ABSTRACT

Health *is* a state of physical, mental and social well-being. Body health is a very important thing and can not be denied in carrying out daily life. Many people too busy with work and ignore his health, the forget how important to maintain healthy lifestyle. The result of careless about the right healthy lifestyle will cause various kinds of disease that can disturb their daily life.

In this final task has been realized mobile applications based on android that works for health monitoring that connect to wearable device using bluetooth. This application using fuzzy logic mamdani to decide the user's health condition are based on data on pulse rate, oxygen saturation, and body temperature. Besides, there is have history menu that serves to previous health monitoring according to the date selected on the calendar.

This health monitoring applications have been build dan tested with good results. To know accuracy of the algoritm used evidenced by resulted accuracy data between application and device is 100 %, and successful accuracy between application and real are pulse rate (79.688%), oxygen saturation (71.875%), and body temperature (50%).

Keywords **:** Fuzzy Logic, mamdani,android, mobile application, health monitoring.