



## Abstract

Drugs are needed in the healing process of the patient's illness. By giving the number and types of drugs will greatly affect therapeutic effects of the patient. In recovering a disease is not only just taking one type of drugs but also required to consume more than one type. This allows the interaction between the drugs which is consumed. Drug interactions may be mutually supportive (synergistic) efficacy of the drug, contradictive that cause a new disease or even death, and do not affect each other.

In this final project will be built a system to detect the drug interaction that shows a limited output such as inhibit, normal, and boost. This system is intended to allow the patient to know the drug interaction which they consumed. Thus reducing the cases of negative impact of drug interaction. But the decision remains in the hands of the pharmacists and doctors.

The drug interaction detection system is built using the ID3 algorithm (Iterative Dichotomiser 3) which is a basic decision tree learning algorithm. And it is expected that the system can adapt to the increase in data and attributes that will be used in the future. The rule accuracy that resulted by testing 300 data is more than 98%. The test result shows that drugbankId is the most decisive attribute.

Keyword : ID3, interaction, drug, drugbankId, accuracy, rule.