

Weekly Progress Report

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Domain: Python

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Week Ending: 01

I. Overview:

This week, the primary focus was on developing and testing the URL Shortener Python project using Tkinter and the pyshorteners library. Efforts were also made to understand the libraries and troubleshoot issues to ensure smooth functionality.

II. Achievements:

1. Project Development:

- Created a Python GUI application for URL shortening using Tkinter.
- Integrated the pyshorteners library to generate shortened URLs via TinyURL service.
- Successfully implemented the core feature where a user can input a long URL and get a shortened URL displayed in the app.

2. Skill Enhancement:

- Improved understanding of Python GUI programming with Tkinter.
- Learned to work with external libraries like pyshorteners and handled installation issues effectively.

III. Challenges:

1. Module Installation Issues:

- Initially faced errors due to missing pyshorteners module.
- Resolved by installing the library correctly and managing environment paths.

2. Program Execution:

- The GUI application did not show immediate output after running initially, requiring debugging.

- Identified missing function call (`window.mainloop()`), which was corrected for proper execution.

IV. Learning Resources:

1. Python Libraries:

- Used official documentation for tkinter and pyshorteners to understand their usage.
- Followed online tutorials and Stack Overflow discussions for troubleshooting and implementation tips.

2. Python Environment Management:

- Learned about Python package management with pip and handling PATH warnings during installation.

V. Next Week's Goals:

1. Enhance GUI:

- Improve the interface for better user experience (e.g., adding error handling, input validation).
- Add features like copying the shortened URL to clipboard.

2. Expand Functionality:

- Explore integrating other URL shortening services supported by pyshorteners.
- Package the project for easier distribution and use.

VI. Additional Comments:

This week was a valuable learning experience in combining GUI development with external API usage. Despite initial hiccups, progress was steady, and collaboration through online communities helped overcome challenges. Looking forward to refining the project further.