

ABSTRACT

In today's world, technology is growing at a quick pace. What is new today might even be old the following day. New model of electronic gadgets have emerge in the market like mushrooms after the rain. So what differs one product from another? It is of course the convenience it can bring to the user.

This project, the "Sound Activated Door Lock" is designed to give more convenience to the users in terms of opening and closing the door. It is like an automated gate but it is controlled by our voice. We do not need to bring our keys or remote out anymore. Whenever we get to a door, all we have to do is just say the phrase. Just in case that we are not feeling well, we can always key in the pin code to unlock the door.

The door is positioned above a servo motor which will rotate 90° to open or close the door. All we have to do is to walk to the door, say the "magic phrase" and the door will then automatically open and we say another "magic phrase" to automatically close the door. The microcontroller is used as the "brain" to sense the correct input and give the desire output such as to open or close the door.

Overall, the project is capable of opening and closing the door automatically once the correct phrase is used and indicates the status with three different LEDs.

Keywords: servomotor, microcontroller, door, voice