

ABSTRACT

At present the handling of Dengue Hemorrhagic Fever only relies on reports from the head of the sub-district concerned for its handling. Both the handling and prevention have not been able to provide the right solution to reduce the number of cases of Dengue Fever in the city of Bandung. From this case, it is necessary to have a proper calculation so that it can reduce the number of Dengue Hemorrhagic Fever cases.

In this Final Project a Decision Support System (DSS) has been made to support the decision in handling Dengue Hemorrhagic Fever. This system is expected to help in making decisions quickly and accurately by the Bandung City Health Office in dealing with Dengue Fever.

The method used by the author is the Decision Support System (DSS) method using C4.5 algorithm. The calculation method uses the specified handling conditions. The system will use the training data or Dengue Fever data in the previous Bandung City as learning algorithm. The web system will display the results of the handling along with the plot used. This system is implemented using RShiny found in Rstudio.

The results of this website display training data, test data, C4.5 algorithm calculation results, algorithm results and plot in the form of a decision tree. Evaluation of the C4.5 algorithm classification in the scholarship case shows an accuracy rate of 97%. The results in this study are those that affect the handling decision, namely the Number of Cases, while the other attributes do not affect the decision to handle Dengue Fever.

Keywords: *C4.5 algorithm, decision support system, decision tree. R Programming*