Gitup

EXL

Prepared by:
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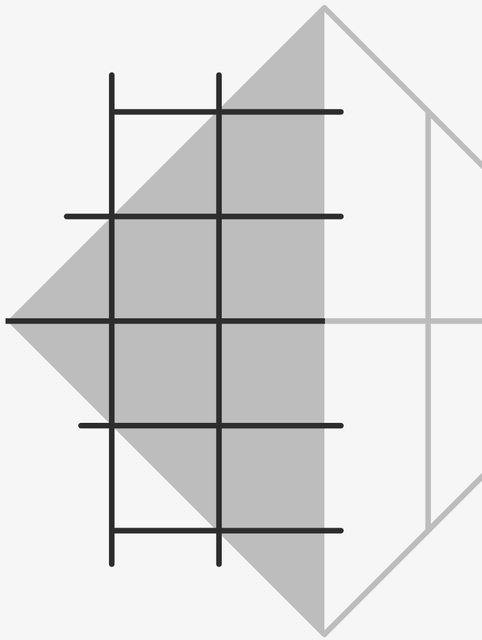


Description

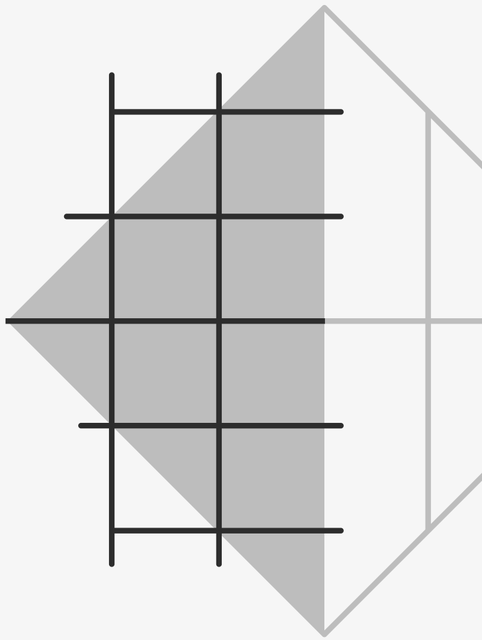
This project involves a Bash script that automates the process of backing up files from a source directory to a Git repository. The backup is pushed to a remote GitHub repository at regular intervals, using cron jobs for scheduling.

Abstraction

The backup solution is designed to ensure automated, version-controlled backups. By leveraging Git for managing backups, it maintains a detailed history of changes. The script uses a configuration file to store necessary GitHub repository details and credentials, ensuring secure and consistent operations without manual intervention

Technology

1. **Bash**: Used to write the script for automation.
2. **Git**: Version control system to manage the backups.
3. **GitHub**: Remote repository for storing backups.
4. **Cron**: Scheduler to automate the execution at regular intervals.
5. **Config File**: Stores GitHub credentials securely.



Implementation

The script accepts two main parameters: the source directory (-s) and the destination directory (-d). To run the script anywhere from the termnial, move it to the `$PATH` directory and give it execution permission.

```
gitup -s /path/to/source -d /path/to/destination
```

Implementation

It initializes a Git repository in the destination, archive all files from source and move it to destination, commits the changes, and pushes the backup to a specified GitHub repository. To configure the git repository, it uses a config file to store git credentials. To edit these config, use -c option.

Implementation

A cron job is used to automate the script execution periodically. To run it every hour use `crontab -e` and put the following code.

```
0 * * * * gitup -s /path/to/source -d /path/to/destination
```

Conclusion

The solution provides an efficient, automated, and version-controlled backup process. By utilizing Git and GitHub, it ensures backups are easily accessible and trackable, with minimal overhead. The cron job scheduling allows for continuous and timely backups, contributing to a robust disaster recovery strategy.

Thank you

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