

# UNIVERSITY MALAYSIA TERENGGANU FACULTY OF OCEAN ENGINEERING TECHNOLOGY & INFORMATICS

#### [CSM3114]

#### FRAMEWORK-BASED MOBILE APPLICATION DEVELOPMENT

### INDIVIDUAL PROJECT 1 FRAMEWORK (CAMPUS MARKETPLACE APPLICATION)

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#### 1 EXECUTIVE SUMMARY

The Campus Marketplace Application project was conceived to address the specific needs of the ABC University community, aiming to simplify daily activities through a user-friendly and efficient platform. This executive summary offers a concise glimpse into the prototype's development, highlighting its design, potential commercial value, and key takeaways. The application serves as a centralized hub for seamless buying and selling within the campus community, fostering a sense of unity and accessibility to campus-related goods and services. Utilizing a scalable and modular architecture with modern technologies, the prototype prioritizes simplicity and functionality in its user interface design. Detailed prototypes and wireframes have been meticulously crafted to showcase the intuitive layout and smooth flow of the application, ensuring a positive and tailored experience for ABC University's community members.

#### 2 PROTOTYPE DESIGN

Prototype design that I make before start development process

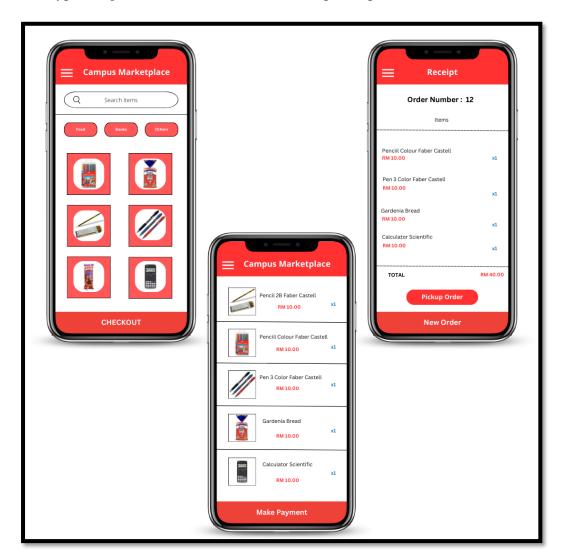


Figure 1 : Prototype Design

#### 3 UI APPLICATION AND EXPLANATION

#### 3.1 UI FOR APPLICATION

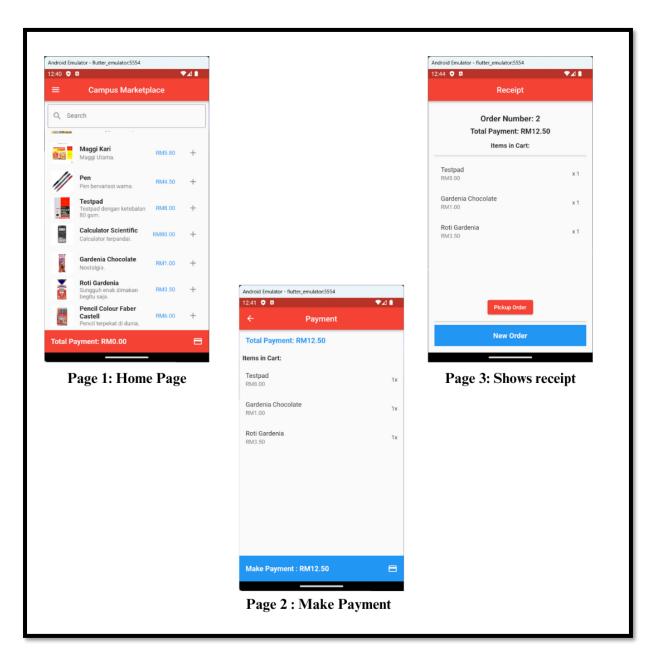


Figure 2: User Interface for Application

#### 3.2 UI EXPLANATION

#### Page 1: Home Page

The home page of the Campus Marketplace Application presents a user-friendly interface designed for a seamless shopping experience. The top navigation bar displays the app's title, "Campus Marketplace," providing a clear identity. The main content includes a search bar for easy item discovery, followed by a dynamic list of items with images, names, descriptions, and prices. Users can effortlessly add items to their cart, updating the total payment and quantity in real-time. A distinctive red container at the bottom serves as the checkout button, displaying the total payment and prompting users to proceed to payment with a single tap. The application also includes a drawer menu for quick access to features like profile details, order history, and settings, contributing to a user-friendly and enjoyable shopping interface.

#### Page 2: Payment Screen

The Payment Screen in the Campus Marketplace Application features a user-friendly interface with a clear AppBar displaying the title "Payment." The screen displays the total payment amount prominently, followed by a concise list of selected items with names, prices, and quantities. Users can seamlessly finalize their purchases with a vibrant blue "Make Payment" button, triggering a confirmation dialog. The design prioritizes clarity and efficiency, guiding users through the payment process and enhancing the overall user experience in the application.

#### Page 3: Show Receipt

The Receipt Screen in the Campus Marketplace Application offers a concise and organized layout for users to review their purchase details. The AppBar, titled "Receipt," maintains a centralized and clean design. The body of the screen displays essential information, including the order number, total payment, and a list of selected items with prices and quantities. Anytime user can pickup an order at the shop and click button pickup order for confirmation. A button to show a gratitude dialog dynamically appears, and a "New Order" button allows users to initiate a new purchase. The UI prioritizes clarity, providing users with a straightforward and visually pleasing experience while acknowledging their transaction and encouraging future engagement within the application.

## 4 POTENTIAL COMMERCIAL VALUE AND THE PRICING OF THE PROTOTYPE

#### 4.1 POTENTIAL COMMERCIAL VALUE

Mobile and wireless devices are enabling organizations to conduct business more effectively. Mobile applications can be used to support e-commerce with customers and suppliers, and to conduct e-business within and across organizational boundaries (Nah et al., 2005). The Campus Marketplace Application exhibits significant potential commercial value, positioned as an e-commerce platform tailored for campus communities. Its user-friendly interface fosters a positive and engaging experience, appealing to a college or university demographic. The application's modular structure enables future expansions and enhancements, including additional functionalities to optimize user experience. With potential monetization avenues such as transaction fees, premium features, and collaborations with local businesses or campus events, the application can generate revenue streams. The emphasis on a "New Order" feature encourages repeat usage, contributing to user loyalty. Strategic marketing efforts and partnerships could further amplify the application's reach and commercial viability within the targeted market.

#### 4.2 PRICING OF THE PROTOTYPE

In general, competition and cost-based methods are widely adopted for pricing products, with competition-based pricing focusing on examining the prices set by manufacturers of similar products (Paramasivan & Amrita, 2020). When determining the pricing strategy for the prototype of the Campus Marketplace Application, a comprehensive approach is essential, taking into account factors such as development time, project complexity, the inclusion of features, and the expertise of the development team. Moreover, the chosen pricing models, whether based on hourly rates or fixed project costs, play a crucial role in influencing the overall cost estimate. It is imperative to conduct a thorough analysis of the competitive landscape and market trends to ensure the application's pricing aligns with industry standards and offers a competitive yet sustainable value proposition. Additionally, considering the potential for future feature expansions and scalability is vital in devising a pricing strategy that caters to the evolving needs of users and remains competitive within the dynamic marketplace.

#### 5 LESSON LEARNED

Embarking on the development of the Campus Marketplace Application has provided invaluable lessons in understanding the intricate process of creating a functional and user-friendly software solution. Through this project assignment, I've learned the significance of meticulous planning and well-defined project scopes to manage development costs effectively. The pricing considerations for the prototype underscored the importance of weighing development time, hourly rates, and design costs. Additionally, the modular structure of the application taught me the flexibility to adapt and expand features for future iterations. Collaboration with a skilled development team and strategic consideration of potential monetization avenues emphasized the business aspects of app development. This project has not only honed my technical skills but also deepened my appreciation for the comprehensive approach required in transforming an idea into a tangible, commercially viable product.

#### **6 CONCLUSION**

Developing the prototype for the Campus Marketplace Application aimed at facilitating the daily lives of ABC University's community is a commendable initiative. By creating a user-friendly platform tailored to the university's needs, the application has the potential to streamline various aspects of campus life, from buying and selling items to fostering social connectivity within the community. The emphasis on ease of use and convenience aligns with the goal of enhancing the overall university experience for students, faculty, and staff. As this prototype progresses, it stands as a promising solution to address the unique requirements of ABC University's community, showcasing the impact that thoughtful technological solutions can have on simplifying and improving daily routines.

#### 7 REFERENCE

Paramasivan, K., & Amrita, M. (2020). Development of mobile application for product pricing. *ResearchGate*.

https://www.researchgate.net/publication/344133758 Development of Mobile Appli cation for Product Pricing

Nah, F. F., Siau, K., & Sheng, H. (2005). The value of mobile applications. *Communications of the ACM*, 48(2), 85–90. <a href="https://doi.org/10.1145/1042091.1042095">https://doi.org/10.1145/1042091.1042095</a>

Napoli, M. L. (2019). *Beginning flutter: A Hands On Guide to App Development*. John Wiley & Sons.

#### 8 GITHUB LINK

https://github.com/ismifariezz/CSM3114/tree/main/S62371%20Project%201%20FARIS%20

ISKANDAR%20BIN%20ABD%20RAHMAN/campus\_apps