| Cybersecurity |
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| Project 1 Technical Brief |

Make a copy of this document before you begin. Place your answers below   
each question. This completed document will be your deliverable for Project 1. Submit it through Canvas when you’re finished with the project at the end of the week.

## Your Web Application

Enter the URL for the web application that you created:

| https://kirylsecurityresume.azurewebsites.net/ |
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Paste screenshots of your website created (Be sure to include your blog posts):

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## Day 1 Questions

### General Questions

1. What option did you select for your domain (Azure free domain, GoDaddy domain)?

| I used an Azure free domain |
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1. What is your domain name?

| kirylsecurityresume |
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### Networking Questions

1. What is the IP address of your webpage?

| 20.119.16.1 |
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1. What is the location (city, state, country) of your IP address?

| Washington, Virginia, United States |
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1. Run a DNS lookup on your website. What does the NS record show?

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### Web Development Questions

1. When creating your web app, you selected a runtime stack. What was it? Does it work on the front end or the back end?

| Php 7.4 and it works on the back end |
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1. Inside the /var/www/html directory, there was another directory called assets. Explain what was inside that directory.

| The assets directory seems to contain the framework for the website like background images and code to customize the front end of the website. |
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1. Consider your response to the above question. Does this work with the front end or back end?

| Front end |
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## Day 2 Questions

### Cloud Questions

1. What is a cloud tenant?

| A customer who purchases cloud computing resources. |
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1. Why would an access policy be important on a key vault?

| Because it will determine which users or user groups have access to perform different tasks. |
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1. Within the key vault, what are the differences between keys, secrets, and certificates?

| Keys are cryptographic material imported into the key vault to request the key vault to perform cryptographic operations.  Secrets are storage for sensitive data like passwords and database connection strings.  Certificates are a renewal feature built on top of keys and secrets. |
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### Cryptography Questions

1. What are the advantages of a self-signed certificate?

| They are free, simple to use and are customizable |
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1. What are the disadvantages of a self-signed certificate?

| If they are compromised there is a serious risk to your website and cannot be monitored by any outside source other than those with the certificate. |
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1. What is a wildcard certificate?

| It is a public key certificate that can be used with multiple subdomains of a domain. |
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1. When binding a certificate to your website, Azure only provides TLS versions 1.0, 1.1, and 1.2. Explain why SSL 3.0 isn’t provided.

| SSL 3.0 its not as secured as the previous TLS versions. |
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1. After completing the Day 2 activities, view your SSL certificate and answer the following questions:
   1. Is your browser returning an error for your SSL certificate? Why or why not?

| No because the certificate has been validated and is operating properly |
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* 1. What is the validity of your certificate (date range)?

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* 1. Do you have an intermediate certificate? If so, what is it?

| Microsoft Azure TLS Issuing CA 01 |
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* 1. Do you have a root certificate? If so, what is it?

| DigiCert Global Root G2 |
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* 1. Does your browser have the root certificate in its root store?

| yes |
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* 1. List one other root CA in your browser’s root store.

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## Day 3 Questions

### Cloud Security Questions

1. What are the similarities and differences between Azure Web Application Gateway and Azure Front Door?

| Front door is a non regional service where the application gateway is a regional service |
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1. A feature of the Web Application Gateway and Front Door is “SSL Offloading.” What is SSL offloading? What are its benefits?

| SSL offloading is the process of removing the SSl based encryption from incoming traffic that a web server receives the relieve it from decryption of data. It is be |
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1. What OSI layer does a WAF work on?

| Layer 7 |
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1. Select one of the WAF managed rules (e.g., directory traversal, SQL injection, etc.), and define it.

| SQL injection- it is a code injection technique used to attack data driven applications. |
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1. Consider the rule that you selected. Could your website (as it is currently designed) be impacted by this vulnerability if Front Door wasn’t enabled? Why or why not?

| Yes because |
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1. Hypothetically, say that you create a custom WAF rule to block all traffic from Canada. Does that mean that anyone who resides in Canada would not be able to access your website? Why or why not?

| No one would be able to access from Canada unless they were using a VPN to change their IP location. |
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1. Include screenshots below to demonstrate that your web app has the following:
   1. Azure Front Door enabled

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* 1. A WAF custom rule

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## Disclaimer on Future Charges

Please type “**YES**” after one of the following options:

* ***Maintaining website after project conclusion****: I am aware that I am responsible for any charges that I incur by maintaining my website. I have reviewed the* [*guidance*](https://docs.google.com/document/d/1ZzC4oTJFdlkkeWuzuJAyVSqtDFbuAWilmwXg8PZgzMs/edit) *for minimizing costs and monitoring Azure charges.*

*YES*

* ***Disabling website after project conclusion****: I am aware that I am responsible for deleting all of my project resources as soon as I have gathered all of my web application screen shots and completed this document.*

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