2. Domain Analysis

2.1 Description

This sub-page provides an analysis of the domain for the software. That is, the general field of business or technology in which the software will be used. By analyzing and better understanding the domain, the developers will have a better understanding of the needs and expectations of the software to function and deliver value to users in this domain.

2.2 Analysis Answer

What is the domain for this project?

- The software domain for this project is a desktop application that serves as a document spell checker. It is designed to be used in an educational institution, specifically The University of Western Ontario.

What do we know about the domain?

- Spell-checking application is an important tool in today's academic world. The software application made for this project could be used by students, faculty, and staff to ensure that any written content and documents meet academic writing standards. A popular and notable application in this domain is Grammarly, a very popular typing assistant. Grammarly is widely used in many educational institutions for document creation and error checking.

What are the common issues encountered in this domain?

- When discussing the common issues encountered in this domain, several challenges arise. We must ensure the accuracy and correctness of documents while also being able to handle them efficiently, as well as offering tools for collaborative editing. Another issue is ambiguity with words that seem similar to each other like "their" and "there". Finally, addressing the adherence to specific academic style guides and the need for consistent language falls under the criteria.

What are the common solutions to the above issues in this domain?

- There are common solutions to the above issues in this domain. We can develop an advanced spell-checking algorithm that is capable of recognizing academic terminology. Integrating plagiarism detection tools and academic databases in order to support research. And to meet academic writing standards, templates could be provided with guides to adhere to specific styles in order to assist users.

How can we use this domain understanding to improve or accelerate the development of this project?

- A deep understanding of this domain will help us improve or accelerate the development of this project. We will be able to align the spell checker software development to the academic needs and challenges of the institutions. On top of that, understanding the domain will help us face less challenges throughout the developing process.