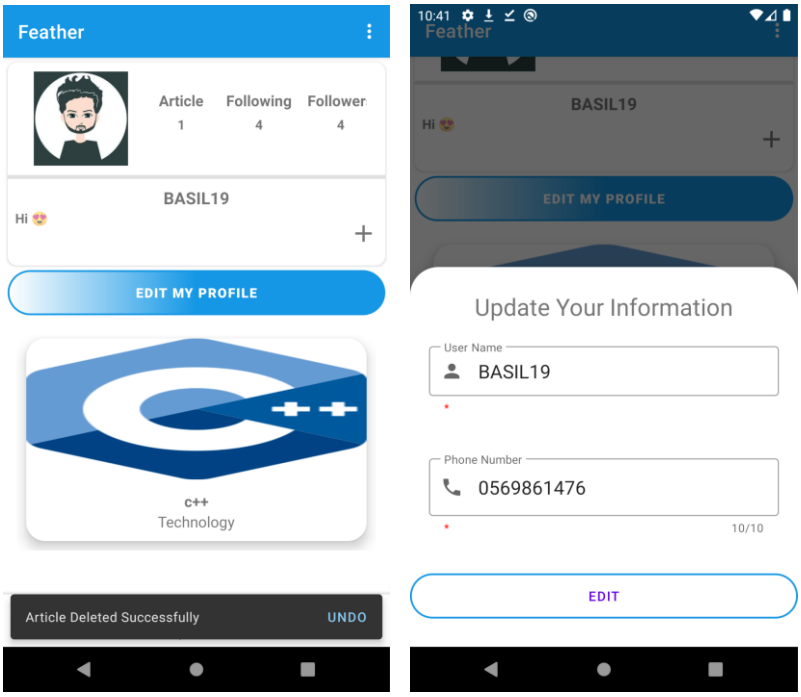
- **Feather app allows you to edit articles by dragging the article to the left to go to the article editing interface, and also delete it if you drag the article to the right.**



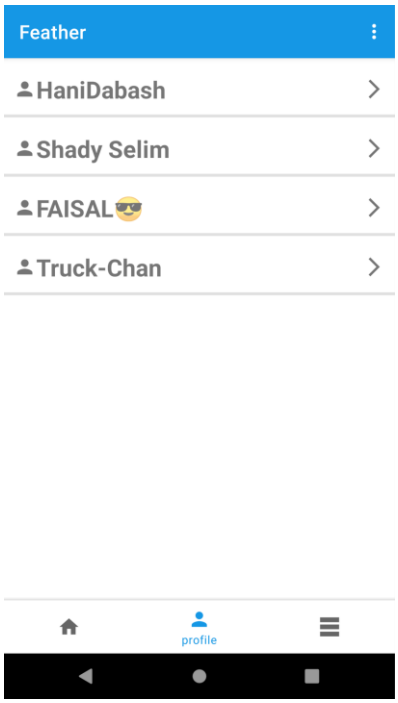
- **Delete Article**

The user can return the article after deleting it within 10 seconds.

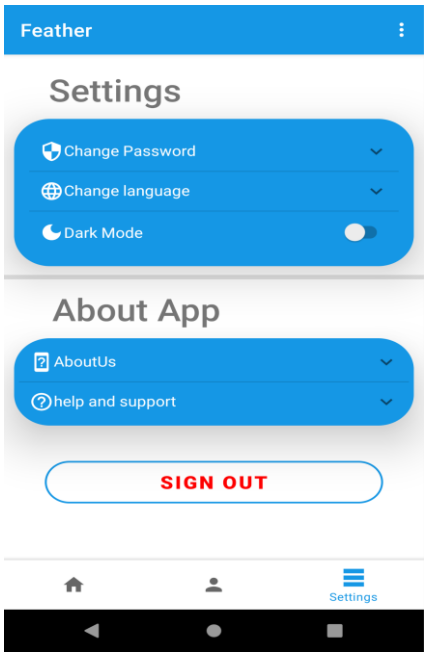
❖User Interfaces



- **The user interface contains several functions, including the number of followers and following, and you can modify your personal data.**

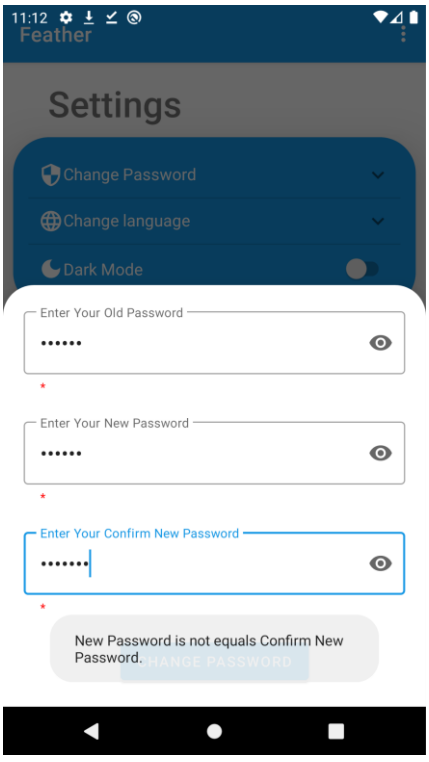


❖Settings Interfaces

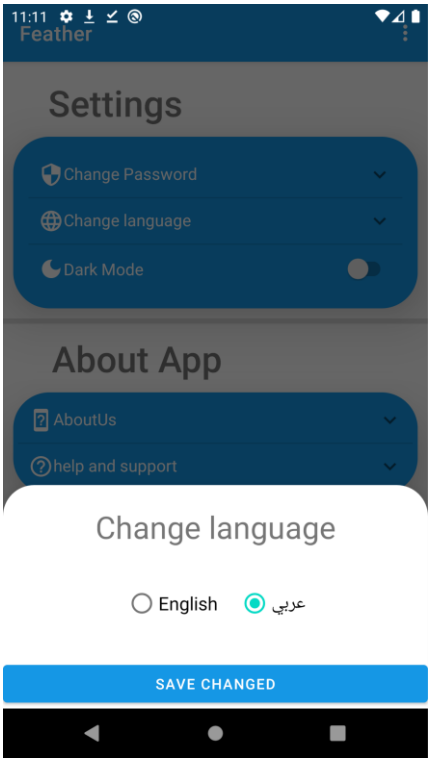


You can, through the settings interface:

- **log out**
- **change the password**
- **change the application language**
- **switch the application to dark mode.**
- **ABOUT APP**

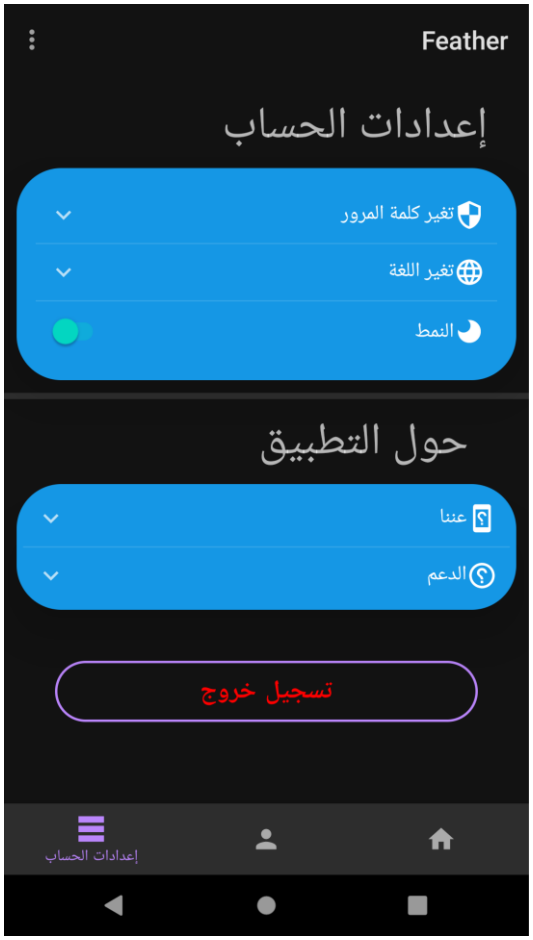


Change Password

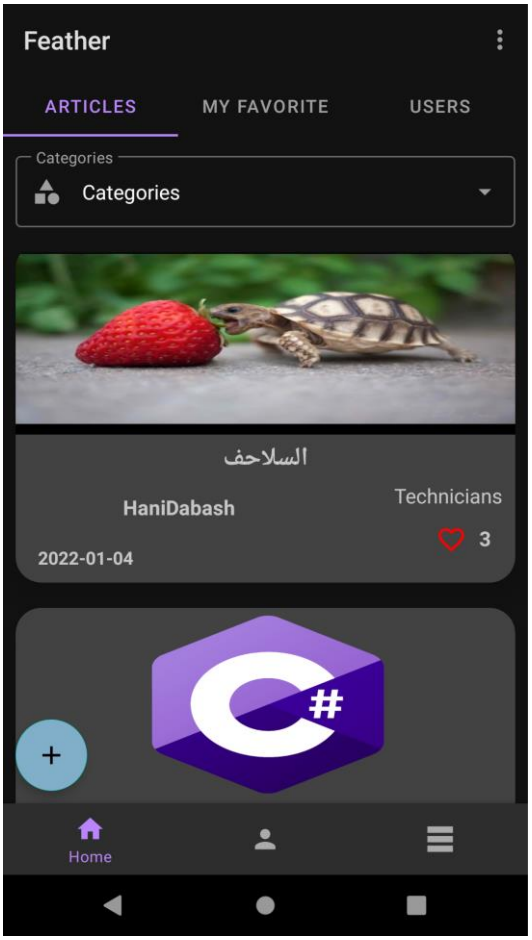


Change Language

Dark Mode



Dark Mode 2



In dark mode the selected colors are suitable for people with special needs.

3.2 Interactive Prototype

An interactive prototype is a dynamic representation of a digital product that allows users to interact with the interface as they would with the final product. Please Click here is a breakdown of the key aspects related to interactive prototypes.

For a great experience please use your phone.

3.4 Conclusion

Interactive prototypes stand as indispensable tools in the iterative design process, offering designers a dynamic medium to visualize, test, and refine user interactions within a digital product. By simulating user experiences and functionality, interactive prototypes enable designers to gather valuable feedback, validate design decisions, and iteratively enhance the user experience.

Chapter 4: Usability Testing & Iteration

4.1 Usability Testing Report (including feedback and identified issues)

Testing Methodology:

Participants: 2 participants were recruited for the usability testing sessions.

Tasks: Participants were asked to navigate through the app and complete specific tasks related to browsing artilces and share a articles.

Minor Issues:

Issue 1 - Font Legibility: Some users noted that certain text elements were difficult to read, especially on smaller screens.

Issue 2 - Button Visibility: A few participants had difficulty identifying primary action buttons due to lack of visual hierarchy.

User Feedback

Participant 1: "I appreciate the overall design of the Feather app. However, the search results did not match my expectations. I was hoping to see more relevant products based on my search queries."

Participant 2: "The font size on the Feather app could be increased to enhance readability, especially when browsing on mobile devices. Larger fonts would greatly improve the user experience."

Chapter 5: Final Presentation & Documentation

5.1 Project Presentation

FEATHER APP.pdf FEATHER APP.pptx

Figma_design

References

[1] https://www.figma.com/proto/6kwXqucEouZmLpGk7ajcg5/Feather-App?node-id=01&t=7NNvgv6rYvysd9EL-1

[2] https://www.figma.com/design/6kwXqucEouZmLpGk7ajcg5/Feather-App?m=auto&t=IoLxkCmJqte8hEFz-1