J-BOT: CHATBOT APPLICATION DEVELOPMENT FOR INFORMATION SERVICES AT JEMBER REGENCY GOVERNMENT

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ABSTRACT

Indonesia is one of the developing countries with the 4th most populous population in the world (worldometers, 2020) and this causes Indonesia to be able to be globally competitive. And certainly in every human activity must use technology. (Danuri, SEPTEMBER 2019) One of the things that is done is government activity, namely the Government of Jember Regency. The Jember Regency Government is one of the regencies in East Java Province, where it hopes to be able to provide the best government services to users who really need information services. One solution is to provide website services in the government sector with the aim of being able to apply sophistication of technology 4.0 and to help the public or users with accurate and complete population information. (Hyehyun Hong, 2013) In creating a new platform for distributing valid government service information about Jember information, Jember news, and Jember services in the field of information technology at the Jember Regency Government, as well as making information distribution effective and efficient, which can help admins from the Jember Regency Government Website and Employees of the Jember Regency Government to answer questions from the public whose questions may be the same and keep repeating, of course the admin and employees can answer the same questions over and over again, of course it is not effective and efficient. Not to mention if people are hesitant and reluctant to ask directly to the admin and ask other people, it's not certain that the answers can be valid and as desired because every community that asks is different. Based on these problems, the researchers built a chatbot to assist the public in obtaining government and non-procedural information about Jember information, Jember news, and Jember services. Which is where the answers from the chatbot which was built using the DialogFlow platform from Google can be accessed using a browser because the application is in the form of a website. (dialogflow, 28 Januari 2021) This chatbot was developed using the NLP (Natural Language Processing) approach. A branch of AI (Artificial Intelligence) that

focuses on natural language processing. (Chandra A. Y., Januari 2020) The results obtained were that 55.9% chose very well, and 43.4% chose good, and 0.7% moderate. Figure 24 shows the data obtained from respondents, with a total of 136 respondents who felt chatbots were useful and the accuracy test was good because they scored 75% for the Jember information category, 87.5% for Jember news, and for the Jember service category at 70%.