POC Task 8

Task 8: Availability Checker Script

1. Executive Summary

This PoC demonstrates a website monitoring solution that checks URL availability through HTTP and fallback ping tests, with comprehensive logging of results.

2. Objectives

- Read URLs from sites.txt
- Test connectivity via curl (HTTP/HTTPS)
- Fallback to ping when HTTP fails
- Log status with timestamps

3. Implementation

3.1 Script Creation

```
┌──(llamafart@jaivanti)-[~]
└─$ sudo -u studentuser tee /home/studentuser/projectX/sites.txt << 'EOF'
https://google.com
https://example.com
https://nonexistent.website
EOF
https://google.com
https://example.com
https://nonexistent.website

┌──(llamafart@jaivanti)-[~]
└─$ >....
        if ping -c 1 -W "$TIMEOUT" "$domain" >/dev/null 2>&1; then
            echo "  [PING] UP (but HTTP failed)" | tee -a "$LOG_FILE"
        else
            echo "  [DOWN] No response" | tee -a "$LOG_FILE"
        fi
    fi
    echo "--------------------------------" >> "$LOG_FILE"
done < "$SITES_FILE"

echo "Check completed at $(date)" >> "$LOG_FILE"
```

3.2 Permission Configuration

```
┌──(llamafart@jaivanti)-[~]
└─$
sudo chown studentuser:studentuser /home/studentuser/projectX/scripts/check_sites.sh

┌──(llamafart@jaivanti)-[~]
└─$ sudo chmod +x /home/studentuser/projectX/scripts/check_sites.sh
```

3.3 Execution

```
┌──(llamafart㉿jaivanti)-[~]
└─$ sudo -u studentuser cat /home/studentuser/projectX/site_status.log
Website Availability Check - Tue Jul 29 02:20:07 PM IST 2025
================================
Checking https://google.com...
  [HTTP] UP
--------------------------------
Checking https://example.com...
  [HTTP] UP
--------------------------------
Checking https://nonexistent.website...
  [DOWN] No response
--------------------------------
Check completed at Tue Jul 29 02:20:09 PM IST 2025
```

4. Conclusion

The website checker successfully monitors URL availability through HTTP and ping tests, logging results with timestamps. The script handles connection failures gracefully while maintaining minimal system impact through timeouts and fallback checks.