

Internship 1: Design of a Cloud-Based Firewall for Website Protection

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Objective:

The intern will design and configure a **cloud firewall** to protect a live website using **Cloudflare**. The project includes enabling firewall rules, WAF, monitoring attacks, and documenting how cloud-based web protection works.

Technologies Required

- Cloudflare platform
- DNS and Nameserver concepts
- HTTP/HTTPS basics
- Web security (OWASP Top 10)
- Basic networking concepts

Basic Ideas Students Should Know

- How websites work (client–server model)
- What is DNS and traffic routing
- Common web attacks (SQL injection, XSS)
- Firewall and Web Application Firewall (WAF)
- Cloud security basics

Online courses: Cloud Computing, Google Cloud Security (Coursera online course)