1. INTRODUCTION

Consistency between application development by developers and client's needs is the primary key in building an application so that the client will use the application. However, not all applications built are successful until they reach the stage of the client uses the application because there is an inconsistency between the applications built with the client's needs, especially in the SRS document as reference data for software development. These losses can be avoided by implementing consistency in the contents of the Software Requirements Specification (SRS) document. Therefore, before application development, the SRS document consistency process is a crucial stage to match the client's needs and the developer's understanding of software development.

Previously, there was research on measuring the similarity between Steps Performed, which describes the steps taken to accomplish the goal of the Use Case in Use Case Descriptions, and Sequence Diagrams in SRS documents [1]. The data used in research [1] consisted of five Step Performed documents from the Use Case Description and five Sequence Diagram documents. The similarity between the two artifacts was measured using Cosine Similarity and tested using Gwet's AC1. Based on this study, the research focuses on propose recommendations for fixing artifacts SRS artifacts whose consistency wants to compare through text mining of objects in the SRS Digibrary document.

Digibrary is an application for borrowing and returning book collections at the online library. The SRS Digibrary document used in this study consists of 14 Steps Performed from the Use Case Description and 14 Sequence Diagrams. Then, the consistency of the document will be measured using Cosine Similarity and tested for validity and reliability using Gwet's AC1.
This study aims to propose recommendations for fixing artifacts based on the lowest value of consistency between Step Performed and Sequence Diagrams based on Unified Modeling Language (UML) rules. There are contributions to this research, namely:

- Conduct requirements elicitation and identification of Use Case Description and Sequence Diagram artifacts, then proceed with identifying these artifacts.
- Applying the text mining method to produce text pre-processing of artifacts in Extraction activities.
- Carry out the process of document weighting, measuring the value of consistency, and testing the results through a process of validity and reliability.

- Generate extraction values as a reference for consistency between the Step Performed and Sequence Diagrams.
- Fixing the Step Performed and Sequence Diagram was carried out based on the results of text-preprocessing which were still inconsistent.