

Abstract

Requirement elicitation is the first step of requirement engineering where software developers focus on obtaining the users' needs and produce a requirement specification. This activity can be accomplished through conducting interviews. However, the requirement specified might not conform to the actual interview transcripts from the elicitation process due to perspective differences between the clients and developers. This study aims to propose a method to validate the requirement specification using text mining analysis. The method involves text preprocessing and text similarity analysis between the specification and elicitation transcripts. The proposed method is validated using interview elicitation transcripts and the software requirement specification (SRS) from the Baker's Corner application. The results demonstrate that the proposed method can effectively validate requirement specifications, producing comparable results to the manual validation process. This finding highlights the potential of automating the requirement validation process using text mining techniques. Additionally, the paper offers recommendations for future studies and developers to enhance the generation of software requirements.

Keywords — Requirement Elicitation, Requirement Specification, Functional Requirement, Non-Functional Requirement, Text Mining