

ABSTRACT

Access control system at this time is one aspect important in everyday life. Along with advances in technology, the conventional access control system was developed into an electronic-based access control system. Conventional access control systems such as manual light switches are now beginning to be developed with an electric light switch that can be controlled wireless from a web. Raspberry pi 2 model B is one of the mini-computer that can be used in an automated access control system. By using GPIO (General Purpose Input Output) on Raspberry Pi, can be created by a wireless access control system, safe and effective. The purpose of this final project is to design a prototype control home lights wireless with a model home that can be accessed via the web, making it possible to turn on or turn off a lamp at a distance. Parameter test the success of the implementation of these tools there is local area network (LAN) as a source of links to a website that has been created. Inside the website there is a function to control home lights. Other parameters user and gadget, the user can operate a gadget to open the website in a browser application that is contained in the gadget. To protect the system from being accessed by anyone then use the authentication web form enter your username and password. By using the scheduling function in home light control device, for example when the person is outside the home, then no need to worry will forget to turn on or turn off the lights. Very helpful when everyone at home travel out of the house in the long term.

Keywords: Raspberry Pi 2 model B, wireless, website, light