**ABSTRACT**

An interactive editor, that implements a live spell checker (spelling error detection and error correction) using n-grams and the noisy channel model for contextual spelling errors is an extraordinary challenge. The editor includes a smart version of Auto-complete, a dynamic Find option, and a theme recognizer. The GUI of the text-editor may be implemented in Java or Python. Our main objective is to concentrate on exciting base algorithms. Spell checking involves three methods- non-word error detection, isolated word correction and word segmentation. Auto complete feature automatically completes a word, which could be implemented using appropriate data structures. Context recognition, an innovative concept that involves recognizing the theme/context that the user is currently attempting to type. On recognition, search links may be provided to the user to arrange for the freedom of easily searching for additional information on text being typed. The theme could be: a letter, an essay, a program, notes, etc. is based on named – entity recognition and topic extraction. Dynamic find, an innovative find option that allows the search of regular expressions in a simple way. It is implemented using various functions and classes of java packages.

This text editor basically tries to implement few features that most text/word editing processors (E.g. MS-Word) do not contain. The live spell checker will cut a lot of time on evaluation for all users. Auto-complete mechanisms allow users to type large essays in limited time. The regular expression find option will be a very versatile search option for all users. Theme recognizer will definitely assist the user at whatever he is attempting to type.

**ACKNOWLEDGEMENT**

The satisfaction and euphoria that accompanies the successful completion of any task would be incomplete without the mention of the people who made it possible. Many are responsible for the knowledge and experience that we have gained during our project and throughout the course. Hence, we feel that expressing our deepest gratitude is just not formality but a part and parcel of the project.

We would also like to express our gratitude towards our honourable principal **Dr. M.K. Venkatesha** for facilitating all of us to pursue a project as per our choice and giving us all the inspiration and support.

We are highly indebted to **Dr. G T Raju ,** Professor and Head, Dept. of CS & E, for his consent and wholehearted cooperation in providing all the facilities and resources that we had required for successful implementation of this project.

We would first like to express our earnest thanks towards our project guide, **Mr. Khodandpur,** Asst. Professor, Dept of CS & E. She is the motivator, guide and constant source of knowledge and inspiration for us towards the preparation of this project. We would also like to thank **Mr. Devaraju B. M.,** Asst. Professor, Dept. of CS & E for his encouragement and support throughout this project work.

Last but not the least, we thank all our friends who helped us directly or indirectly during this project and made it successful. At the same time, we thank all our faculty and lab assistants of the Computer Science and Engineering Dept., for their kind co-operation.

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