DEVELOPMENT OF ANDROID PHONE CONTROLLED AC OUTLET USING ANITO TECHNOLOGY

A Project Design
Presented to the Faculty of the
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In Partial Fulfilment
of the Requirement for the Degree
Bachelor of Science in Computer Engineering

by
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The study hereto attached entitled

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has been prepared and submitted by **Jayson P. Allejos, Eugene Agapito, and Wayne Marafina,** who are hereby recommended for oral examination.

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Abstract

This design project aimed to prove how a remote controlled AC outlet can be constructed using an android phone, PhilRobotics Anito Kit v1 using PIC16F877A (Anito Board), Bluetooth Shield, Isolated I/O Shield, and relay modules. This Anito – based Android phone controlled AC outlet is a control system that lets the user to power on or off a socket (numbers 1 to 8) remotely using the android phone controller, and by merely using the ready-made manual switches corresponding to each of the socket. Upon successful pairing of Bluetooth devices, "1234" as the default pairing code, the user could then be able to control each or all of the sockets using the application installed in the android phone. Other may connect to the device, but they cannot control the sockets if the connection with the first android phone is still present.

The user can control each or all of the sockets in whatever way he/she wishes to control. That is so because he/she may choose on the application to power on or off one socket or all of the sockets by using (touching) a single button on the application. The load on each socket may be an electric fan, phone charger, television, and other appliances with the maximum power of 1100 watts. All of the 8 sockets may contain a load, and the AC outlet may be used for about 12 hours.

Based on the series of test, this designed project is effective in controlling loads remotely by using the android phone controller via Bluetooth, 55 meters maximum effective range in an open space and 10 meters in the presence of barriers such as floors, walls or ceiling. It is also accurate and secured that makes it as a unique application of Anito Technology at home.