| 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:

| myminime.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)?

| Azure free domain |
| --- |

1. What is your domain name?

| myminime |
| --- |

### Networking Questions

1. What is the IP address of your webpage?

| 20.119.8.44 |
| --- |

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

| US East |
| --- |

1. Run a DNS lookup on your website. What does the NS record show?

| That the website is hosted and published by azure |
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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?

| PHP8.0 backend |
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1. Inside the /var/www/html directory, there was another directory called assets. Explain what was inside that directory.

| Cascading style sheets and images used in the webpage/blog |
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1. Consider your response to the above question. Does this work with the front end or back end?

| Front end |
| --- |

## Day 2 Questions

### Cloud Questions

1. What is a cloud tenant?

| Customers that pay for cloud computing space from a cloud provider. |
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1. Why would an access policy be important on a key vault?

| Because it can determine which user or user group(s) are able to perform what operations with key vault secrets, keys and certificates. |
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1. Within the key vault, what are the differences between keys, secrets, and certificates?

| Keys are cryptographic keys that are used in encrypting and decrypting messages/data.  Secrets: information that needs top be stored securely  Certificates: digital documents that contain information about the owner and identity of the owner of a web application |
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### Cryptography Questions

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

| Simple to modify and customize. Quick issuance. |
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1. What are the disadvantages of a self-signed certificate?

| Not free. May be expensive and difficult to monitor. |
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1. What is a wildcard certificate?

| A certificate with a wildcard character in the domain field allowing for one certificate to secure multiple sub domains |
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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.

| Outdated and not secure |
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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. The certificate is valid and up-to-date |
| --- |

* 1. What is the validity of your certificate (date range)?

| May 21, 2023 to May 15, 2024 |
| --- |

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

| Yes. Microsoft Azure TLS Issuing CA 06 |
| --- |

* 1. Do you have a root certificate? If so, what is it?

| Yes. DigiCert GLobal Root G2 |
| --- |

* 1. Does your browser have the root certificate in its root store?

| Yes |
| --- |

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

| Razer Chroma SDK Local Cert |
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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?

| They are both load balancers that operate on the layer 7.  Front is a nonregional service. Gateway i sa 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?

| Removing the SSL-based encryption from incoming traffic. It relieves a web server of the processing, decryption, and encrypting traffic sent through the SSL.  It allows the website to load quicker and smoother. |
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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 is a common hacking tool that consists of ‘injecting’ malicious code into SQL statements so that when they are ran, the malicious code is executed as well. |
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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?

| No. There is no implementation of SQL products/databases on the webpage. |
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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. An example would be someone from Canada utilizing a VPN to bypass that security measure. |
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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.*
* ***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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