UNIVERSITY MALAYSIA TERENGGANU

FACULTY OF OCEAN ENGINEERING TECHNOLOGY & INFORMATICS

[CSM3114]

FRAMEWORK – BASED MOBILE APPLICATION DEVELOPMENT

ASSIGNMENT 1 – STUDENT GRAB

[DEVELOPING THE UNIVERSITY PERSONAL MOBILE APP PROTOTYPE]

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TABLE OF CONTENT

EXECUTIVE SUMMARY OF THE PROTOTYPE

The Student Grab project is an ambitious initiative to prototype a dedicated ride-sharing application catered specifically to the transportation needs of students within the campus environment. Utilizing the Flutter framework, known for its cross-platform capabilities and efficient development, the application aims to offer a simplified yet impactful user experience. At its current stage, the prototype will focus on three fundamental features the ability for students to request a ride, register as a driver, and provide valuable feedback. This streamlined approach allows for a focused development process, ensuring that these core functionalities are robustly implemented and thoroughly tested before any potential expansion of features.

For users seeking transportation, the application's request ride feature will offer a straightforward interface, allowing them to effortlessly request rides within the campus boundaries. Simultaneously, the register as a driver feature will facilitate an easy onboarding process for students interested in becoming drivers, contributing to the growth and sustainability of the ride-sharing service. Recognizing the importance of user feedback, the application will also enable users to provide insights and suggestions, fostering a sense of community engagement and continuous improvement.

As this project is currently in the prototype phase, the emphasis is on refining these essential features and establishing a solid foundation for future development. Regular updates and user feedback will be instrumental in shaping the trajectory of the application, ensuring that subsequent iterations align closely with the evolving needs and preferences of the student user base. The prototype's budget is allocated with precision to cover the development and testing of these features, creating a manageable scope that sets the stage for the application's potential evolution.

PROTOTYPE DESIGN

      Mobile app wireframes are like a roadmap, dividing the screen into zones for pictures, action buttons, and text labels. Clickable and with basic transitions, they transform into playable prototypes, offering a sneak peek into the app's flow. From e-commerce to games, wireframes pave the way for user-friendly mobile experiences before designers add the finishing touches.

USER INTERFACE

This report outlines the UI design of Student Grab, a user-friendly ride-sharing app for students. The homepage prioritizes clarity with dedicated search and driver registration buttons. The intuitive search page simplifies date/time selection, presenting driver information in cards. Requesting a ride or becoming a driver is just a click away, and an accessible feedback form encourages user input, creating a seamless experience for the campus community.
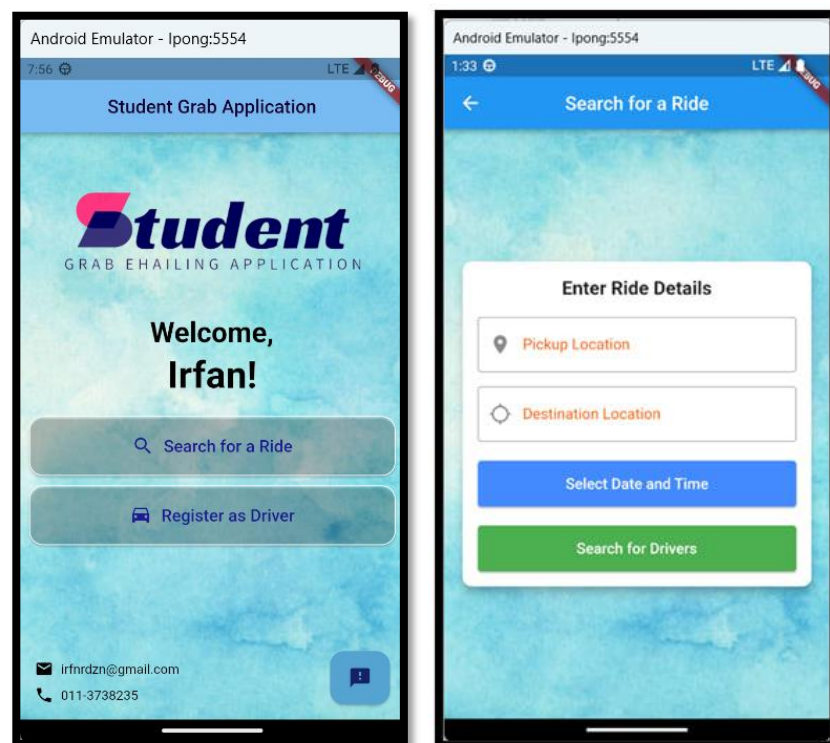
Student Grab, a student ride-sharing app, features a home screen with a background image, a welcome message, and buttons for searching a ride or registering as a driver. A feedback button is at the bottom right. The search page includes a form for ride details and buttons for date/time selection and driver search. Sample drivers are simulated when searching, and the driver list is displayed on a new page.
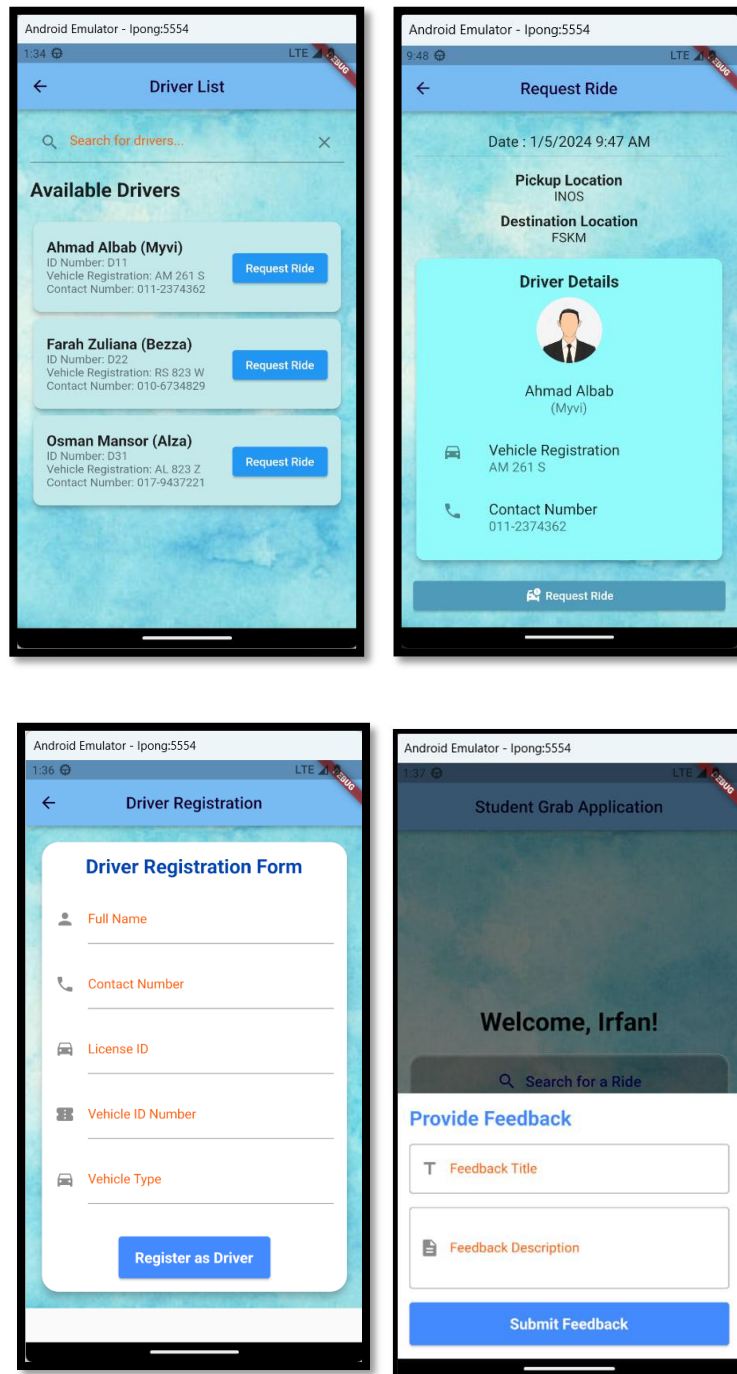
The driver list page showcases available drivers with cards displaying essential details, leading to a "Request Ride" confirmation page. After clicking, an alert notifies the user of the submitted ride request awaiting driver acceptance. The registration page, with a welcoming background, captures user details for driver registration, triggering a confirmation message upon clicking "Register as Driver". Student Grab's feedback form enables users to share thoughts, receiving a thank-you message; although not database-connected, its clear layout provides a straightforward way for users to communicate insights with developers.

POTENTIAL COMMERCIAL VALUE

The Student Grab prototype holds significant potential commercial value within the university and college campus environments. The dedicated focus on the transportation needs of students, coupled with the streamlined features of requesting rides, registering as a driver, and providing feedback, addresses a specific niche in the market. The prototype's user-friendly interface and efficient functionalities have the potential to enhance the overall student experience, making it a valuable tool for campus communities.

The potential commercial value lies in the convenience and accessibility offered to students, creating a reliable and student-centric transportation solution. The prototype, with its essential features, can be expanded and customized to meet the unique requirements of different educational institutions, potentially leading to partnerships and collaborations.

PRICING OF THE PROTOTYPE

The pricing strategy for the Student Grab prototype should consider the value it brings to the campus community. A tiered subscription model could be implemented, offering basic functionality for free with the option to upgrade for additional features and benefits. Potential pricing tiers could include:

1. Basic Plan (Free) : Access to essential ride-request and driver-registration features, supported by ads.
2. Premium Plan (Paid) : Ad-free experience, priority matching for ride requests, and enhanced driver visibility.
3. Campus Partnership Plan : Tailored solutions for educational institutions, including customization options, analytics, and campus-specific features.

Pricing models could be flexible, catering to both individual users and institutions. Additionally, partnerships with student organizations, campus services, or businesses could offer discounts or promotional pricing.

LESSON LEARNED

1. User-Centric Design : Prioritizing user experience and simplicity in design is crucial. The wireframes and UI design showcase the importance of creating an intuitive and accessible application.

2. Focused Development : Starting with a minimal set of features allows for focused development, ensuring that core functionalities are robustly implemented and tested before expanding.

3. Iterative Development : Regular updates and user feedback are integral to shaping the application's trajectory. Iterative development cycles enable the incorporation of user insights and preferences.

4. Community Engagement : The inclusion of a feedback mechanism fosters community engagement and continuous improvement. Actively involving users in the development process contributes to a sense of ownership and loyalty.

CONCLUSION

The Student Grab prototype, built on the Flutter framework, presents a promising solution to the transportation needs of students on campus. The combination of a streamlined design, essential features, and a user-friendly interface positions the prototype as a valuable tool for the campus community. The potential commercial value is significant, with opportunities for customization and expansion to cater to the diverse needs of educational institutions.

As the project progresses, a flexible pricing strategy that considers both individual and institutional users will be key to its success. The lessons learned emphasize the importance of user-centric design, focused development, iterative improvement, and community engagement in creating a successful and sustainable ride-sharing application for students.

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