ABSTRACT

The heart is a component of the human body that is responsible for responding to blood and distributing oxygen throughout the body. Hospitals and doctors are still checking disease diagnoses manually currently. However, this method is expensive and time consuming. In this study, the Gradient Tree Boosting (GTB) algorithm is used to detect patients diagnosed with heart disease, this research uses the python programming language as machine learning development, as an interface using the PHP programming language and storage using MySQL. With the dataset provided from the UCI Machine Learning Repository, there are 13 supporting features to detect heart disease with a total of 304 data and has 1 label to determine whether a patient is diagnosed with heart disease or not. Application development using SDLC Waterfall with stages of analysis, design, implementation, testing, and implementation. From the results of the classification carried out, a recall score of 0.98 was obtained.

Keywords: Heart, Machine Learning, Gradient Tree Boosting