4. Non-Functional Requirments

4.1 Requirements

- 1. The application calls for the development of a standalone desktop application using Java as the primary programming language.
- 2. The application is required to make use of a Java GUI, with Swing or JavaFX being the preferred options. The choice of framework is up to the group, but it must be uniform across the group. Adequate research is essential to gain proficiency in these toolkits.
- 3. The performance of the application should be optimized to ensure that the dictionary setup for checking and the search for words within the dictionary during a check do not result in excessive load or run time.
- 4. The application should not require the utilization of any additional libraries. In the event that another library is desired, approval must be obtained from the instructor in written form, specifically via email, prior to implementation.
- 5. All code in the application must be commented using <u>Javadoc</u>.
- 6. The group has the freedom to decide on the coding conventions and styles they want to use for naming objects, indenting, and other related aspects. However, it's essential to maintain consistency in applying those conventions and styles throughout all the files in the application.
- 7. The application must be compatible with systems that have a standard Java installation. Additionally, it is necessary for each member of the group to be able to compile and run the application from their own development environment, which can be of their choice.
- 8. The application should ensure that it doesn't make any changes outside of its installation directory and its subdirectories. This means that any user dictionary or configuration file must be stored in a suitable location, such as the user's home directory. It's important for the application to be self-contained and not interfere with other files on the system.
- 9. It is imperative that the application provides a clear and conspicuous response to every user-initiated action. Any action that is erroneous or cannot be completed successfully must be accompanied by a professional and informative error message.
- 10. The development of the application should adhere with software engineering principles.
- 11. Regularly committing and pushing project code to the assigned repository is mandatory for team members. It is crucial to ensure that the repository designated for your team is updated with the latest code changes.
- 12. The group must complete the documentation using Confluence collaboration system
- 13. All tasks and issues related to the project must be tracked on Jira and updated throughout the project.