UNIVERSITI MALAYSIA TERENGGANU

FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

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FRAMEWORK-BASED MOBILE APPLICATION DEVELOPMENT

CSM 3114

PROJECT 1 ASSIGNMENT

(I-ATTENDANCY APPLICATION)

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1. EXECUTIVE SUMMARY OF THE PROTOTYPE

The I-Attendancy application is a revolutionary mobile app prototype designed to enhance the daily lives of ABC University's community members. This innovative solution aims to provide real-time information, smart services, and a seamless experience for users. By intelligently connecting various aspects of university life, the application contributes to improved efficiency and a heightened sense of community on campus. The goal is to propel ABC University towards the realization of a smart campus environment.

I-Attendancy application serves as a digital attendance management solution which is designed to simplify record-keeping for various entities, including educational institutions and businesses. I-Attendancy application allows users to directly add groups, add members in the created groups, and effortlessly take attendance by ticking the 4 icons.

2. THE PROTOTYPE DESIGN

Below are the protype design that I have designed in Canva before starting the coding.

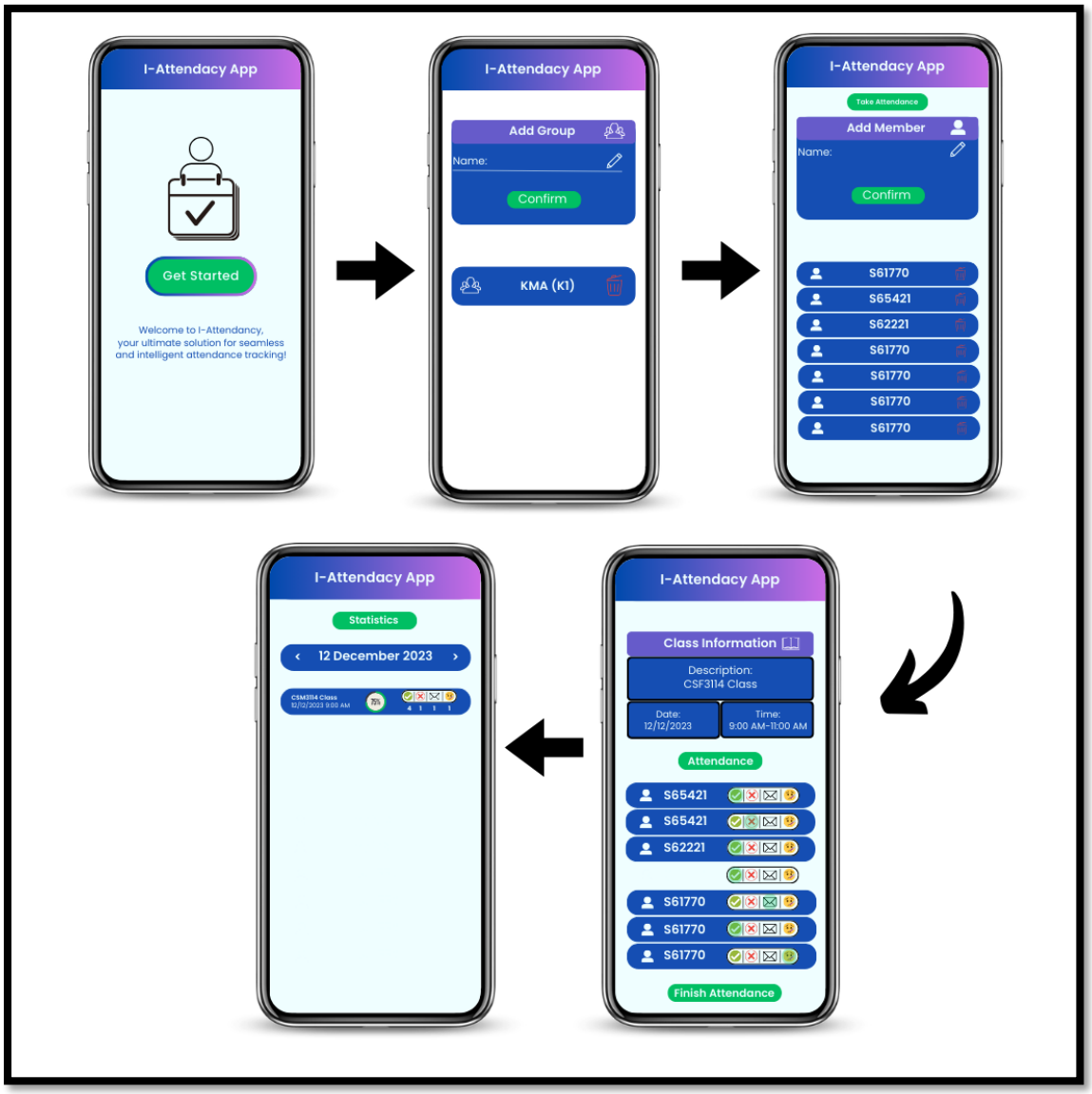

Figure 1: Prototype Design

3. THE UI FOR THE APPLICATION AND EXPLANATION

3.1 THE UI FOR THE APPLICATION

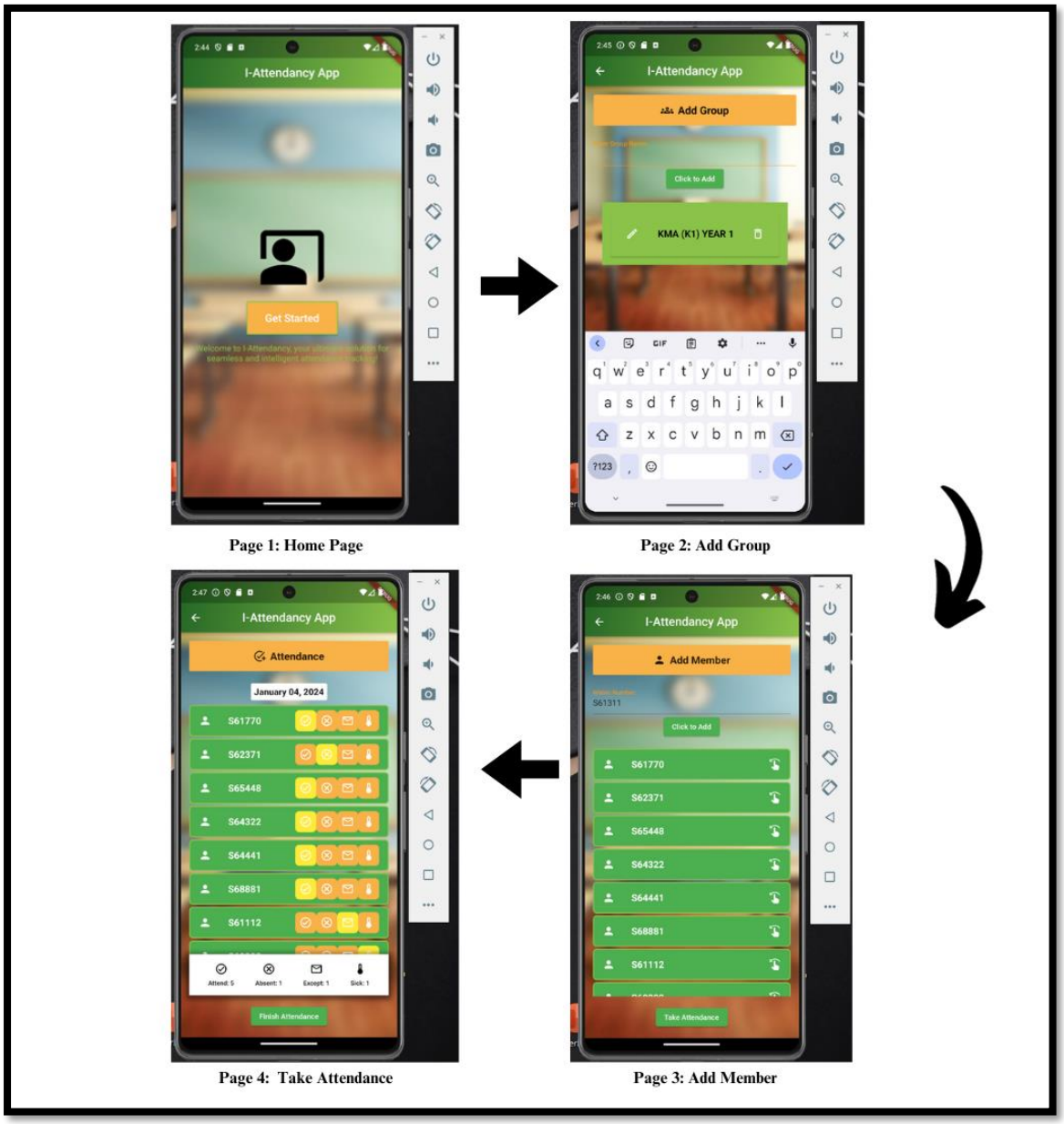

Figure 2: The UI for Application

3.2 THE EXPLANATION

Page 1: Home Page

When user enter the application, user will land on the Home Page (AHomePage.dart). The Home Page welcomes user with an application logo, a "Get Started" button, and a brief introduction to the app's purpose. Tap the "Get Started" button. This action triggers navigation to the next screen (BAddGroup.dart).

Page 2: Add Group

For the Add Group screen (BAddGroup.dart), user will see an interface to add a new group. Enter the group name in the provided text field. Tap the "Click to Add" button to add the group. The added group will appear in a list on the same screen.

Each group in the list is presented with ‘Edit’ options, tap the edit icon to modify the group name. At the right pane is presented with ‘Delete’ options, tap to delete the group name and the data of members will also be removed. Next, tap on the group name to view and manage members (this action navigates to the CAddMember.dart screen).

Page 3: Add Member

On the Add Member screen (CAddMember.dart), user can add members to the selected group. Enter the matric numbers of members in the provided text field. Tap the "Click to Add" button to add members. The added members will appear in a list on the same screen. There is an option to dismiss the member by sliding the list to the left. It will remove the member from the list.

Page 4: Take Attendance

Once members are added, user can take attendance. Tap the "Take Attendance" button. This action navigates to the Take Attendance screen (DTakeAttendance.dart). The list of added members is passed to this screen.

On the Take Attendance screen, user can mark attendance for each member by tapping the corresponding icons (Attend, Absent, Except, Sick). The screen provides options for user to mark the attendance. Once user click ‘Finish Attendance’ button, the ‘Confirmation Taking Attendance’ and ‘Succeeded’ dialog box will pop-up.

4. POTENTIAL COMMERCIAL VALUE AND THE PRICING OF THE PROTOTYPE

4.1 POTENTIAL COMMERCIAL VALUE

The I-Attendancy application presents a valuable commercial proposition for ABC University, offering a comprehensive solution to streamline attendance tracking and enhance community engagement within academic institutions. The potential commercial value of the prototype is multifaceted, catering to the diverse needs of universities and colleges seeking efficient attendance management and improved collaboration among students and faculty.

Key Features Driving Commercial Value:

Efficient Attendance Tracking: The application's attendance tracking system simplifies the process for instructors and administrators, saving time and resources.

Real-time updates and status notifications ensure accurate and up-to-date attendance records.

Community Engagement: The app fosters a sense of community by providing a platform for group creation and member management.

Seamless communication between students and faculty through attendance-related interactions enhances overall engagement.

Smart Campus Environment: The I-Attendancy prototype aligns with the vision of creating a smart campus environment, showcasing ABC University as a technologically progressive institution.

4.2 PRICING OF THE PROTOTYPE

To unlock the full commercial potential of the I-Attendancy application, a strategic pricing model is proposed. The aim is to offer the application at a price point that balances affordability for educational institutions and the inherent value it brings. The pricing strategy considers the following considerations:

Affordability: The pricing structure is designed to be affordable for universities and colleges of varying sizes, ensuring accessibility for a broad range of educational institutions.

Tiered Pricing Plans: Implementing tiered pricing plans allows flexibility, with different packages catering to the diverse needs and capacities of educational institutions.

Basic, Standard, and Premium plans can be introduced, offering varying levels of features and scalability.

Subscription-Based Model: A subscription-based model ensures a steady revenue stream for continuous app improvement and support services.

Subscription plans could be offered on an annual or semester basis.

Customization Options: Institutions may have unique requirements, and providing customization options could be offered as an additional service, enhancing the overall value proposition.

Pilot Programs and Discounts: Initial adoption can be facilitated through pilot programs, allowing institutions to experience the benefits before committing to a full subscription.

Introductory discounts for early adopters can incentivize quicker adoption and build a user base.

5. LESSON LEARNED

Throughout the development of the I-Attendancy application, several key lessons were learned. The importance of user-centric design, seamless navigation, and responsiveness were emphasized. Understanding the balance between simplicity and functionality played a crucial role in creating an effective prototype. User feedback and iterative testing were essential in refining the application's usability and overall experience.

6. CONCLUSION

In conclusion, the I-Attendancy application stands as a testament to the potential impact of mobile applications in transforming university life. With a focus on simplicity, adaptability, and intelligence, the application offers a glimpse into the possibilities of a smarter campus environment. As ABC University explores opportunities for commercialization, the I-Attendancy application paves the way for future innovations that empower and connect university communities.

7. REFERENCE

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