Abstract

Smart home technology is slowly becoming a large part of today’s world. People prefer the ease and flexibility that such forms of technology provide. One such form of technology is remote access to residences. Previously, in order to enter a residence, one would either require a key or have someone else open the door for them. However, there are many forms of technology that are now providing house owners with keyless entry by allowing owners to enter a pin. There are other systems that allow users to view a live stream of their residence entrance to see if there is anyone nearby while also providing them with a way to remotely unlock the door. While there are many innovative products in the market, they can get costly. We wanted to provide a system that integrated various methods to created the ultimate system, for less.

To create this system, it is important to include popular and unique specifications. The system we have created includes a touch screen panel which would be mounted on the front door. This allows for a more interactive interface for the user. In addition, it would be easier to have a vast variety of functionalities for the door on the touch screen panel itself. Further, in order to provide remote access, an android application is necessary. This will allow the owner of the residence to stay updated on activities occurring around the house, even if they are not at home.

Once the individual components are made, we need to have a secure way to combine the system together. Since security is a large part of this project, we need to make sure that it is not possible for an intruder to hack the system. This report will provide an insight into our solution to an interactive, secure, and innovative remotely accessible system. When comparing the developed product, a simple key unlocking mechanism will be used as the current solution.