### Overview

The Word Count Tool is designed to assist students in determining the approximate word count of documents in various formats such as doc, docx, or pdf. This tool is particularly useful for academic assignments where word count is a crucial factor.

## **Functionality and User Interaction**

## 1. Accessing the Tool

Students access the tool through a user-friendly interface on the website.

## 2. Document Upload and Format Support

The tool provides an option for students to upload the document they wish to analyse. Supported formats include DOCX and PDFs.

#### 3. Word Count Calculation

Upon uploading, the system processes the document.

The tool employs algorithms to accurately calculate the total number of words in the document. This includes handling various challenges like counting words in footnotes, endnotes, or text boxes if applicable.

## 4. Result Display

The tool displays an approximate word count to the student.

This feature is useful for students to ensure they meet the word limit requirements for their assignments or projects.

# <u>Technical Implementation and Challenges</u>

The backend processing will involve text extraction and analysis algorithms, which may vary depending on the file format.

For PDF documents, additional considerations include handling text embedded in images or complex layouts.

The tool needs to be optimized for accuracy and speed, ensuring a quick response time for the user.

# **Sprint Planning for Implementation**

- 1. Develop a clear and intuitive interface for file upload and word count display.
- 2. Implement text extraction and word counting algorithms, with special considerations for different file formats.
- 3. Ensure handling of various document layouts and embedded textual elements.
- 4. Testing.