## **ABSTRACT**

Expert System for Anamnesis the abnormal children growth is developed to handle conclusion-making and problem-solving from an anamnesis (an interview) of children's abnormal growth. It handles children of the age up to 5 years. The children abnormal growth includes slow rate of motorist growth, social, verbal, eye-contact, and independency.

This expert system is built based on the needs of a children's growth monitoring which can find children's growth level and children's abnormal growth aspect, without or less connected to pediatricians. This final project object to develop expert system for anamnesis of children's abnormal growth with good level of validity based on literatures and medical expert experiences.

This expert system is expected to recognize current children growth level from age and spesific kind of children growth, and to find the existence of children's abnormal growth aspect. It makes easier the next diagnosis process if the abnormal aspects were found. It also provides facilities to pediatricians (expert) to manage the basis of knowledge. The application is built in client-server base and operated on internet or intranet. Expert System Development Life Cycle (ESDLC) is used as an expert system development method. Children growth knowledge is represented in production rules and rule-based system (forward chaining) is used as inference method. Forward chaining is appropriate to applied on case study with conclusion-tracing process from a set of fact, includes on anamnesis o abnormal children growth case study. It also uses classification to categorize kinds of children's growth and to simplify monitoring and anamnesis while the abnormal children growth aspect were exist.

Keywords: Expert System, Anamnesis, Rule-Based System, Children Growth