Midterm Project

Automatic Advice System
Charles Brunger
Indiana Tech
CS1500 – Introduction to Server Systems

10/7/2025

Summary

This project demonstrates the creation of an automated advice collection system using Bash scripting in Linux. The system fetches random advice from an online API every hour and saves it into a log file with timestamps. The goal was to integrate JSON data handling, automation with cron, and Git version control via GitHub.

New Technologies and Tools Learned

- **curl** – used to fetch data from an API.
- **jq** – used to parse JSON data easily in Linux.
- **cron** – automates running scripts at scheduled times.
- **Git and GitHub** – used for version control and online repository management.

Code and Repository

```
#!/bin/bash
LOGFILE="charles.brunger.advices"
URL="https://api.adviceslip.com/advice"

response=$(curl -s $URL)
advice=$(echo $response | jq -r '.slip.advice')
datetime=$(date +"%Y-%m-%d %H:%M:%S")

echo "[$datetime] $advice" >> $LOGFILE
```

GitHub Repository: https://github.com/McBrunger/cs1500advices

---

Conclusion

This project helped strengthen my understanding of Linux scripting, JSON data processing, and task scheduling. I learned how to interact with APIs, automate data collection, and maintain clean version control with Git and GitHub.

References and Credits

- https://api.adviceslip.com/
- Linux cron documentation
- jq manual pages
- ChatGPT (OpenAI) – instructional breakdown and steps
