FACULTY OF ELECTRICAL ENGINEERING

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TERENGGANU

HOME POWER MONITORING SYSTEM

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ABSTRACT

Abstract – This paper describes the development of power monitor for the selected devices at home. The problem statement of this project are many homeowners have high electricity bills every month, users always forget to unplug the electrical appliances when not in use and the electric wastage occur and users confuse which electrical devices causes concessive power usage. So, the purpose of our project is to design to build solar system in household that can reduce electricity consumption from energy company, to develop wireless switch that can be monitor and manage in long distance connection and to create system that can provide information of power usage for every component. .This project will be using electrical device such as lamp, fan and 240V socket and also used real component such as lamp that controlled by microcontroller which is NodeMCU. This project need solar panel as an extra electrical source. All the actions in this project can be done using mobile phone regardless of the location of the users as long as they have internet connection in their mobile phones. The users have to install an application in their mobile phone which is Blynk application to operate the switches and also we have the manual switch as a backup. The concept of this project is uses the internet of things (IoTs) platform which nowadays is a common element adopted by many people in the world.

Keywords - Power Monitor, Solar System, Wireless Switch, NodeMCU, Internet of Things (IoTs)

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