

## **ABSTRACT**

*Data mining is a semi-automatic exploration and analyzing large size of data to get meaning pattern. Data mining is a combine process between majors especially machine learning, statistic analytical and database. Data mining try to find rules and pattern form data.*

*One of important task in data mining is classification. Classification can be described as follows. The input data, also called the training set, consists of multiple examples (records), each having multiple attributes or features. Additionally, each example is tagged with a special class label. The objective of classification is to analyze the input data and to develop an accurate description or model for each class using the features present in the data.*

*Through this final project writer would like to implement an algorithm based on decision tree classifier to do classification task of data mining. The algorithm is SLIQ (Supervised Learning In Quest).*

*SLIQ is classifier algorithm based on decision tree that can handle both numerical and categorical attributes. SLIQ use combine of pre-sorting technique at tree-growth phase, sorting procedure that integrated with breadth-first-growing strategy and new pruning-tree algorithm based on Minimum Description Length(MDL) principle. Combination of this technique make SLIQ as an algorithm that can handle large size of data interesting writer to bring this topic to her final project.*

**Keyword :** *Data mining, Classification, SLIQ*