

UNIVERSITY MALAYSIA TERENGGANU FACULTY OF OCEAN ENGINEERING TECHNOLOGY & INFORMATICS

[CSM3114] FRAMEWORK BASED MOBILE APPLICATION DEVELOPMENT (GROUP 1)

FINAL REPORT PROJECT 1: UMT COMPLAINT APP

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Contents

Executive summary of the prototype	3
The prototype design	4
The UI for the application with explanation	5
Potential commercial value and the pricing of the prototype	7
Lesson Learned	8
Conclusion	8
Reference	9
Github link	0

Executive summary of the prototype

The prototype of the UMT Complaint App aims to enhance convenience for students, staff, and lecturers in reporting issues promptly. While UMT currently offers a complaint system through the Aduan ICT website, its response time is often delayed, requiring staff and lecturers to wait for meetings to report problems. This delay prompted the need for a user-friendly mobile app accessible to all ages.

The core of this prototype is simplicity. It focuses on intuitive design, strategically placing buttons and features for ease of use. The app includes a straightforward app bar with clear titles to guide users and a simplified form that requires minimal input while ensuring authentication. Utilizing unobtrusive popups like snap bars, the app provides feedback on the reporting process without disrupting user flow.

By streamlining the design and user experience, the app aims to eliminate the need for detailed instructions. Simplifying the reporting process is expected to encourage more users to provide feedback swiftly, allowing UMT to take prompt actions in response to reported issues.

The prototype design

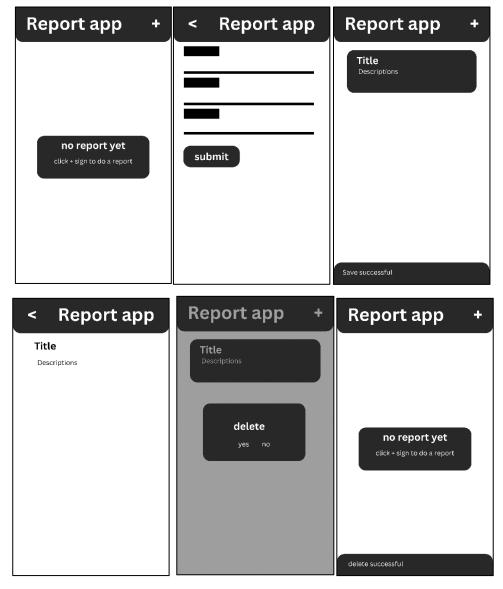


Figure 1: wireframe

The UI for the application with explanation

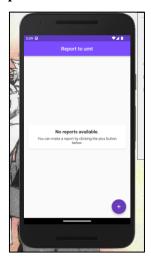


Figure 2: Home UI

The home page greets users with an app bar, a prominent button, and information indicating no reports are available yet. It guides users on how to create a report by clicking the "+" button.



Figure 3: Form View(left) and Successful Submission View(right)

Upon clicking the button, users are directed to a form (picture on the left) requiring them to input title, description, matrik number, and name. The absence of a matrik number ensures differentiation between users (students, staff, or lecturers). The name requirement ensures matching with the UMT system, making it impossible for strangers to submit reports. Once the form is completed and submitted, a confirmation pop-up appears on the updated home page (picture on the right), confirming the successful report submission.

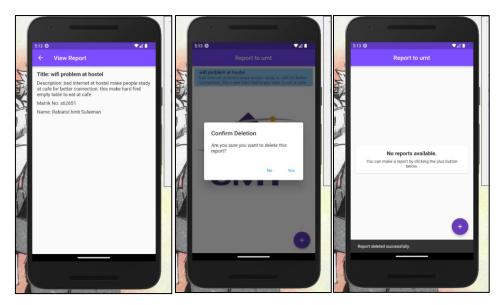


Figure 4: View Report Details (right) and Deletion Confirmation (middle and left)

Users can view their submitted report with a single tap, displaying all the information they previously entered (picture on the left). To delete a report, users can double-click on the report, triggering a confirmation prompt (pic on the middle). Upon confirming deletion, a pop-up confirms the successful deletion (picture on the right).

These features create a user-friendly experience, guiding users through report creation, providing feedback on submission, and enabling easy access to view or delete reports. Additionally, the requirement of specific information adds a layer of authentication and verification for submitted reports.

Potential commercial value and the pricing of the prototype

The potential commercial value of the complaint app might seem initially low because many universities or companies prefer voicing complaints during meetings. However, in reality, this method can be time-consuming, with an average meeting lasting around 50.6 minutes. There lies an opportunity for the complaint app to streamline this process by setting agendas beforehand, ensuring clarity, and maintaining focus during meetings.

Considering these factors, the draft pricing for the app could range between RM250-500. However, setting an exact price for a prototype can be challenging. The value depends on several factors such as development time, the developer's experience, and the complexity of the app. For the UMT Complaint app, a price range of RM50-100 for the initial purchase seems reasonable due to its simple coding and beginner-level development.

On the other hand, monthly maintenance and additional feature additions could be priced between RM50-1000. This higher monthly fee accounts for ongoing demands for feature additions and the effort required to ensure the app's smooth functioning over time. As these tasks can be time-consuming, the maintenance fee reflects the need for continuous attention and enhancements.

Lesson Learned

Developing an app isn't as straightforward as it might seem. Even for a seemingly simple application, the process can span weeks to months, encompassing decision-making, development, and troubleshooting. I've realized there's no shortcut to learning. Sometimes, the perception of simplicity doesn't negate the need for a comprehensive understanding or deep research.

I've faced challenges where I had to restart projects multiple times due to errors or gaps in my knowledge. Initially, I wanted to dive into complex app development, but that approach ended up consuming excessive time. Ultimately, I learned the value of starting with simpler projects. Although it took longer than expected, this approach ensured a smoother process and a better grasp of fundamental concepts. Each setback became a lesson. I had to accept that complex projects weren't feasible without a strong foundation in the basics. Embracing simplicity, despite its slower pace, allowed me to focus on refining my skills and understanding the nuances of app development, preventing unnecessary setbacks.

Conclusion

In conclusion, this project was a humbling experience that highlighted my existing knowledge and exposed areas for improvement. It taught me the vast diversity in coding approaches, showcasing numerous possibilities once the fundamentals are understood. Understanding the basics unlocks a multitude of pathways to create various types of applications.

Reference

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Github link

https://github.com/srabiatul/Project1_flutter.git