Web Title Scraper - Internship Task Report

Internship Details

- **Intern Name:** B. Vinuthna
- **Internship Program:** CodeAlpha - Python Programming Internship
- **Project Title:** Web Title Scraper

Project Summary

The Web Title Scraper is a simple Python program that allows users to extract the title of multiple websites. The user provides URLs, and for each one, the program fetches the webpage content, extracts the `<title>` tag, and displays it. The user also has the option to save all extracted titles to a text file.

Key Objectives

- Take multiple website URLs from the user.
- Fetch webpage content for each URL.
- Extract and display the title using regular expressions.
- Allow the user to save results to a file.
- Provide basic error handling and input validation.

Tools & Concepts Used

- **Python** - Programming language
- **requests** - To send HTTP requests and fetch webpage content
- **re (Regular Expressions)** - To extract titles from the HTML content
- **logging** - To track program events and errors
- **file handling** - To save extracted titles to a file

Workflow

1. Program starts and waits for user input.
2. User enters website URLs one by one.
3. The program checks if each URL is valid.
4. If valid, it fetches the webpage content.
5. The program extracts and displays the title.
6. After processing all URLs, the user can choose to save the results to a text file.

Sample Tested URLs

URL	Extracted Title
`https://www.google.com`	Google
`https://www.wikipedia.org`	Wikipedia
`https://www.python.org`	Welcome to Python.org

Benefits

- Automates repetitive web scraping task.
- Validates user input for better accuracy.
- Gives user full control over saving results.
- Simple, interactive, and easy to use.

Conclusion

The Web Title Scraper efficiently automates the process of extracting webpage titles for multiple URLs provided by the user. This project demonstrates practical use of Python for automation and task scripting, fulfilling the objectives of the internship task.