**D424 – Software Capstone**

**Task 4**



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| **Capstone Proposal Project Name:** | Order Management Web Application |
| **Student Name:** | Adam Barham |

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1: Justification of cloud solution provider:

Microsoft Azure was chosen as the cloud solution provider for this project. Azure has several benefits when deploying an ASP.NET application and was a natural choice for this project. First: Azure integrates with .NET and Visual Studio natively as they are both Microsoft products and are designed with a wholistic experience in mind. While other hosting services (AWS, Google) integrate and work well with .NET web applications, Azure has the most native and easy integration, especially when using advanced tools like server-side rendering of Blazor pages and components. Additionally, by deploying an AzureSQL database for the back-end data management, both the Azure App Service and Visual Studio are able to connect and integrate with the database with a minimum of configuration, saving time and production costs.

2: Container Images

Container images such as Kubernetes were not used with this application. Instead, Azure App Service was used to deploy the application to a distinct and segregated resource for hosting. Containerization services weren’t necessary in this instance because no OS specific dependencies were included in the project and Azure App Service scales, provides redundancy, and load balances already, containerization added an additional and unnecessary level of complexity to the application. Additionally, as Blazor is rendered server-side and piped to the browser via SignalR, it runs the same on all OS and most browsers without needing to package additional dependencies or OS information with the application.