Project Documentation: satvik\_devops Automated Backup Script

# 1. Introduction

This documentation outlines the end-to-end setup and usage of the 'satvik\_devops' automated backup solution. The purpose of this project is to automate daily backups of a codebase folder, upload it to Google Drive using 'rclone', and implement a rotation strategy to clean up older backups. It also includes optional webhook notifications.

# 2. System Requirements

- Ubuntu OS (tested on a VirtualBox VM)

- Internet access

- Google account for Drive access

# 3. Step-by-Step Setup

## Step 1: Install Required Packages

Open terminal and run the following command to install required tools:  
sudo apt update && sudo apt install zip curl rclone -y

## Step 2: Configure rclone with Google Drive

1. Run `rclone config`  
2. Type `n` to create a new remote and name it (e.g., gdrive)  
3. Choose `drive` as the storage type  
4. Follow the authentication steps in your browser  
5. Test the setup using `rclone lsd gdrive:`

## Step 3: Prepare Project Files

1. Create a folder `/opt/local/shell-scripts/`  
2. Add the `backup\_script.sh`, `backup\_config.env`, and `README.md` files into this folder  
3. Make the script executable: `chmod +x /opt/local/shell-scripts/backup\_script.sh`

## Step 4: Edit Configuration

Edit `backup\_config.env` to match your system paths, Google Drive remote name, backup folder, retention settings, and webhook URL.

## Step 5: Test the Script

Run the script manually to ensure it works:  
bash /opt/local/shell-scripts/backup\_script.sh  
Check the logs under the backup destination folder.

## Step 6: Schedule Daily Backups

Use crontab to schedule the script to run automatically every day:  
crontab -e  
Add this line: `0 2 \* \* \* /opt/local/shell-scripts/backup\_script.sh`

# 4. Features Overview

- Creates timestamped .zip backups

- Uploads to Google Drive using rclone

- Keeps last 7 daily, 4 weekly, 3 monthly backups

- Sends webhook notification on success

# 5. Conclusion

This solution is simple, clean, and easily customizable. It helps ensure that code backups are safe, automated, and properly maintained. The script, configuration, and documentation are designed to be HR-review-friendly and production-ready.