



Filoger Comprehensive Python For AI Course 2024

Final Project

Deadline: 2024 28 September

Score: 1000 + 400

Saturday - 2024 14 September

Python CLI Tool for File Manipulation

In this project, you will develop a Python Command Line Interface (CLI) tool that facilitates file manipulation and directory navigation, similar to command-line functionalities in Unix-like operating systems. A key component of your tool will be an advanced logs system that tracks each command's usage.

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You are required to implement the following commands in your CLI tool.

1. `ls [path]` — List directory contents at ``path``, or the current directory if no ``path`` is given.
2. `cd [path]` — Change the working directory to ``path``.
3. `mkdir [path]` — Create a new directory at ``path``.
4. `rmdir [path]` — Remove the directory at ``path`` if it is empty.
5. `rm [file]` — Remove the file specified by ``file``.
6. `rm -r [directory]` — Remove the directory at ``directory`` and its contents recursively.

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- 7. **cp [source] [destination]** — Copy a file or directory from `source` to `destination`.
- 8. **mv [source] [destination]** — Move a file or directory from `source` to `destination`.
- 9. **find [path] [pattern]** — Search for files or directories matching `pattern` starting from `path`.
- 10. **cat [file]** — Output the contents of the file `file`.

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Logs file:

- Log each command, its arguments, the time of execution, and the outcome (success or error).
- The log file should be human-readable and well-organized for ease of analysis and debugging.

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Points:

- Use the `argparse` module to parse command-line arguments.
- Each command should be a function.
- Handle exceptions and provide clear error messages.
- write comment for your code.
- Prepare a `README.md` file that documents the setup of the project

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1. Team working and Challenges (For Extra Scores):

- working as a team (2 or 3):
- Use Git and GitHub for version control.
- Commit changes regularly with descriptive messages.
- Use GitHub Issues and Projects for task management.
- Explore GitHub Actions for continuous integration and automatic unit testing

2. Add additional commands for more complex file manipulations or system information retrieval.

3. Create a function that allows for content search within files.

Did you
know ?

You automatically
lose the chances you don't take.
Trust yourself. You can do this.



Don't give up on your dreams :)