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# i-JaMCSIIX 2022

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

## EXTENDED ABSTRACT BOOK

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Extended abstract

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## Click Car Services

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**Abstract** – Click Car Services is a mobile application that provides car rental services targeting people who live in the city and tourist attraction areas in East Malaysia. The application will help the tourists and locals by having a proper and efficient mobile application to rent cars instantly. Existing car rental services do not offer a secure and safer system for managing the user's personal information and data, which can lead to an issue of fraud or identity theft. Furthermore, with the digitalization evolution, the application may help to provide a quick response in terms of documentation, deal, and agreement. Users can get an instant car rental in real-time based on the location and time by using the application. This function can enhance the user's experience without going through many procedures and hustles when renting a car. The method used for this project is the three Waterfall methods which consist of analysis, requirement specification, and design. In a nutshell, this application provides many help to the users by offering easy access to car rental through mobile devices, enhancing users' experience, easy access to local attractions, and upgrading the transportation rental system in East Malaysia.

**Keywords** – car rental, mobile application, security, East Malaysia, digitalization

### I. INTRODUCTION

Click Car Services is a mobile application that provides car rental services to the public that is dedicated to East Malaysia's population due to the lack of a proper rental system. In the use of this application, it involves two parties, namely car rental service providers and car renters. Click Car Services are created to facilitate the rental process to the public with the system used and upgraded, especially in terms of host and tenant security. This system is convenient because it only needs to be accessed via mobile phone without having to meet with hosts to make it easier for renters to find a rental car location quickly. This mobile application also helps to cater the domestic tourist in Sabah and Sarawak by provide easy car rental service nearby tourist attraction areas. Click Car Services will provide a less time-consuming preparation of the application especially for documentation and agreement.

### II. MATERIALS

Click Car Services is an application that uses User Interface (UI), virtual assistance technology, and the Global Positioning System (GPS) concept to develop the product. User Interface (UI) is the graphical and usually touch-sensitive display on a mobile device, such as a smartphone or tablet, that allows the user to interact with the device's apps, features, content, and functions. Mobile user interface (UI) design requirements are significantly different from those for desktop computers. The smaller screen size and touch screen controls create special considerations in UI design to ensure usability, readability, and consistency (Miraz, et al., 2021), while Global Positioning System (GPS) is a system that broadcasts highly accurate navigation pulses to users on earth (Tom S., 2022). Click Car Services application contains the display devices, user tracking devices, and TAC code. Mobile data or Wi-Fi access is needed to download the application on mobile devices to use Click Car Services. Besides that, this application can be downloaded by any type of operating system either Android or iOS users, and it is also a free App to make it easier to get more tons of users using this Click Car Application, which can be downloaded on Google PlayStore and Apple AppStore to make it convenient to other users.

### III. METHODS

The method that was used is the Waterfall method which consists of three parts that are analysis, requirement specification and design. In the analysis phase, this application is developed by making analyses in terms of cost, yield, and feasibility. The creation of Click Car Services is to analyze the current situation by making observations about the needs of the community and setting target concepts to give them an easier path. The requirement specification phase is potential requirements, deadlines and guidelines for the project are analyzed and placed into a functional specification. In this stage, it will handle the defining and planning of the Click Car project without mentioning specific processes. Lastly, the design phase is the general perspective on the design, structure, instructional strategy, learning theory, media type, and technology involved. The team creates the system using the predetermined requirements. Besides, the team sets specifications like the programming language or hardware needs at this phase, but no coding is done.

The advanced feature for Click Car App development is:

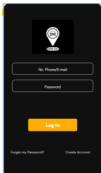

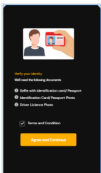
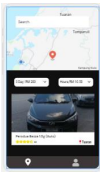
- a) In - App Camera: The function will allow users to take pictures or document.
- b) Custom Relation Management (CRM): Enables users to deliver emails, discount coupons and other promotional materials.
- c) Real Time Tracking: Users & administration can follow the live location of the automobile rental on the map using GPS.
- d) Online Payment: Can make a prepaid booking by using credit/debit card.
- e) Fare Calculator: Uses its own algorithm to determine price depending on the vehicle picked and the length of time customer needs. For instance, Perodua Bezza, 1 hour/RM10.50.

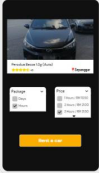

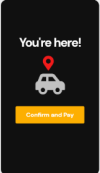



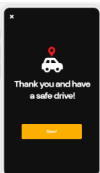
The Click Car service is where anyone can rent a car simply from their smartphone. Click Car application provides comfortable and safe services in East Malaysia. This include Kota Kinabalu, Sandakan, Tawau, Ranau, Semporna, Kuching, Bintulu, Sibu, Miri, etc. Click Car application provide wide range of car ranging from affordable ones to luxury ones. Such as Alza, Myvi, Axia, Bezza, Preve, Honda Civic, Nissan Almera. Etc.

### IV. RESULTS AND FINDINGS

Click Car Services is an application to help people, to be more specific, the East Malaysia population, international and local tourists, and those people with no cars. Click cars application will help these people to rent a car wherever they are with a hassle-free process of renting. Click Car application used the concept of AR technology, virtual assistant, and GPS to guide the consumer in reaching the car rental destination. In this application, there will be a package for tourists to choose and ride wherever they want to go. There are more people nowadays that use their smartphones, therefore we chosen to develop an application since smartphones are more convenient and efficient.

Table 1. The 11 processes of Using the Application

Step 1	Step 2	Step 3	Step 4
 <p>Register for new user and login.</p>	 <p>Registration process 1: Verify identities, such as fill in name email, phone, and password.</p>	 <p>Registration process 2: This step needs the customer to selfie with their ID or Passport, upload a driver's license, and click on terms and conditions to continue to the next process.</p>	 <p>This is the "HOME" of the apps. It has a "search package" of the car rental, the list of car rentals and the customer profile</p>

Step 5	Step 6	Step 7	Step 8
 <p>Next is to order the car rental using the apps. The customer will pick the car, the packages or the hours of the car will be used to be rented.</p>	 <p>This is to find the nearest car rental location.</p>	 <p>Once the car rental is located, the payment will proceed.</p>	 <p>After the car is rented, the verification will be given to unlock the car.</p>
Step 9	Step 10	Step 11	
 <p>After the verification code is given, the customer will need to do the inspection process.</p>	 <p>Last but not least, is to upload the exterior car condition photo, interior car inspection photo, and lastly to check on the fuel level.</p>	 <p>Lastly, after being done with the final check, the customer now can use it.</p>	

## V. CONCLUSION

In this modern era with technological developments, most people can carry out their daily life with the technology that always simplifies affairs and work. Therefore, Click Car Services also takes advice and opportunities in simplifying people's lives, by giving and opening opportunities to them to facilitate the affairs of service providers and service users. Looking at the current situation of the people living in East Malaysia, especially in Sabah and Sarawak, it opens opportunities for them to use this application either as a service provider that is a car or as a service user that is a renter. By using AR technology which helps in upgrading the system of car rental companies, it is very easy for East Malaysians as well as international and local tourists who want to rent a car to go to any destination. Hopefully, with this innovation, it can help people to rent cars more easily.

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## REFERENCES

- [1] Longsdon, T. s. (2022). GPS | Definition, Types, Uses, & Facts | Britannica. In *Encyclopædia Britannica*. <https://www.britannica.com/technology/GPS>
- [2] Lewis, S. (2019). *What is waterfall model?* - definition from *whatis.com*. SearchSoftwareQuality. <https://www.techtarget.com/searchsoftwarequality/definition/waterfall-model>
- [3] Miraz, M. H., Ali, M., & Excell, P. S. (2021). Adaptive user interfaces and universal usability through plasticity of user interface design. *Computer Science Review*, 40, 100363.