



**UNIVERSITY MALAYSIA TERENGGANU  
FACULTY OF OCEAN ENGINEERING TECHNOLOGY & INFORMATICS**

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

**PROJECT REPORT 1  
[UMT SWIMMING POOL BOOKING APP]**

**PREPARED BY:  
NUR IZZATI BT ABDUL MANAF (S61964)**

**PREPARED FOR:  
DR. MOHAMAD NOR HASSAN**

**[BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH HONOURS] SEMESTER II 2022/2023]**

## Table of contents

### Contents

Table of contents .....	2
1.0 Executive of summary layout.....	3
2.0 Prototype Design.....	4
3.0 The UI for the application with explanation .....	6
4.0 Potential Commercial value and the pricing of the prototype .....	8
4.1 Potential commercial value.....	8
4.2 Pricing of the prototype .....	8
5.0 Lesson Learned.....	9
6.0 Conclusion.....	10
7.0 REFERENCE.....	11
Github Link: .....	11

## 1.0 Executive of summary layout

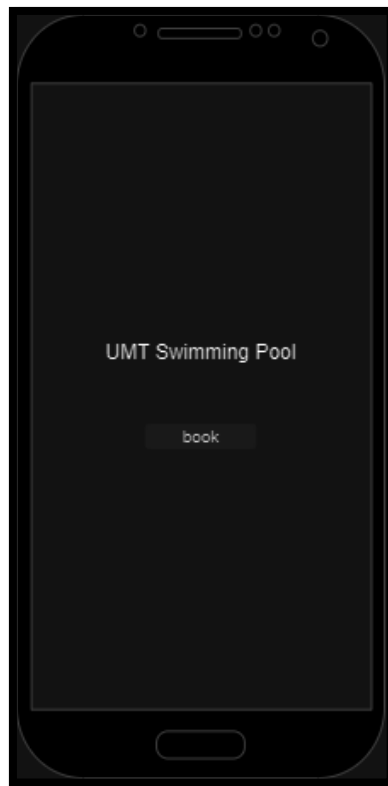
The UMT Swimming Pool Booking App represents a significant advancement in optimizing the utilizing of our university's facilities. This app is developed to enhance accessibility and personalization for our UMT community members engaging in fitness activities.

With a user-friendly interface, the app simplifies the process of scheduling swimming sessions. Users can effortlessly navigate through the app for booking swimming pool without have to waiting in queue. At the core of its functionality are three pivotal features that enhance user experience: flexible date selection, time preferences, and booking confirmation reviews.

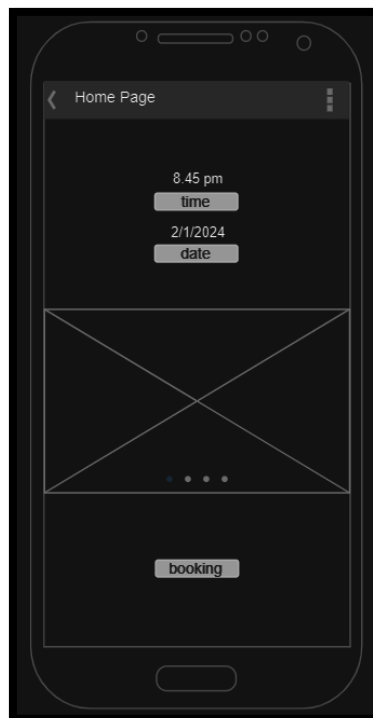
In the home screen, the app offers users flexibility by allowing them to choose their preferred date and time for swimming session. The user interface simplifies the process, allowing users to navigate through available dates effortlessly. In the booking confirmation page, the app facilitates a streamlined confirmation process, allowing users to review and confirm their bookings. This step serves as a valuable mechanism to double-check selections, providing users their scheduled swimming sessions.

In conclusion, the UMT Swimming Pool Booking App stands as a testament to our commitment to providing a personalized and user-centric approach to fitness management. With features like date selection, time preferences, and booking confirmation reviews, this app sets a new standard for efficiency, and satisfaction within our UMT community.

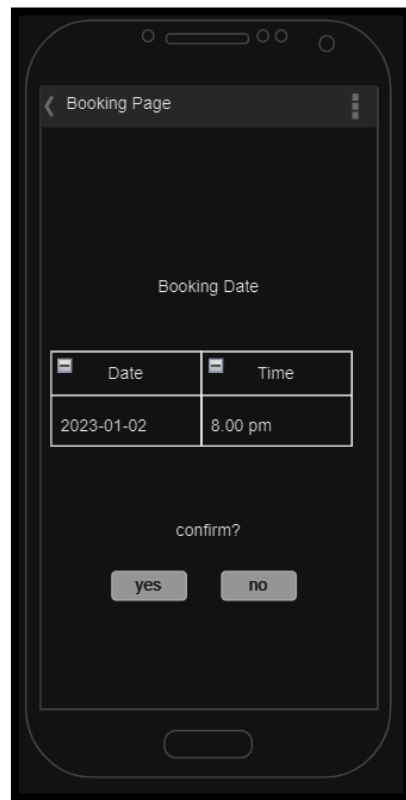
## 2.0 Prototype Design



*Welcome page screen prototype*

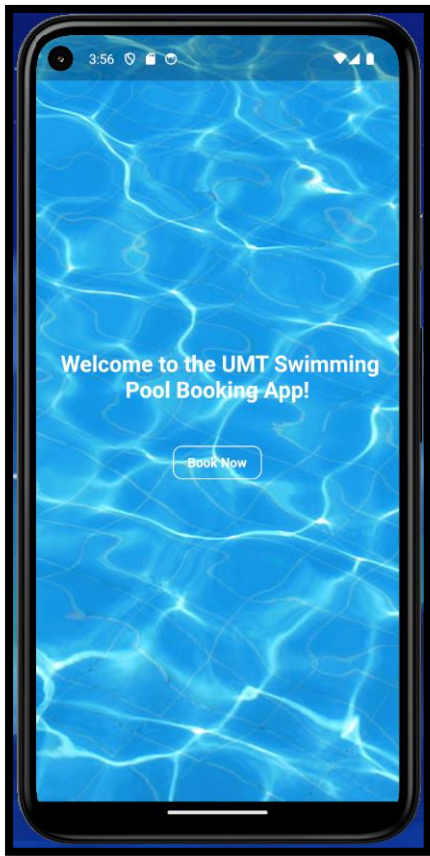


*Home page screen prototype*

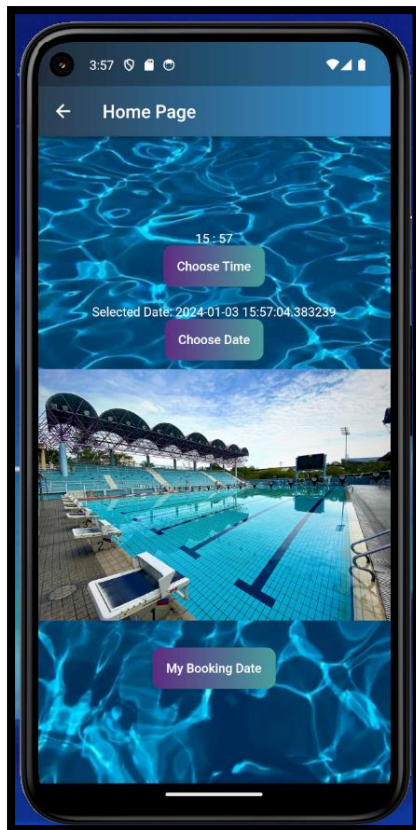


*Booking page screen prototype*

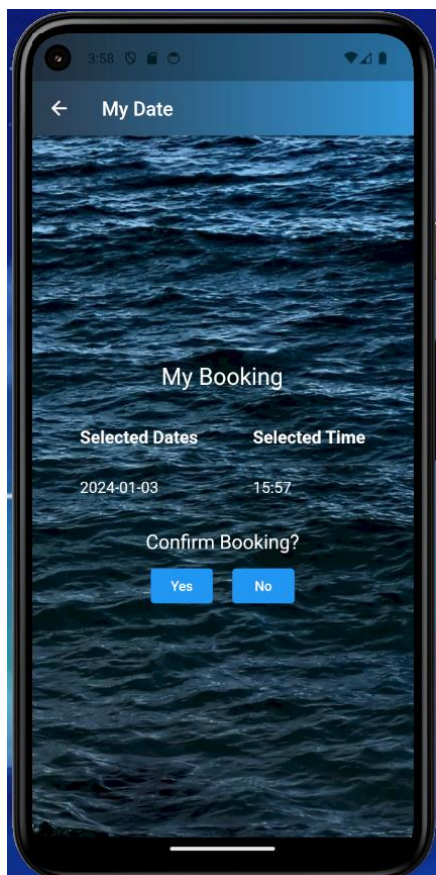
### 3.0 The UI for the application with explanation



On the welcome page, there is text that welcoming the users to the app with appealing background image that resembles the pool. Under the page, there is 'Book now' button that when the users clicked it, they will be redirected to the home page.



On the home page, there is app bar on top of the apps that labeled as 'Home Page' referring to the current page. Water-ish image is set as background to make the user interface more appealing. On the screen, the user can choose their preferred date and time for booking pool by clicking the button that is displayed on the screen. For reviewing the users' booking date, the users can click on 'My Booking Date' button on the screen. There is also UMT swimming pool that is displayed as the slideshow image.



On my date page, there is app bar on top of the apps that labeled as 'My Date 'referring to the current page. On the screen, the selected date and time by users is displayed on this page. At bottom of the page, the users can confirm booking by clicking 'yes' or 'no' button. By clicking 'yes' the alert dialog will be displayed. By clicked 'no', both selected date and time will be deleted from booking page.

## 4.0 Potential Commercial value and the pricing of the prototype

### 4.1 Potential commercial value

This project mainly focused on UMT student with approximately 10,000 students. With the existence of this apps, surely it will make the process of booking swimming pool much more easier. Rather than waiting in line for the availability which is unconfirmed, users can save their time with just one tap and enjoy the ease of selecting confirmed time slots, ensuring a seamless and hassle-free experience with the UMT Swimming Pool Booking App.

This apps holds promising commercial value by offering opportunities for revenue generation through subscription models. This apps streamlining the reservation process, offering a user-friendly interface, and providing real-time availability updates, the app serves the needs of both individuals and businesses, ensuring a seamless and convenient experience for accessing pools. By focusing on user interface and operational efficiency, the apps positioned itself as an effective solution for the UMT community, ready to meet the demands of a wide audience.

### 4.2 Pricing of the prototype

Dive into the UMT Swimming Pool prototype for just \$0.99 a month. By selecting our basic plan, users can access cost-effective features for their swimming pool reservations. Furthermore, for early adopters, we extend the exclusive benefit of enjoying the first three months at no cost. This offer provides an excellent opportunity to experience the



convenience and efficiency of our service without incurring any initial expenses.

Choosing our yearly subscription not only guarantees you a full year of continuous access to premium pool features but also includes a 20% discount, bringing the total cost down to just \$9.99. Our dedication to ensuring user satisfaction is reflected in the various flexible payment options we provide, ensuring that your experience with the UMT Swimming Pool prototype is both enjoyable and economical.

## 5.0 Lesson Learned

Working on this project not only made me better at Flutter but also added some knowledge to my coding skills. I figured out how to pass info between pages, connecting the pages by using constructors. Moreover, I've gained proficiency in handling date and time in Flutter, particularly through the insightful utilization of the **.toLocal()** method, which returns DateTime values in the local time zone.

Additionally, the project has enhance my skill by introducing me to exciting functionalities, such as implementing image slideshows, further enriching my knowledge and capabilities in Flutter development. I learned to use varieties colors and images to make user interface more appealing for the users.

## 6.0 Conclusion

In conclusion, the UMT Swimming Pool Booking Application stands as a transformative solution, not only increasing user convenience in scheduling swimming sessions but also presenting a robust and diverse commercial model. This project not only signifies a commitment to user satisfaction but also opens doors for potential expansions and continuous improvement.

This project, which includes technological innovation and business element, is ready to redefine the way our UMT community engages with fitness facilities, ensuring a seamless and sustainable approach for the foreseeable future.

## 7.0 REFERENCE

*showDatePicker function - material library - Dart API. (n.d.-b).*

<https://api.flutter.dev/flutter/material/showDatePicker.html>

*showTimePicker function - material library - Dart API. (n.d.).*

<https://api.flutter.dev/flutter/material/showTimePicker.html>

*Flutter Mapp. (2022b, October 20). Flutter DatePicker Widget [Video]. YouTube.*

<https://www.youtube.com/watch?v=ntwS8G-LWFU>

*Joshi, D. (2021, December 7). A deep dive into PageView in Flutter (With custom transitions). Medium.*

<https://medium.com/flutter-community/a-deep-dive-into-pageview-in-flutter-with-custom-transitions-581d9ea6dded>

*Fernando, I. (2021, November 20). Creating an image carousel in Flutter - LogRocket*

*Blog. LogRocket Blog.* <https://blog.logrocket.com/creating-image-carousel-flutter/>

Github Link:

[https://github.com/notpunpun/swimming\\_pool\\_app.git](https://github.com/notpunpun/swimming_pool_app.git)