Abstract

The *software* development process begins with Requirements Engineering or RE, which is the process of collecting requirements or requirements for developing *software*. However, in its implementation the RE process also experiences shortcomings, for example in the process of collecting requirements from users, where it is found that the RE process still experiences problems in fulfilling user desires, and the requirements obtained are sometimes still not appropriate. So efforts are made to overcome these problems, one of which is by implementing the use of the *design thinking* process. The *design thinking* or DT process is a process of solving problems creatively and innovatively. DT is also a user-focused process. However, in using DT to assist the RE process, there are also shortcomings, some of these shortcomings are that there is still no mapping of which parts of the DT can be used to help complete the RE and there is also a lack of documentation of the DT process. So this research will build a user requirements parsing machine to overcome the lack of documentation in using DT to assist in the RE process and also map DT artifacts that can be used to assist the RE process. Through research it was found that DT artifacts can be used in forming user requirements, these artifacts are; Point Of View (POV), How Might We (HMW), *Empathy map*, User Charm, and Site Map. Then, the resulting user requirements document can use Affinity Map in its development to get better results in accordance with the validation results.

Key Words: *Requirement Engineering, Design thinking, User Requerement*