

BAB I

INTRODUCTION

Historically, several kingdoms have been in Indonesia, including the Sumedang Larang Kingdom. The Sumedang Larang Kingdom was a kingdom founded in 721M by King Tajimalela. This kingdom is famous in Indonesian national history, especially in Tanah Parahiyangan, after the Pajajaran Kingdom ended. The kingdom of Sumedang Larang is widely praised, especially among the poets and poets who tell the story of Sumedang in fairy tales, rhymes, and even legends. However, now, many young people are not familiar with the history of the Sumedang Larang Kingdom. To make it easier for the younger generation to know the history of the Sumedang Larang Kingdom and with the development of information technology, we created a Question Answering System to make it easier for the public. In education, this system helps facilitate the search for information for students about the history of the Sumedang Larang Kingdom. Especially the younger generation, to find information about the history of the Sumedang Larang Kingdom. In addition, in the economic field, this system can increase the cultural assets of Indonesia. The QA system aims to generate and provide precise short answers to user questions by automatically analysing thousands of articles using information extraction and natural language processing methods. In previous research, the question answering system has implemented on. biomedical questions where the test was carried out with yes or no questions so that questions from users were limited [1]. Based on the research, we conducted research on the application of the Question Answering System for Information about the Sumedang Larang Kingdom. In this study, the use of yes or no questions was not the result of collecting user question data. While in our study, we use more flexible questions with the question dataset we have created to reach questions from users. To collect and generate questions, we use the concept of ontology. Ontology is part of information technology used for one domain so that it can generate questions [2]. Research in ontology-based questions has developed in various domains, such as music, biology and knowledge representation[3], [4]. Ontology presents information facts in their logical relationship, thus providing opportunities for the development of historical research [5]. We built a QA system based on a chatbot that can help students find information about the history of Sumedang Larang. After collecting and generating questions, there is a prediction process based on the respective questions and answers. in the process of searching for answers, we use the Naive Bayes method. We use the Naive Bayes method because in our research we classify several question sentence texts. This is based on several studies that apply the Naive Bayes method to classify text such as text-based

chatbot applications that apply the Naive Bayes algorithm for the classification method.[6] Naive Bayes is a classification method rooted in Bayes' theorem where two separate events will later be classified. In testing, we compare the accuracy value between the method we use, namely Naive Bayes and the Decision Tree method. The Decision Tree method uses entropy to classify questions. Meanwhile, the Naive Bayes method uses multinomials to classify questions.