

## ABSTRACT

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*Dementia is a disease characterized by a decrease in thinking power and independence in carrying out daily personal activities. Alzheimer's disease is the most important cause of dementia which causes the degeneration of brain cells and can even cause death. However, until now there has not been found a drug and an effective way for acute sufferers. Therefore, with the development of technology today a system is needed that can help us in the early examination of Alzheimer's dementia. Based on the above facts, Expert system is the best solution for helping us diagnose a disease. Expert system for early diagnosis of Alzheimer's dementia, it is made web-based using PHP and MySQL and uses the forward chaining method by collecting several existing symptoms. In this expert system will be asked several questions and after all questions are answered, the system will display the results of disease diagnoses that can help anticipate the risk of Alzheimer's dementia. This expert system application has been tested using a confusion matrix and shows results in the form of 88,57 precision, 100% recall, and an F1 score score of 94,02%.*

*Keywords: Alzheimer's Dementia, Expert Systems, Forward Chaining, Web, Confusion Matrix.*