



**UNIVERSITY MALAYSIA TERENGGANU**  
**FACULTY OF COMPUTER SCIENCE AND MATHEMATICS (FSKM)**

**CSM3114**  
**FRAMEWORK-BASED MOBILE APPLICATION DEVELOPMENT**

**Project 1 Final Report**  
**ABC University News App**

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**Source code for ABC University News App:**

[https://github.com/dothernish/abc\\_university\\_news\\_app](https://github.com/dothernish/abc_university_news_app)

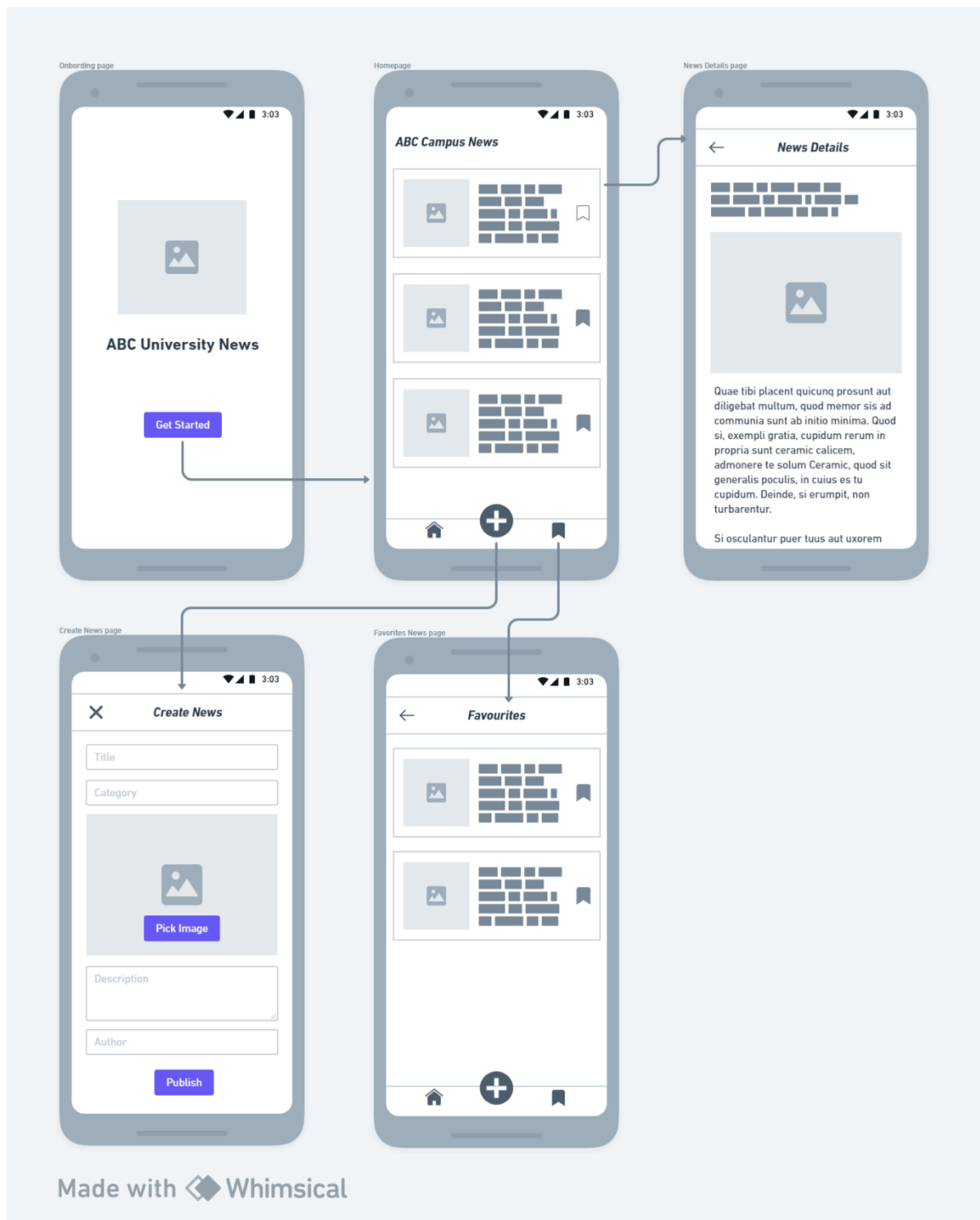
## **1. Executive Summary**

The ABC University News App is a mobile application developed using Google's Flutter framework with Dart programming language that provides the ABC University community with a centralized platform for campus news and information. “A modern framework such as Flutter requires a high-level modern language to be capable of providing the best experience to the developer and making it possible to create awesome mobile applications” (Biessek, 2019). Hence, this is why ABC University News App is developed using Flutter Framework. By producing news articles into categories like sports, academics, and clubs, students and faculty can easily stay up to date on the latest events, announcements, and stories related to campus life. The app allows users to bookmark their favorite articles to get back to anytime.

This project was driven by the need to consolidate the many fragmented communication channels currently used across ABC University campus. The market research process by browsing through articles and focus groups revealed strong demand for an easy way to get university news tailored to each user's interests. The ABC University News App solves this problem through an intuitive, user-friendly interface optimized for the way students and faculty already consume content on their mobile devices.

With over thousands of students, faculty and staff combined, ABC University provides a significant total addressable market for the app. Secondary targets including parents, alumni, and prospective students can further expand the reach. The app represents a major opportunity to improve campus communication, engagement, and sense of community.

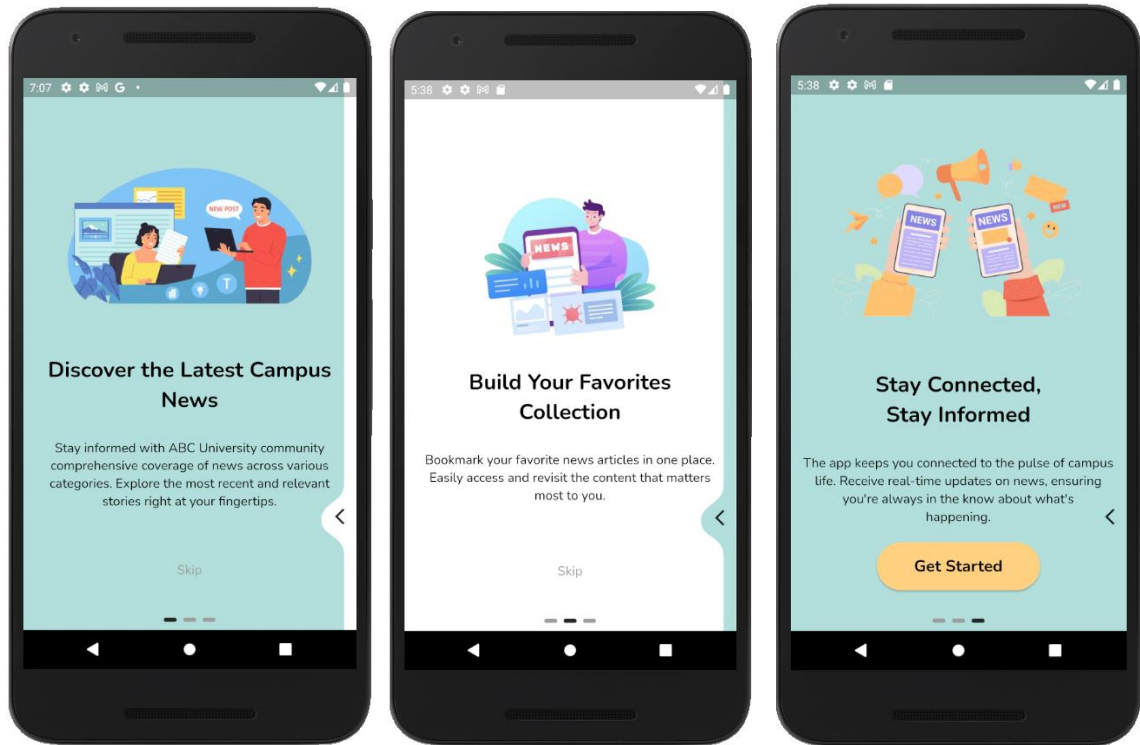
## 2. Prototype Design



*Figure 1 Application Prototype Design*

### 3. Application User Interface

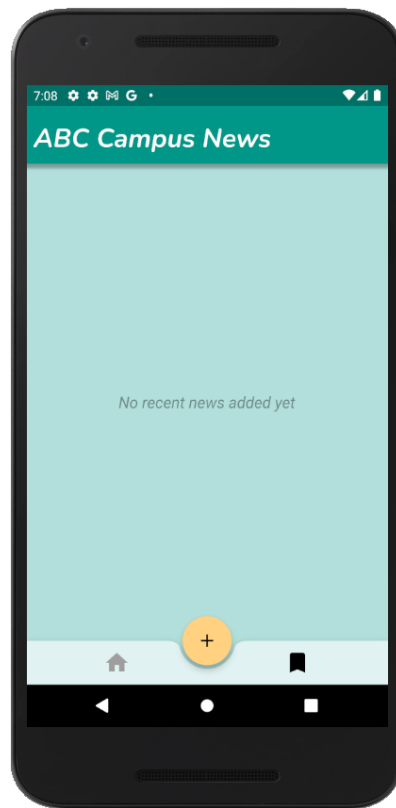
#### a) Onboarding page



*Figure 2 Onboarding Page*

**Figure 2** shows the onboarding screens when user first enters this ABC University News application. The onboarding screens contain three screens that can be swiped one after another until it reaches the third screen which contains a button. The ‘Get Started’ button will lead user to the application homepage after it is clicked.

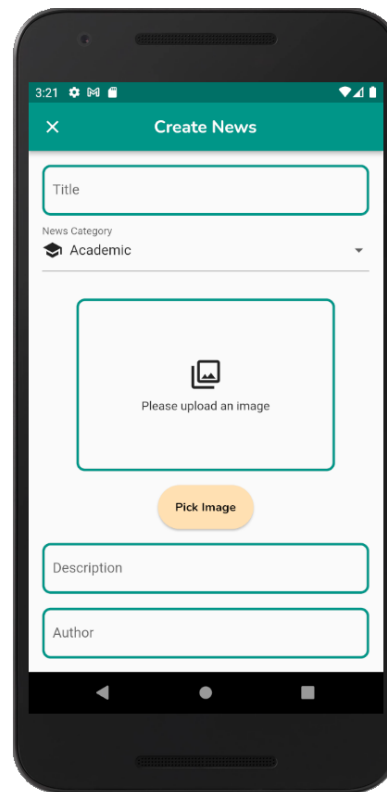
**b) Homepage**



***Figure 3 Home Page***

**Figure 3** shows the home page of the application where all the news published will be shown here from the latest news. The news will be represented in a card which contains the news category, title, author, and date of publication. Furthermore, each news will have a bookmark icon for users to bookmark their favorite news.

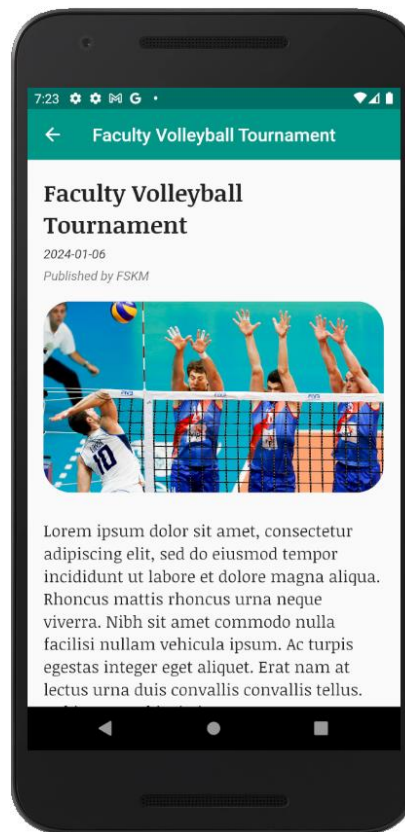
### c) Add News Page



**Figure 4** Add News Page

**Figure 4** shows the add news user interface for users to publish news that happen among the ABC University community. In the form, user must input news title, category, upload an image, description, and author. The form contains a validation process where all fields are required meaning that if a field is not filled, users cannot publish the news.

#### d) News Details Page

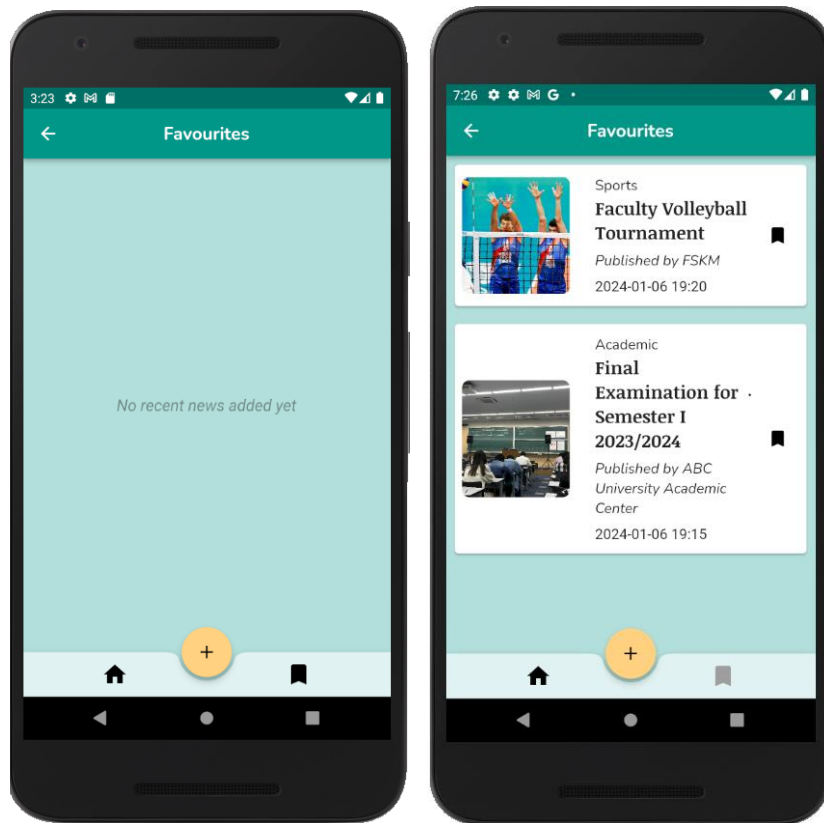


**Figure 5** News Detail Page

**Figure 5** shows the user interface for the news details. Users can navigate to here by clicking the card of a news at the homepage. Here, users can read the whole article of the news.



### e) Favorites News Page



*Figure 6 Favorite News Page*

**Figure 6** shows the user interface where all the bookmarked news by the users will be displayed here. The purpose for this interface and functionality is to make it easier for users to go back to their favorite or important news anywhere and anytime.

## **4. Potential Commercial Value and Pricing**

### **1. Market Analysis**

The ABC University News App targets all the ABC campus community which contains the students, faculty, and staff at ABC University as its primary market. Secondary targets include parents, alumni, prospective students, local businesses, and the broader community.

Competitor analysis shows no direct competition for a centralized campus news app. Indirect competitors include existing school websites, newsletters, and social media pages that currently fragment campus communication. The ABC University News App will consolidate these channels into one centralized platform tailored to each user.

This product-market fit is driven by the trends of mobile news consumption and demand for personalization. Overall, the market timing indicators, competitive landscape, and user feedback signify strong market demand, limited direct competition, and a high likelihood of adoption for the ABC University News App.

### **2. Monetization Strategies**

- **Premium Subscription**

Users can access an ad-free version of the app with exclusive content and push notifications. Personal customization of the app can be implemented with a subscription.

- **Sponsorship**

Selling exclusive sponsorships for specific news in the app creates high-value inventory. For example, the sport section could be sponsored by a top sport brand.

- **Promoted Posts**

Allowing campus organizations and local businesses to pay to promote their posts to the top of feeds generates transactional revenue.

### **3. Pricing Plans**

The ABC University News App will utilize a freemium model with both a free, ad-supported version and a premium subscription version. The free version will be accessible to all users with no paywall. This aims to drive rapid adoption throughout the campus community. Revenue will be generated through advertisements.

The premium version will be priced at competitive market rates for similar content-based subscription mobile applications. Premium features will include ad-free browsing, exclusive content, and notifications. Sponsorship opportunities will be tiered by inventory value. High visibility sections will command greater sponsorship rates compared to ancillary content.

Campus entities and local businesses represent potential sponsors. There will also be opportunities for promoted posts and branded content partnerships. These will be priced according to the size of reach and level of exposure for each opportunity. The goal of keeping pricing flexible is to allow optimization over time based on adoption, usage patterns and advertiser demand. The mix of free access and premium features aims to balance revenue with strong user experience.

Overall, the pricing strategy will focus on maximizing the app's value for the ABC University community while generating robust commercial return across diverse monetization streams.

## 5. Lesson

Personally, the key lesson from developing this ABC University News App project was the immense value of continuous user testing and research on how to structure a well-maintained code throughout the development process. The initial product concept and features were inspired by brainstorming what I would have wanted as a university student in getting the latest news and updates about what is happening around the campus. I believe this idea can increase the productivity of the people in ABC University.

The success of this app highlights the immense value of human-centered design. Continuous user testing gives a product the best chance of achieving product-market fit, high adoption, and retention. This level of user input significantly de-risks development and increases the likelihood of commercial success.

By referring to great sources like the official Flutter API documentation, I have managed to challenge myself in developing this prototype. Next, I also learned how to manage my time in completing the tasks from designing the wireframes to developing the app. Hence, it made me realized that for me to become a great mobile application developer, I must be discipline and hardworking.

## 6. Conclusion

In conclusion, the ABC University News App showcased end-to-end proficiency in mobile application development using Flutter. The project combined technical skills with critical soft skills like project management, research, and communication.

Market analysis indicates a clear need for this app within the ABC University community and promising revenue potential. Hence, dedicated user testing provided the necessary validation and refinements to ensure the final product delivers real value to end users, as emphasized in lean product development.

The completion of this project demonstrated the ability to identify a target market, deeply understand user needs through research, translate those needs into technical requirements, and ultimately deliver a polished, impactful solution.

On top of that, this app can be expanded and enhanced with additional features and functionality over time, in line with agile development principles (Schwaber & Sutherland, 2020). The core workflow and technical framework established through this project provides a robust platform for growth. With continuous improvement guided by user feedback, the ABC University News App can become an indispensable part of the campus experience and continue advancing the ABC campus community as well as expanding the market to other universities.

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