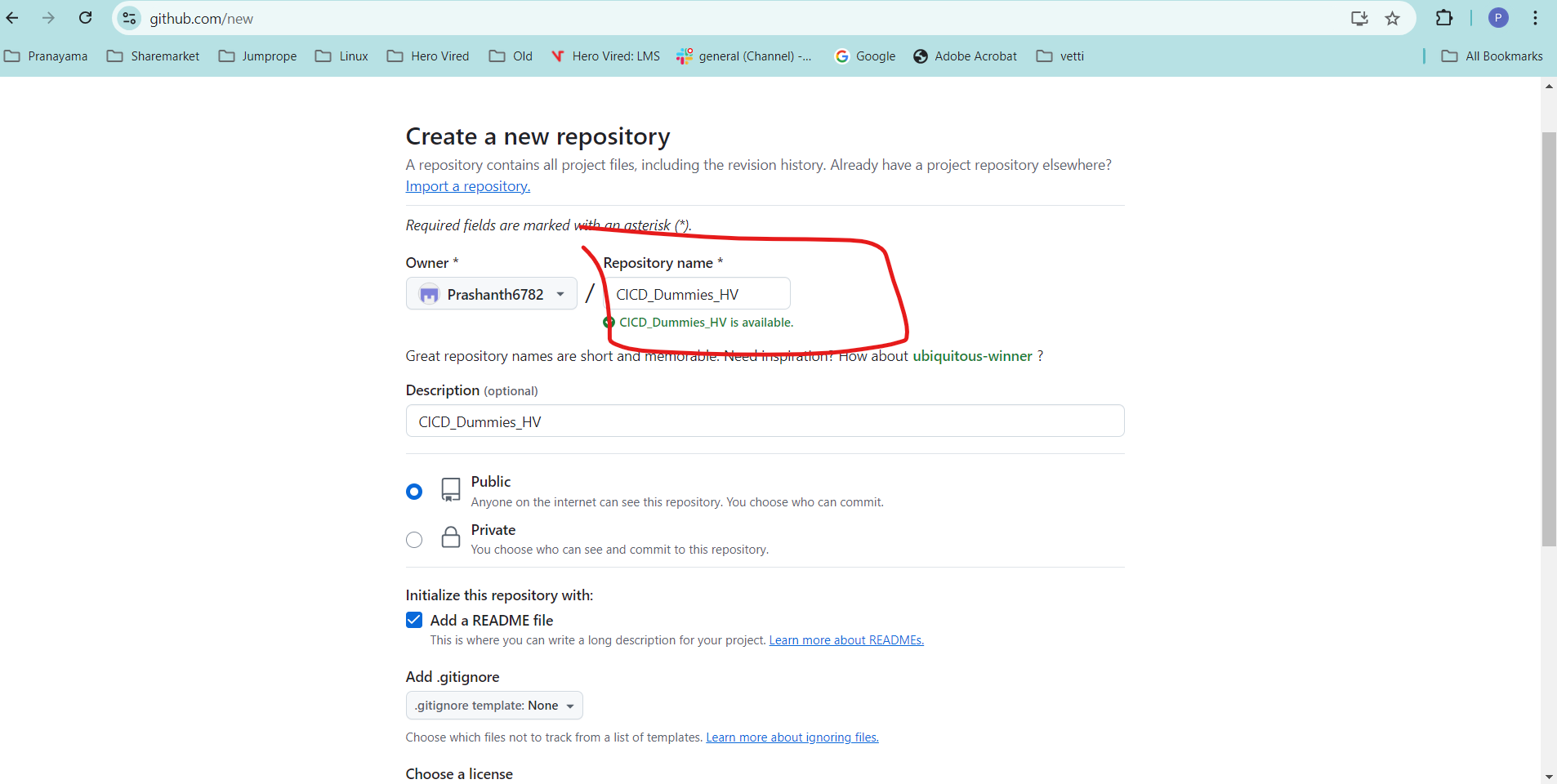
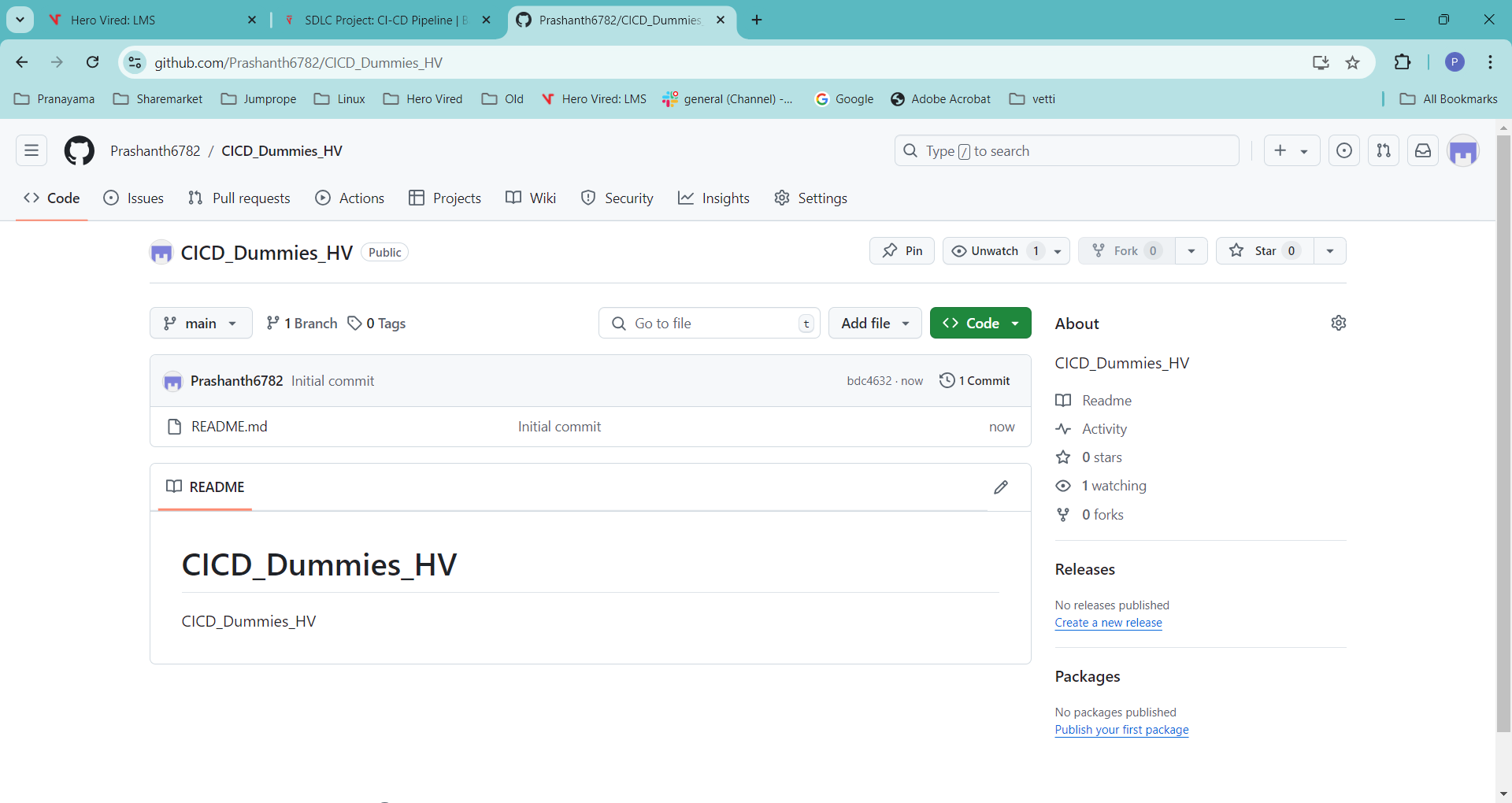
|  |  |
| --- | --- |
| **GIT Repo** | <https://github.com/Prashanth6782/CICD_Dummies_HV> |
| **Python** | https://github.com/Prashanth6782/CICD\_Dummies\_HV/tree/main/python\_scripts |
| **Shell Scripts** | https://github.com/Prashanth6782/CICD\_Dummies\_HV/tree/main/shell\_script |
| **Other Temporary files** | https://github.com/Prashanth6782/CICD\_Dummies\_HV/blob/main/otherfiles/check\_commits.log |
| **Startup script** | I have shown it as part of the below word document |

* **Task 1:** Set Up a Simple HTML Project
  + - Create a simple HTML project and push it to a GitHub repository.
* **Task 2:** Set Up an AWS EC2/Local Linux Instance with Nginx
* **Task 3:** Write a Python Script to Check for New Commits
  + - Create a Python script to check for new commits using the GitHub API.
* **Task 4:** Write a Bash Script to Deploy the Code
  + - Create a bash script to clone the latest code and restart Nginx.
* **Task 5:** Set Up a Cron Job to Run the Python Script
  + - Create a cron job to run the Python script at regular intervals.
* **Task 6:** Test the Setup
  + - Make a new commit to the GitHub repository and check that the changes are automatically deployed.

# TASK1

**Created a new repository in GITHUB**

****



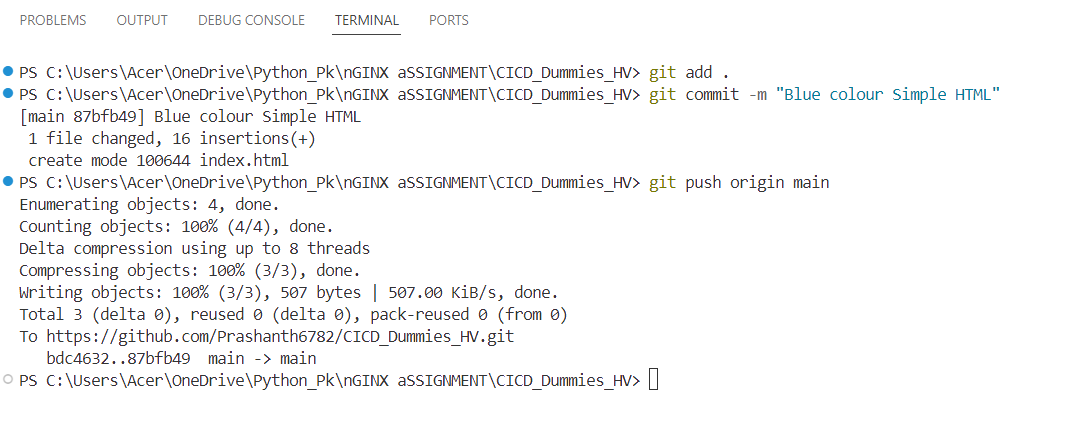
**Clone into Windows Path Initially to create the HTMl**

|  |
| --- |
|  |

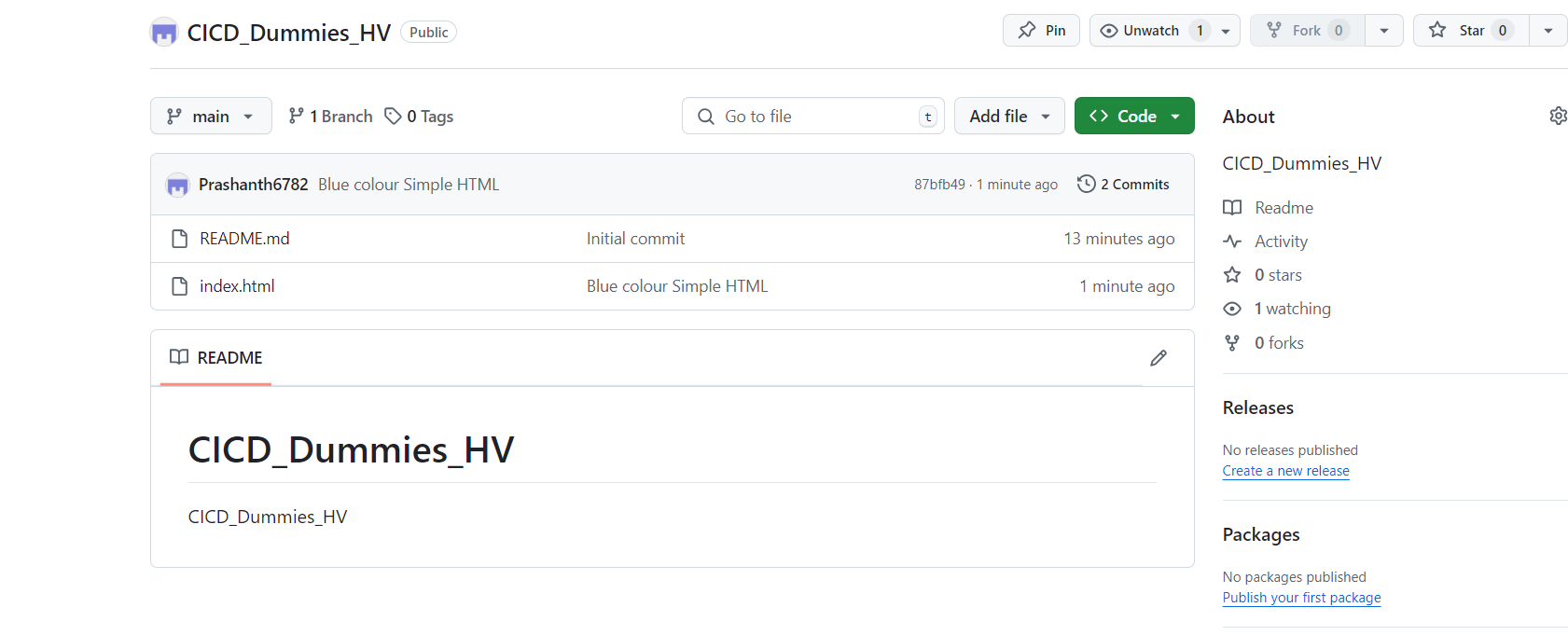
**Created a Index.html**

|  |
| --- |
|  |

**Commit and push into GITHUB**

****

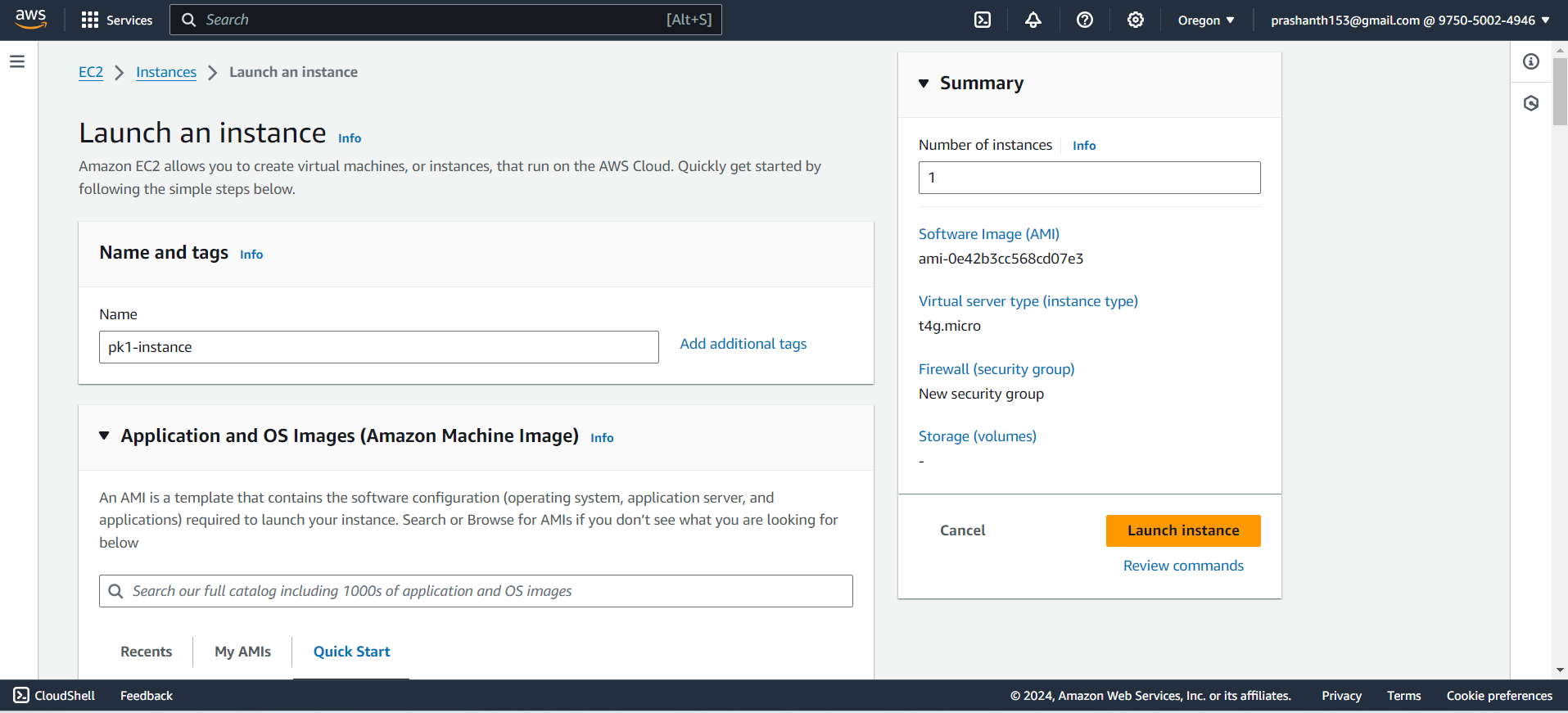
**Can see it in GITHUB now**

****

Task 2**:** Set Up an AWS EC2/Local Linux Instance with Nginx deploying the app1

**Create an Ec2 Instance running and hosting our simple html in app1**

**Im running all instructions as part of the start up script for ease and the startup script is shown below**

****

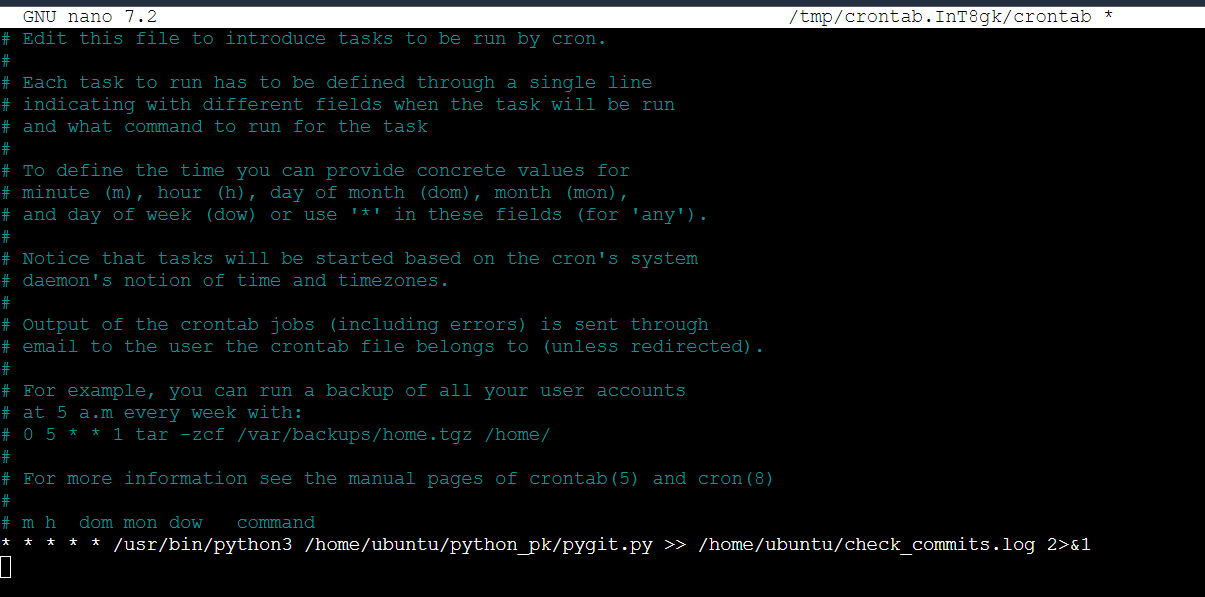
**Startup script**

|  |
| --- |
| #!/bin/bash  # Log file to store the script's output  LOGFILE="/var/log/startup\_script.log"  # Function to log output with timestamp  log() {  echo "$(date '+%Y-%m-%d %H:%M:%S') - $1" | tee -a "$LOGFILE"  }  log "Starting startup script"  # Update the package list and install necessary packages  log "Updating package list and installing necessary packages"  apt-get update >> "$LOGFILE" 2>&1  # Install sudo if not installed  log "Installing sudo"  apt-get -y install sudo >> "$LOGFILE" 2>&1  # Install Nginx to serve the HTML  log "Installing Nginx"  sudo apt-get -y install nginx >> "$LOGFILE" 2>&1  # Install git if not installed  log "Installing git"  sudo apt-get -y install git >> "$LOGFILE" 2>&1  # Clone the GitHub repository to /home/ubuntu  log "Cloning the GitHub repository"  REPO\_URL="https://github.com/Prashanth6782/CICD\_Dummies\_HV.git"  CLONE\_DIR="/home/ubuntu/repo"  if sudo git clone "$REPO\_URL" "$CLONE\_DIR" >> "$LOGFILE" 2>&1; then  log "Repository cloned successfully"  else  log "Error cloning the repository"  exit 1  fi  # Create the /var/www/html/app1 directory if it doesn't exist  log "Creating /var/www/html/app1 directory"  sudo mkdir -p /var/www/html/app1 >> "$LOGFILE" 2>&1  # Give necessary permissions to the /var/www/html/app1 directory  log "Setting permissions for /var/www/html/app1"  sudo chown -R www-data:www-data /var/www/html/app1 >> "$LOGFILE" 2>&1  sudo chmod -R 755 /var/www/html/app1 >> "$LOGFILE" 2>&1  # Copy the index.html file from the cloned repository  log "Copying index.html from the repository"  INDEX\_HTML\_SRC="/home/ubuntu/repo/index.html"  INDEX\_HTML\_DEST="/var/www/html/app1/index.html"  if [ -f "$INDEX\_HTML\_SRC" ]; then  sudo cp "$INDEX\_HTML\_SRC" "$INDEX\_HTML\_DEST" >> "$LOGFILE" 2>&1  log "index.html copied successfully"  else  log "Error: Source index.html file not found at $INDEX\_HTML\_SRC"  exit 1  fi  # Ensure Nginx is running and enable it to start on boot  log "Starting and enabling Nginx"  sudo systemctl start nginx >> "$LOGFILE" 2>&1  sudo systemctl enable nginx >> "$LOGFILE" 2>&1  # Restart Nginx to make sure changes are applied  log "Restarting Nginx"  sudo systemctl restart nginx >> "$LOGFILE" 2>&1  # Open port 80 in the firewall  log "Allowing Nginx through the firewall"  sudo ufw allow 'Nginx Full' >> "$LOGFILE" 2>&1  log "Startup script completed successfully" |

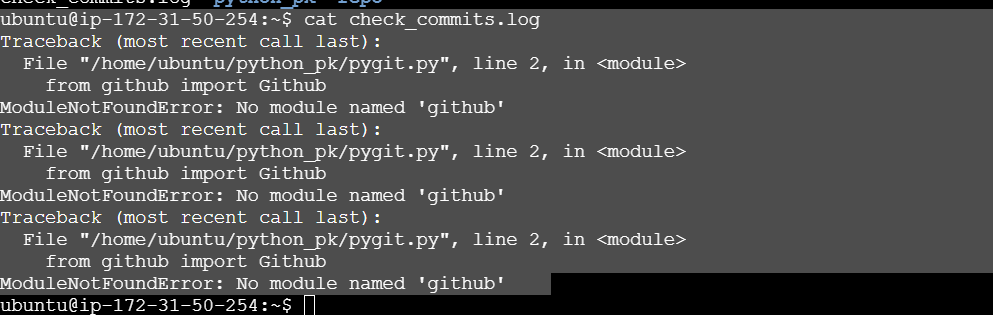
**HTML is opening now successfully with NGINX**

****

**Cronjob to run every minute to check for commits**

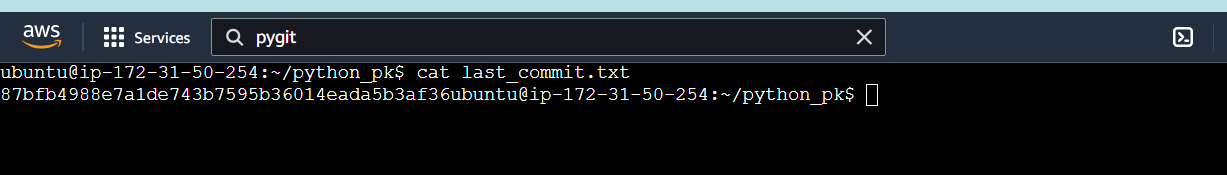
****

**Getting the following dependencies error when the cron is executed**

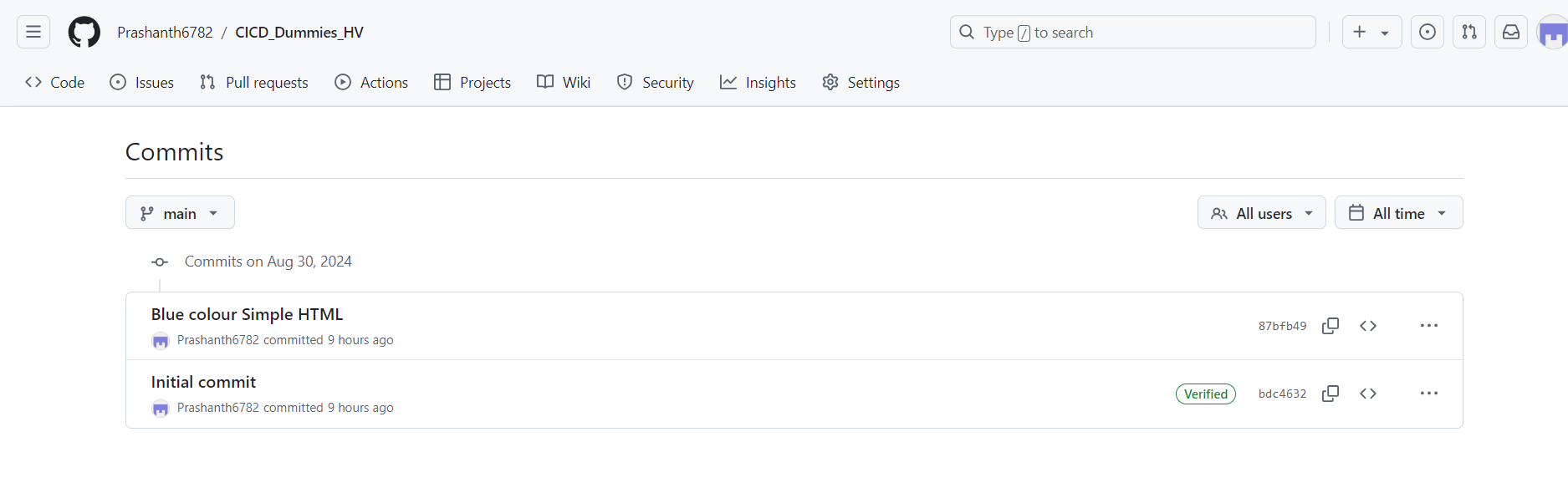
****

**Installing all the gith dependencies**

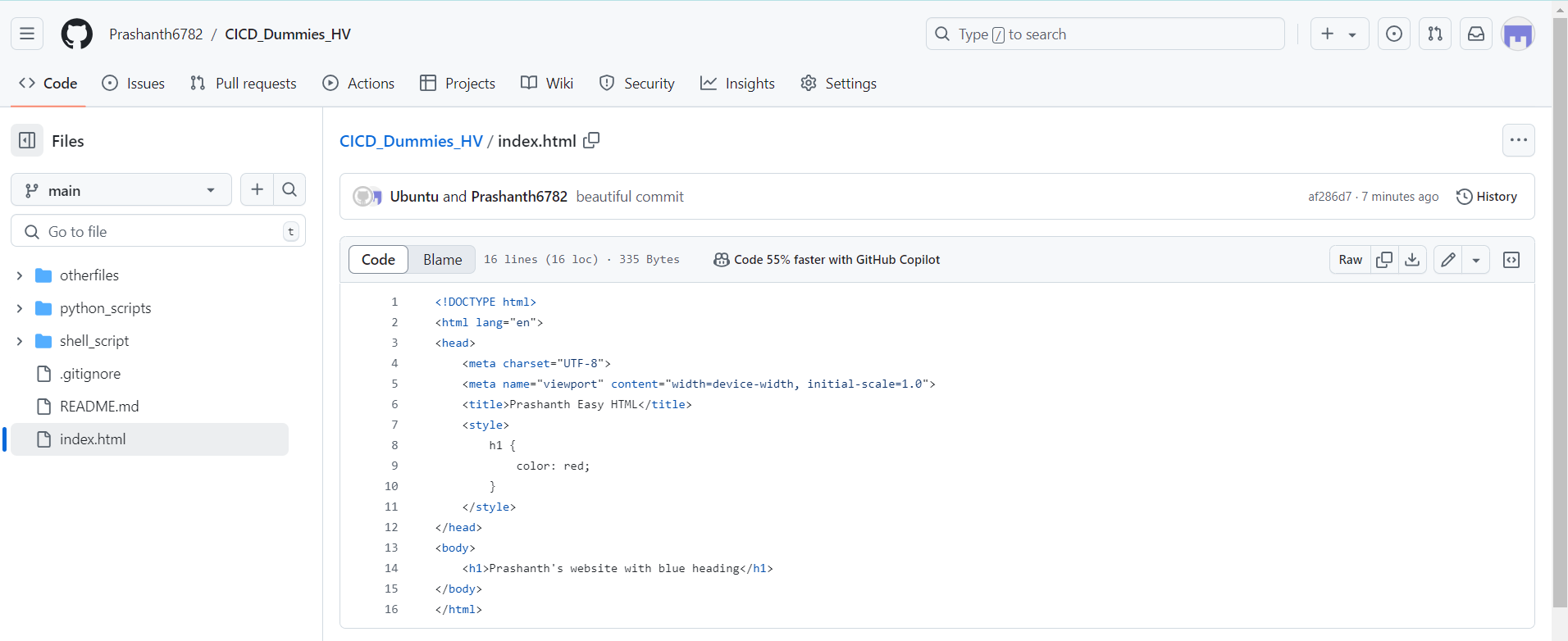
**Initial commit is stored in the last\_commit file**

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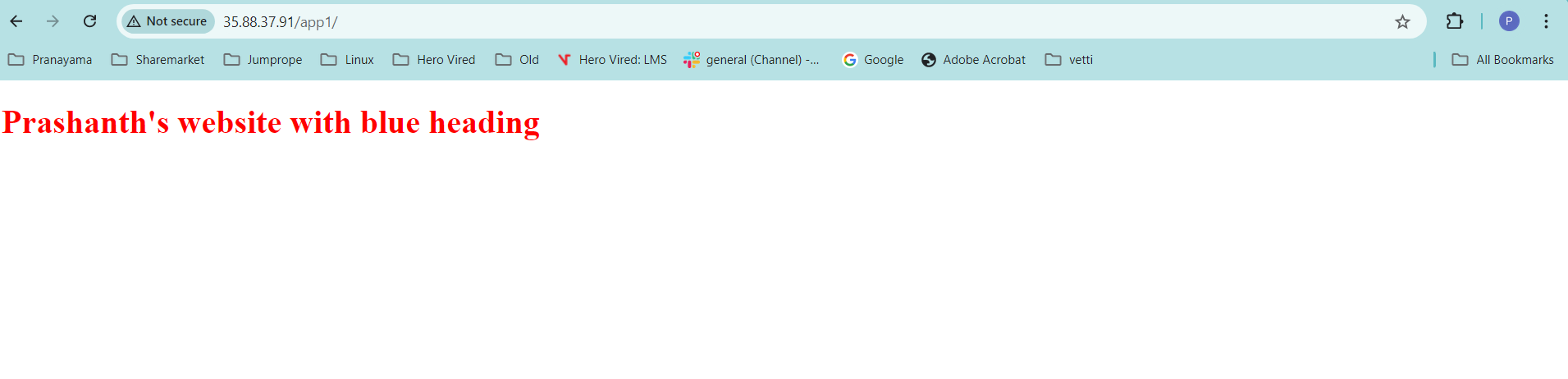
**Matches with commit found in github**

****

**Changing the html and pushing the RED colour code to GITHUB which should be picked up automatically now by the cronjob**

****

**Finally colour is changed to red automatically once the shell script is executed**

****