

MOBILE WIRELESS TRACKER BY USING BLUETOOTH AND SMARTPHONE

**Thesis is presented in partial fulfillment for the award of the
Bachelor of Engineering (Hons.) Electronics (Communication)
UNIVERSITI TEKNOLOGI MARA (UiTM)**



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JULY 2014

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ACKNOWLEDGEMENT

With the name of ALLAH Most Gracious Most Merciful praise to ALLAH the Almighty for giving me the strength in order to complete this research and giving me the chance to complete this thesis successfully.

First of all, my sincere gratitude goes to my dad and mom and family members for their overwhelming support, understanding and encouragement. I would like to share my deep wisdom of gratefulness and appreciation to my project supervisor PM Dr. Norsuzila Bt Ya'acob for her kindness, support and being the source of my inspiration. She had guided me a lot of knowledge and giving valuable information in order to finish this research. I also desire to show my highest appreciation to my friends , especially my classmate who is helping me and giving nonstop motivation in completing my final year project successfully. Lastly I would like to say may ALLAH bless you all.

Thank you.

ABSTRACT

Mobile wireless tracker can find and locate lost personal belongings by using Bluetooth technology and Android smartphone. Many people had weird experience to lost and found their items at random places with unexplainable reasons and this will lead to major frustration when people urgently need the items such as keys, wallet and any personal belongings. An Android application is used as a tracker that provides information to help user to track a Bluegiga BLE112 Bluetooth Smart module. The application will be designed by using App Inventor for Android developed by Google and Massachusetts Institute of Technology (MIT) whereas the Bluetooth module will be programmed by using BGScript developed by Bluegiga Technologies and the module powered by a 3V coin cell battery. CC Debugger by Texas Instruments is used to program a system on chip microcontroller that came onboard in the BLE112 module for programming purpose. This system have been tested within a range of normal house and worked perfectly but not effective for long distance purpose due to Bluetooth limitations. By using wireless approach, the lost rate of personal belonging would be decrease remarkably. With the advantage of the new generation of Bluetooth which is Bluetooth 4.0 range from 10 meters up to 100 meters and with the aid of Android apps the lost items will be found effortlessly in no time and consume much less power and successfully guide the user to get back the lost item.

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