

E-Grocery Application with Geolocation and YOLO Algorithm

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Abstract—Online grocery becomes more popular nowadays because people can purchase groceries without going to the physical store. There are several online grocery applications such as BungkusIt and HappyFresh. However, most of these applications only deliver groceries to some areas, especially in the city. At the same time, people in rural areas do not have access to use their applications. Other than that, the delivery of groceries is still a challenge for this business. Sometimes, the grocery delivery does not arrive on time, or the customer is absent while delivering the groceries. Furthermore, people become busier with work that they do not have much time to think about the cuisine they want to cook. It is essential to provide new platforms that benefit the user and are more convenient to use. The objective of this project is to develop an E-Grocery application using geolocation and YOLO algorithm. The users can store their groceries' stock in the system using the YOLO algorithm. The implementation of geolocation in this project is to solve the delivery issue; hence, the user will be aware of the courier's location during grocery delivery. E-Grocery application will provide a wide selection of ingredients and allow the customer to plan and manage their own groceries as a checklist. Waterfall model consists of requirement analysis, design, implementation, testing and documentation that helped the application to develop effectively. The application was tested based on the user interface, system effectiveness and overall usability for both the customer and owner of the store.

Keywords—E-Grocery, Geolocation, YOLO Algorithm