Internship Report – Task 2 Data Science Nullclass
Akanksha Dogra

WORD CHECKER APPLICATION

QUESTION:

Create a feature to throw an error if we enter the wrong word . For example if we enter a word which is not available the program should throw an error saying like this “word is not available” and provide some suggestion related to the word which is incorrect . If the user enter continuously 2 wrong word it should show list of wrong words which we enter so far in the error notification as well as it should give some suggestions related with wrong word .

INTRODUCTION:

During the internship period, I was tasked with enhancing an existing program to throw an error when an incorrect word is entered while providing suggestions for correction. The program was developed using the tkinter library in Python and integrated with the PyEnchant dictionary for word validation and suggestion generation.

BACKGROUND:

The program was initially designed to allow users to input words and validate them against an English dictionary. The objective was to enhance the user experience by implementing error handling and suggestion features, including providing suggestive words when incorrect entries were made, thereby improving the program's usability and effectiveness.

LEARNING OBJECTIVES:

Gain proficiency in using the tkinter library for developing graphical user interfaces (GUIs) in Python.

Understand the integration of external libraries like PyEnchant for language processing tasks.

Learn about error handling techniques in Python applications.

Enhance problem-solving skills by implementing user-friendly features.

ACTIVITIES AND TASKS:

1. Reviewed the existing codebase to understand the program's structureand functionality.
2. Identified areas for improvement, particularly in error handling andsuggestion generation.
3. Researched and implemented error handling logic to notify users ofincorrect word entries.
4. Integrated PyEnchant dictionary to provide suggestions for incorrectlyspelled words.
5. Tested the program extensively to ensure proper functionality and userexperience.
6. Documented the changes made and updated the program accordingly.

SKILLS AND COMPETENCIES:

1. Proficiency in Python programming language.

   Understanding of GUI development using tkinter.
2. Knowledge of external library integration for language processing

   tasks.Ability to analyze and modify existing codebases.
3. Strong problem-solving and debugging skills.
4. Effective communication for documenting changes and presenting findings.

FEEDBACK AND EVIDENCE:

Throughout the internship, my feedback regarding the tasks and projects was consistently positive.

CHALLENGES AND SOLUTIONS:

Challenge: Integrating the PyEnchant dictionary library seamlessly into the program.

Solution: Conducted thorough research on PyEnchant's documentation and examples, followed by iterative testing and debugging to ensure proper integration.

Challenge: Designing an intuitive user interface for displaying error messages and suggestions.

Solution: Utilized tkinter's widget functionalities to create informative labels and dynamically update them based on user input.

OUTCOMES AND IMPACT:

The enhanced program now provides users with meaningful feedback when entering incorrect words, thereby improving the overall user experience. By suggesting corrections, users can easily identify and correct spelling errors, enhancing the efficiency of the application. The internship experience has not only improved technical skills but also fostered a deeper understanding of user-centered design principles and software development best practices.

CONCLUSION:

The internship provided valuable hands-on experience in software development, particularly in GUI programming and error handling. By successfully enhancing the program's functionality, I have gained confidence in my abilities to tackle real-world problems and deliver user-friendly solutions. I look forward to applying the skills and knowledge gained in future applications.