

# Password Strength Analyzer + Custom Wordlist Generator

## GUI Mode — Summary Report

### Overview:

The Graphical User Interface (GUI) mode of the Password Strength Analyzer provides an easy-to-use interface for non-technical users. Built using Python's Tkinter library, it allows users to analyze password strength or generate custom wordlists through simple text inputs and button clicks — without the need for command-line knowledge.

### Key Features of GUI Mode:

- Simple interface with input fields for password, name, pet, birth year, and extra words.
- Password strength displayed with entropy, score, and detailed feedback.
- One-click custom wordlist generation and export to .txt files.
- Option to specify year ranges and include leetspeak or common variations.
- User-friendly layout for educational or demonstration purposes.

### How to Launch GUI Mode:

```
# Launch GUI
python pwtool.py --gui
```

### GUI Workflow Steps:

1. Launch the program using the --gui flag.
2. Enter the password to analyze in the input field and click 'Analyze Password'.
3. Review the strength score, entropy value, and feedback.
4. Enter personal details such as names or years to generate a wordlist.
5. Save the generated list as a .txt file using the 'Generate Wordlist' option.

### Advantages of GUI Mode:

- Accessible for beginners and non-technical users.
- Visual representation of password feedback.
- Quick and interactive — no commands required.
- Ideal for teaching password security in workshops or classrooms.

### Conclusion:

The GUI mode of the Password Strength Analyzer bridges the gap between usability and functionality. It enables users to experiment with password security concepts visually while maintaining the same powerful analysis and generation features found in the CLI version.