Universiti Teknologi MARA

Tobi-RC Mobile Application:

Development of Remote Control Car Program over Bluetooth System

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STUDENT'S DECLARATION

I certify that this report and the project to 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 acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Mobile application is trendy and receives high demand in marketplace. Thus, mobile technology has been identified as a potential delivery alternative since it is able to provide services anywhere and anytime. For example, mobile control can control other device via mobile phone just by using the application such as television, air conditioner, lamp and fan. This project develops a mobile control application used to control the movement of the particular control car. This project have achieve three objectives which are to design mobile based program that allows user to play the control car using the smart phone, to develop a program that connects the car over Bluetooth system and to test the functionality of the prototype. The project achieve objectives by using RAD (Rapid Application Development) approach as the guideline and by making sure that this application is filled with great user experiences and functionality goals. This project use fuzzy control for the algorithm and Bluetooth for the technique. The developing of the remote buttons in the android application can control the car motion, interfaced by the Bluetooth module. The significance of this project is users can bring their smart phone without have to carry the remote control. Besides that, the range distance of the control car is 10 meter and suitable for indoor. There are many advantages when use smart phone as a remote control such as portable, does not need to change the battery, low cost and can get wide range of signal better than used telescoping antenna. The mobile application can add acceleration and use gyroscope to control the car as the future improvement.

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