

# Built, Secured and Protected Web Application

## Summary:

I employed Azure Websites in collaboration with Git Bash and Terminal to create an Azure web app, deploying it with a container on the web app. Additionally, I designed a customized web application to meet specific project needs. Notably, I established a secure environment by creating a Key Vault and generating self-signed certificates for encryption. I effectively analyzed both self-signed and trusted certificates. Moreover, I implemented a Front Door instance, optimized WAF rule sets, configured custom WAF rules, and addressed Security Center recommendations to ensure a robust and secure application environment. My accomplishments demonstrate my proficiency in Azure, web app deployment, security analysis, and proactive maintenance.

## URL for the web application created (no longer in use):

williamcruickshanksecurityresume.azurewebsites.net

## IP address of webpage (no longer in use):

20.119.16.24

## IP address location:

Washington, Virginia, United States

## DNS lookup on website:

Server: dns.cp.net.rogers.com

Address: 2607:f798:18:10:0:640:7125:5204

Non-authoritative answer:

Name: waws-prod-blu-379-f4e5.eastus.cloudapp.azure.com

Address: 20.119.16.24

Aliases: williamcruickshanksecurityresume.azurewebsites.net  
waws-prod-blu-379.sip.azurewebsites.windows.net

## The runtime stack selected:

PHP 8.2. This runtime stack was used on the back end of the server.

#### Validity of web application certificate:

Issued On: Thursday, March 9, 2023 at 10:05:55 PM  
Expires On: Sunday, March 3, 2024 at 10:05:55 PM

#### Intermediate certificate of web application:

Microsoft Azure TLS Issuing CA 02

#### Root certificate of web application:

DigiCert Global Root G2

#### Example of WAF rule on web application:

**Rule: Bot100100 - Malicious bots detected by threat intelligence**

This rule is blocking any traffic that threat intelligence has detected to make sure no Malicious bots are compromising the integrity of the system.

Screenshots:

Screenshots of website created:





## Securing Your Home Network: Steps to Protect Your Connected Devices

#DigitalPrivacy #OnlineSafety #DigitalFootprint  
#SocialMediaPrivacy #MobileAppSecurity  
#TwoFactorAuthentication #PasswordSecurity  
#DataProtection #OnlinePrivacyTips #EmailSecurity

As our homes become more interconnected with smart devices, securing our home networks has become essential. Here are some steps you can take to protect your connected devices: **Change Default Passwords:** When setting up a new device, always change the default username and password. Default credentials are often known to hackers, making it easier for them to gain unauthorized access. **Update Firmware:** Regularly update the firmware or software of your devices. Manufacturers release updates to patch security vulnerabilities and improve device performance. **Enable Network Encryption:** Secure your Wi-Fi network with strong encryption, such as WPA2 or WPA3. Use a strong, unique password for your Wi-Fi network to prevent unauthorized access. **Guest Network:** Set up a separate guest network for visitors. This keeps your primary network and connected devices isolated from potential security risks. **Firewall Protection:** Enable the built-in firewall on your router to block unauthorized incoming connections. Additionally, consider using a network security solution that provides advanced firewall features. **Disable Remote Management:** Unless necessary, disable remote management features on your router. This prevents attackers from accessing and controlling your network remotely. **Device Segmentation:** Segment your devices into different network zones. For example, separate your smart home devices from your computers and personal devices. This adds an extra layer of protection. **Strong Passwords for IoT Devices**

## Azure Front Door enabled:



### Azure Front Door

Azure Front Door is a modern cloud CDN service that provides high performance, scalability, and secure experiences for your content, files and global applications. It combines modern CDN technology and intelligent threat protection in a tightly integrated service that's easy to set up, deploy, and manage. Use Front Door with Azure services including App Service, Static Web App, Storage, API Management, Application Gateway, Azure Kubernetes Service, Azure Container Apps, and virtual machines—or combine it with on-premises services for hybrid deployments and smooth cloud migration. [Learn more](#)

✓ Azure Front Door is enabled for your web app. Configure your Front Door at the link below. To remove Front Door from this web app, you must remove app service from the Front Door's origins or the classic Front Door's backend.

Name ↑↓	Type ↑↓	Endpoint name ↑↓	Origin group name ↑↓
<a href="#">project1-FrontDoor</a>	Azure Front Door Premium	Project1-FD-aghhg7byg6dfcgy.z01...	XCorpRedTeam

## WAF custom rule:

2980a4509fc203f

515099afcb7450eb2980a4509fc203f | Custom rules ☆ ...

Save Discard Refresh

There are pending changes, click 'Save' to apply.

Configure a policy with custom-authored rules. Once a rule is matched, the corresponding action defined in the rule is applied to the request. Once such a match is processed, rules with lower priorities are not processed further. A smaller integer value for a rule denotes a higher priority. [Learn more](#)

+ Add custom rule

Priority	Name	Rule type	Action	Status
100	Project1rule	Match	Block	Enabled

Edit custom rule

A custom rule is made up of one or more conditions followed by an action. All custom rules for a WAF policy are match rules. [Learn more about custom rules](#)

Custom rule name \*

Project1rule

Status

Enabled Disabled

Rule type

Match Rate limit

Priority \*

100

Conditions

If

Match type

Geo location

Match variable

SocketAddr

Operation

Is Is not

Country/Region \*

3 selected

+

Then

Deny traffic

Update Delete Cancel