Controlling for IoT Projects Systems based on Smart Phone using Firebase Notification Technique

Internet of Things (IoT) projects have become very popular in the fields of information technology and spread widely among technicians and engineers. These projects play an important role in our daily life, especially after the emergence of new technologies that have made these projects more flexible and close to the needs of the human community and also when cloud computing started to provide services to these projects. In this paper I shed light on one of those techniques provided by the multinational technology company (google), which is a (firebase) technology that provides many services for projects whether small project or large, including database service, license service and notification service etc., In this paper I will provide a detailed explanation of notification service over IoT. This work will implement in two parts: Hardware which consist of Arduino, a ESP8266 Wi-Fi controller, and a keypad that use to access to the system when typing the secret code, and software include android application that contact with firebase. When a new user turn on the device, it will send notify to the smart phone using firebase notification to alert someone tried to access to the system. The owner will resend notify to device to give permission and store it in firebase database or prevent the user which
the keypad will be disable.

References


Index Terms

Computer Science          Networks

Keywords

Arduino, ESP8266, Firebase, Android Studio.