ABSTRACT

Lift or Elevator is a vertical transportation used to transport people or goods. Elevators are generally used in high-rise buildings which usually have more than three or four floors. Elevators in modern times have buttons that passengers can choose according to their destination floor.

At the end of 2019 the world was shocked by the emergence of a disease caused by a virus, namely the 2019 novel corona virus or abbreviated as 2019-nCov. The results of a study by the UvA Institute of Physics and the University of Amsterdam stated that one of the characteristics of the corona virus is that it can survive for 30 minutes on an elevator button due to aerosol particles from an infected person. Furthermore, anyone in the agency building also needs an elevator to go up and down the floor. In order to prevent virus transmission through the elevator button media due to many users touching the elevator button, it is proposed that the elevator button operation control can be controlled with an Android phone via a local wifi network.

In this final project, a prototype wifi-based elevator control system is proposed in the form of a prototype that aims to reduce contact with the media for the spread of the Covid-19 virus. The use of infrared sensors as sensors to detect trains during calibration which is then sent to the server using ESP32 and displays information on the presence of trains in the elevator application with the fastest delay of 0 seconds and the slowest 2,5 seconds. The output of this tool is the movement of the elevator when the user presses a button from the application which is forwarded to the ESP32 using a local wifi network to run the elevator movement command with a time accuracy of 95%.

Keyword*: Lift, Corona Virus, Wifi*