

## **ABSTRACT**

Software documentation is one of the most noteworthy aspects of software engineering. This document has an important role in software engineering because it is one of the factors in the success rate of developing a software. Poor documentation will result some obstacles in software development process, like development errors and reducing efficiency on every software development process and use. One of the ways to resolve this problem is by doing software redocumentation process with reverse engineering method. Software documentation is a document-making activity that used in software development environment to deliver functions, operations and activities to the stakeholder. While reverse engineering is a process to analyze a system in order to indentify components and linkages in that system, and make a representation of the system in other form. In this study, we have done software design redocumentation process with a case study of an app called Sisca using reverse engineering method that generated design documentation, and analyze problems that arise and data accuracy that was generated by the process. The results of this research are the reverse engineering method succeeded in producing accurate data and can streamline the time of software modification, with the problems associated with making diagrams that are influenced by the understanding of the method users.

**Key Word** : Reverse Engineering, Software Design, Software Redocumentation, Unified Modelling Language, Perangkat Lunak