**CHAPTER 2**

**PROBLEM DEFINITION**

Flamingo is a stylistic analyser. Word processors like MS Word provide syntax and semantics functionalities like spell check and grammar checks. However, this application evaluates a document against rules of style. Stylistics is a field of study that focuses on interpretation of texts in regard to their linguistic and tonal style. Linguistics is the study of language. So, this application attempts on enhancing the stylistic aspect of a piece of text thus making it more pleasing to read. The purpose is to benefit writers of essays, articles or even short stories by providing stylistic comments. The concept of a stylistic analyser is a novel idea attempting to better the style of writing.

**2.1** **Stylistic evaluation of text**

Initially, we create a compilation of various rules of style. These rules of style are from popular and widely acclaimed books like *The Elements of Style* by William Strunk Jr. and E. B. White. This book puts forth several rules that, if followed, gives rise to crisp, clear and well-organized writing. Flamingo uses a select set of rules from this book.

This application intends on evaluating a document for non-conformance of these rules of style. They appear as comments that user may choose to ignore but if corrected will better the piece of text. Certain aspects are so deeply embedded in our writing style like usage of passive voice or construction of long winding sentences with plenty of descriptive words. The application catches such seemingly trifling “errors” that can be hindrances to the reader of that text.

**2.2 Evaluation of readability**

Readability is the ease with which text can be read and understood. There are several measures of readability that associate the readability of a text with a number. Some measures like Gunning-Fog index and SMOG index give a formulae denoting the number of years of formal education required to easily read a piece of text. Some others like the Flesch-Kincaid Reading Ease evaluate to a score from 0 to 100 - the higher the score, the easier is the text.

Flamingo, for a given text, calculates several readability scores and gives an average value. This gives the user an idea as to which age group his/her document caters. It can also help the user write keeping his target audience in mind. The application can be configured to alert the user when his writing goes either above or below the readability range for the target audience. Readability may be evaluated as and when the user requests for it or dynamically – as the user types.

**2.3 Floweriness and obscurity**

Floweriness is a measure of how elaborate a piece of text is. It is the number of adjectives and adverbs per sentence. The higher this number, the greater is the floweriness. For an article or an essay, a less flowery text is preferred. However, works of literature may have a high floweriness count.

Obscurity is a measure of the complexity of a piece of text, in terms of the number of rare words. A word is rare it its frequency of usage in the English language is very low. Obscurity is the number of rare words used per sentence. As is the case with floweriness, each user’s requirement of obscurity may be different based on the type of text he is writing.

This application provides the floweriness and obscurity count of a piece of text. The measure is provided as and when the user requests for it. The user may interpret the values of the measures according to the type of document he is writing. A literary work of art may be very flowery with the usage of complex and infrequently used words. A scientific article or essay must be less flowery but may still have a large set of rarely used words. However, a composition for children will necessarily be less descriptive with simple words.

**2.4 Adherence to a template**

When the user wishes to write a piece of text that requires a particular format, he may waste time searching for a suitable template. Flamingo provides templates of popular formats like school essay and formal letter. The user can fill the appropriate data according to the template provided. After completion, the user can view his document with the text provided appended with help text. The user may also edit it further. Conformance to the template is not checked when the user begins editing his document.

**2.5 Simple text editor**

At the heart of this plethora of functionality is that Flamingo is a text editor. It provides the user all the basic features of a text editor – new, open, undo, redo, cut, copy and paste. The application can save text only in a .txt format file, but can read any file with ASCII characters. Just like other text editors, Flamingo does not provide text-formatting functionality.