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CERTIFICATE

This is to certify that the project entitled **"Remote controlling of home appliances like light, fan, TV using mobile phone"** submitted by Anshul Vanawat, Archika Singh, Khushal Sharma, Kritima Gupta, Laveena Agarwal towards the partial fulfilment of the requirement of the degree of **Bachelors of Technology (B.Tech.)** in **Electronics and Communication Engineering** of **Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur,** is a record of the bona-fide work carried out by reached to a level required for being accepted for the examination.

Mrs. Pooja Choudhary
Asst. Professor
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ABSTRACT

Home automation has been a feature of science fiction writing for many years, but has only become practical since the early 20th Century following the widespread introduction of electricity into the home, and the rapid advancement of information technology. Home automation refers to the application of computer and information technology for control of home appliances easily. It is a automation of the home, housework or household activity. The concept of the "Internet of Things" has tied in closely with the popularization of home automation. Through the integration of information technologies with the home environment, systems and appliances are able to communicate in an integrated manner which results in convenience, energy efficiency, and safety benefits. As we are using Arduino 2560. It is a popular open source single-board microcontroller, descendant of the open-source Wiring platform, designed to make the process of using electronics in multidisciplinary projects more accessible. The objective of this project is to remote control the home appliances by using android mobile app. Appliances like light, fan, TV can be controlled by just pushing a button on the app. The user will send instructions through internet using the designed app. The project presents mobile application and Home appliances as a FRONT END whereas an online server, website, database, Arduino mega 2560 with Ethernet and relay system as a BACK END. Website acts as an interface between mobile application and database. Database stores the details about the appliances and their states (ON/OFF). Mobile Application connects to the server and fetches the details stored in database and displays to the user. User interacts with the application and changes the states according to the use, which is reflected in the database. Arduino, with the help of Ethernet shield, connects to the online server database and fetches the data about the appliances. This data is the converted into instruction and sent to the relay which in turn switch OFF or ON accordingly. The range of the project is AROUND THE GLOBE where ever you can get internet connection on your phone. This project will not only help in saving power but also enable handicapped people to operate appliances at their own.