Nmap Scanner Tool

This script is a comprehensive Nmap scanning utility designed for users to perform network reconnaissance tasks effectively. The tool provides a user-friendly interface to run various types of Nmap scans, display results with clear formatting, and optionally save the results to a file.

Features

- **Interactive Scan Selection**: Choose from multiple scan types, including:
  - Regular Ping Scan (`-sP`)
  - Service Version Detection (`-sV`)
  - OS Detection (`-O`)
  - Full Scan (`-sS`)
  - Default Scan (`-sV -sC`, recommended)
- **User Input Validation**: Ensures that the target IP address or domain is valid before initiating the scan.
- **Error Handling**: Gracefully handles and logs errors related to Nmap scanning and unexpected issues.
- **Formatted Output**: Displays scan results in a color-coded format for better readability, including host details, state, protocols, and port states.
- **Result Export**: Optionally save the scan results to a time stamped text file for record-keeping and further analysis.

Dependencies

- `nmap`: Python library for interfacing with the Nmap network scanner.
- `termcolor`: Library for colorizing terminal output.
- `logging`: Python's built-in library for logging information.