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

|  |
| --- |

## 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?

| benchiuresume.azurewebsites.net |
| --- |

### Networking Questions

1. What is the IP address of your webpage?

| 20.211.64.15 |
| --- |

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

| Sydney NSW Australia |
| --- |

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

| No NS record found |
| --- |

### 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 -8.0 - Back end |
| --- |

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

| Contains the format/template of the website including its layout and images involved. |
| --- |

1. Consider your response to the above question. Does this work with the front end or back end?

| Back end |
| --- |

## Day 2 Questions

### Cloud Questions

1. What is a cloud tenant?

| Sharing of computer resources in an isolated enviroment |
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1. Why would an access policy be important on a key vault?

| To restrict unwanted access to keys from both internal and external threats |
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1. Within the key vault, what are the differences between keys, secrets, and certificates?

| Key - Public Key + Private Key - Both Interact to Authenticate data and allow the access and transfer of encrypted data  Certificate - A File that Authenticates the authenticity of the website and allows the transfer of data  Secret - An information that wants to be encrypted and stored |
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### Cryptography Questions

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

| * Unlimited Certificate generation * Free * Quick set up |
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1. What are the disadvantages of a self-signed certificate?

| * Personal data can be set at risk * Permanent “unknown publisher” Warning * Data security isn't guaranteed * Can possibly transfer errors |
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1. What is a wildcard certificate?

| A Single certificate that can authenticate the user to multiple subdomains related to the base 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 has flaws that allow external attackers to potentially attack and steal information and cookies |
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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 Domain/Website is certified by microsoft |
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* 1. What is the validity of your certificate (date range)?

| From: Fri, 10 Mar 2023 03:05:55 GMT To : Mon, 04 Mar 2024 03:05:55 GMT |
| --- |

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

| Yes - \*.azurewebsite.net |
| --- |

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

| Yes - Microsoft Azure TLS Issuing CA 02 |
| --- |

* 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.

| Go Daddy Class 2 CA |
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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?

| Both Azure Web Application Gateway and Azure Front Door are load balances, helping reduce the strain on the server  Differences   | Azure Web Application Gateway | Azure Front Door | | --- | --- | | Non-Regional Service | Regional Service | | Load Balance Between different scale units across regions | Load Balance between VM/COntains within the Same scale | |
| --- | --- | --- | --- | --- | --- | --- |
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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 where encryption/decryption occurs on a separate device.  This reduces the load on the web server increasing its overall performance |
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1. What OSI layer does a WAF work on?

| Layer 7 |
| --- |

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

| SQL Injection Attack : Common Injection Testing Detected   * Detects and automatically blocks common methods of SQL Injection attacks. |
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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?

| The website could be impacted by an SQL attack as the attacker could access the databases and potentially steal or modify data inside for their use. |
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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?

| Anyone with a Canadian IP would not be able to access the website. However this can be bypassed via a VPN as that can mask their location to be from a different country. |
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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.* ***YES***

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