

UNIVERSITI TEKNOLOGI MARA

**LEARNING ABOUT VEHICLES FOR
KIDS: A MOBILE APPLICATION
WITH AUGMENTED REALITY**

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STUDENT DECLARATION

I certify that this thesis and the project which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledge in accordance with the standard referring practices of the discipline.



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ABSTRACT

Learning About Vehicles for Kids: A Mobile Application with Augmented Reality focuses on learning about the various forms of vehicles by using a mobile application that is developed in order to give new experiences to the users, especially kids who are around 4 to 6 years old. The problem that has been traced that lead to this project is that traditional physical books that are currently in use are paper based books, limited knowledge about vehicles in children of preschool age, and it's hard to visualize rare vehicles that can't be found every day. The aim for this project is to boost the interaction of traditional books, while still keeping the most advantage of the standard physical book to be successfully implemented using Augmented Reality. The basic idea behind the project is to develop alternative interfaces through the application of exciting interactive learning to attract the interest of contemporary children. The application will help children to have a more immersive learning experience. From the identified problems, the objectives of the project are determined. The objective for this project is to design and develop a mobile application for kids to learn about vehicles, to demonstrate the different types of vehicles using Augmented Reality, and to evaluate the usability of the mobile application with Augmented Reality in engaging kids to learn about vehicles. The methodology that has been used in this project is ADDIE to arrange the system design, implementation and the testing result. Overall, the system design and implementation managed to be achieved and act like expected. For the testing, the result shows that the project managed to follow the project objective proposed in this project. Lastly, by implementing the technology of Augmented Reality in learning about vehicles, it is hoped that it can make children able to learn it more easily and they will be able to picture the appearance of the vehicles clearly.

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