ABSTRACT

Internet of Things-based office security system monitoring makes it easier to secure and monitor offices to reduce crime such as theft when office conditions are crowded. One of the most widely used technology for office security is CCTV, with the hope of reducing crime in the office.

In this research, CCTV development will be carried out with the addition of a face recognition system so that an unknown face is detected which is then sent to the Android application as a communication medium with the user. The Android application will receive a message from the system in the form of a photo and will notify the user. Before the data is received by the Android Application, the data will be stored by the database so that users can access it at any time.

From the results of system testing, in image capture the system can recognize registered and unregistered faces, send images and notifications to the application simultaneously. For QoS testing, the smallest delay from the morning, noon and night is 0.819, 6.356 and 0.933 ms and the largest delay in the morning, afternoon and evening is 11.645, 25.944 and 20.357 ms. The throughput value in the morning is 565 Kbytes/s, at daytime it is 441.4 Kbytes/s and at night it is 563 Kbytes/s. the value of the calculation of Availibility is 90.87% and Realibility is 89.95%.

Kata Kunci: Internet of Things, Face Recognition, office security system, Delay, Throughput, Availability and Realibility