

## **ABSTRACT**

Smart Home and the Internet of Things combine services and technology to increase efficiency, security, and comfort in the home or building environment. In this IOT-based smart home, several devices or home appliances can be accessed through android and connected to the internet. The process of making a tool consists of several stages that have their functions. In addition, the selection of components used has also been adjusted to the current design needs. On the hardware side, Arduino Nodemcu ESP8266 is the primary control tool, and the whole work is supplied with a power supply of 9 VDC. While in the software section, the use of Arduino IDE as a C programming application is chosen because it is easier to use and familiar to the user in writing or editing programs with their respective language types. This research aims to implement an electrical equipment control device using Telegram-based IoT to create a smart and convenient home for users, as well as to increase awareness and utilization of IoT technology. The goal of this research is to create an electrical equipment control device using Telegram that can be remotely operated.

Keywords: Smarthome, Arduino, IoT