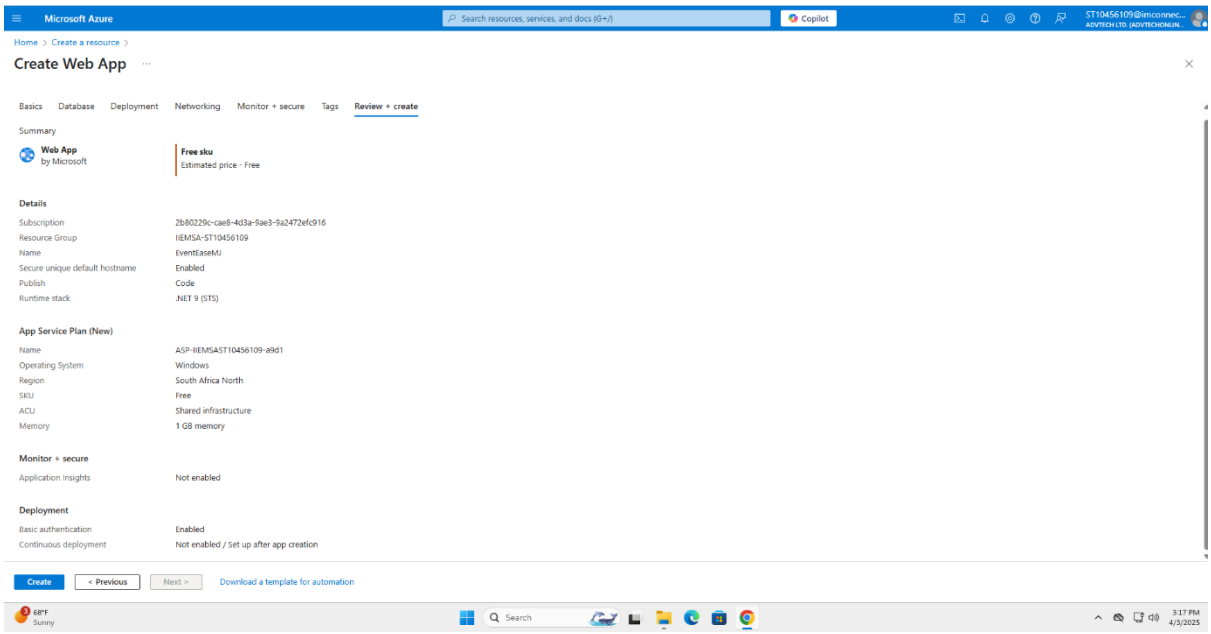
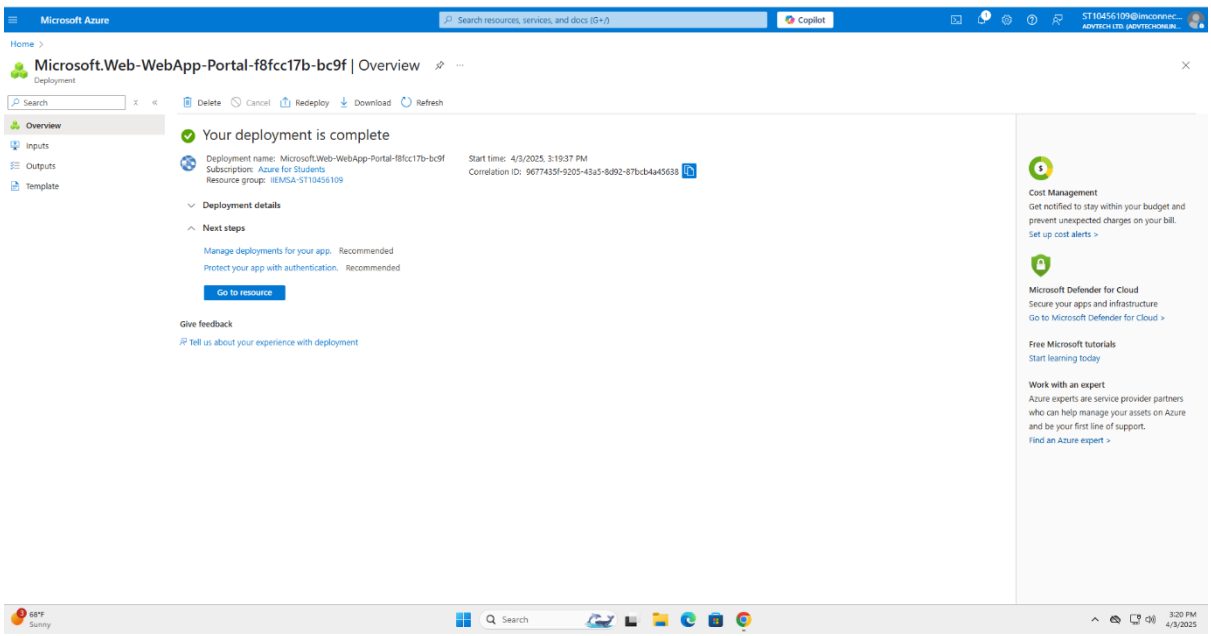
ST10456109
CLDV6211: POE PART1
SCREENSHOTS
AND LINKS

Link for Repository: https://github.com/MusaJanda/ST10456109_CLDV6211_POE_PART1.git



The picture above shows the creation of EventEaseMJ web application before deployment.



Deployment for web application was successful, showing which subscription and what resource group used.

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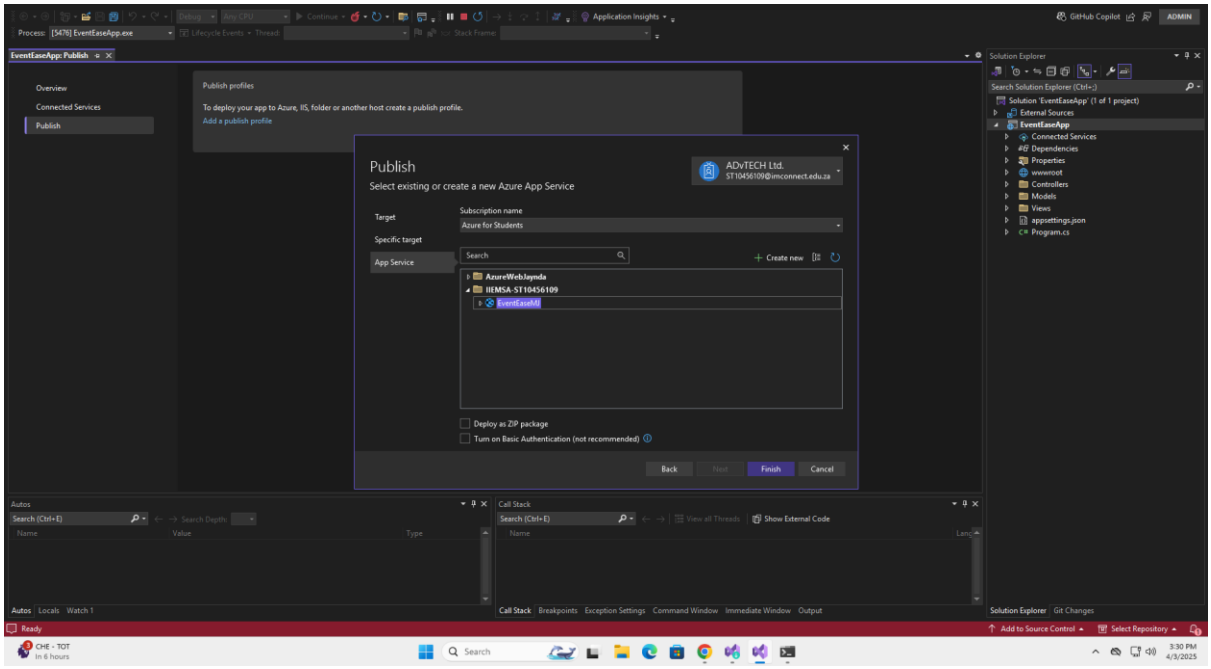
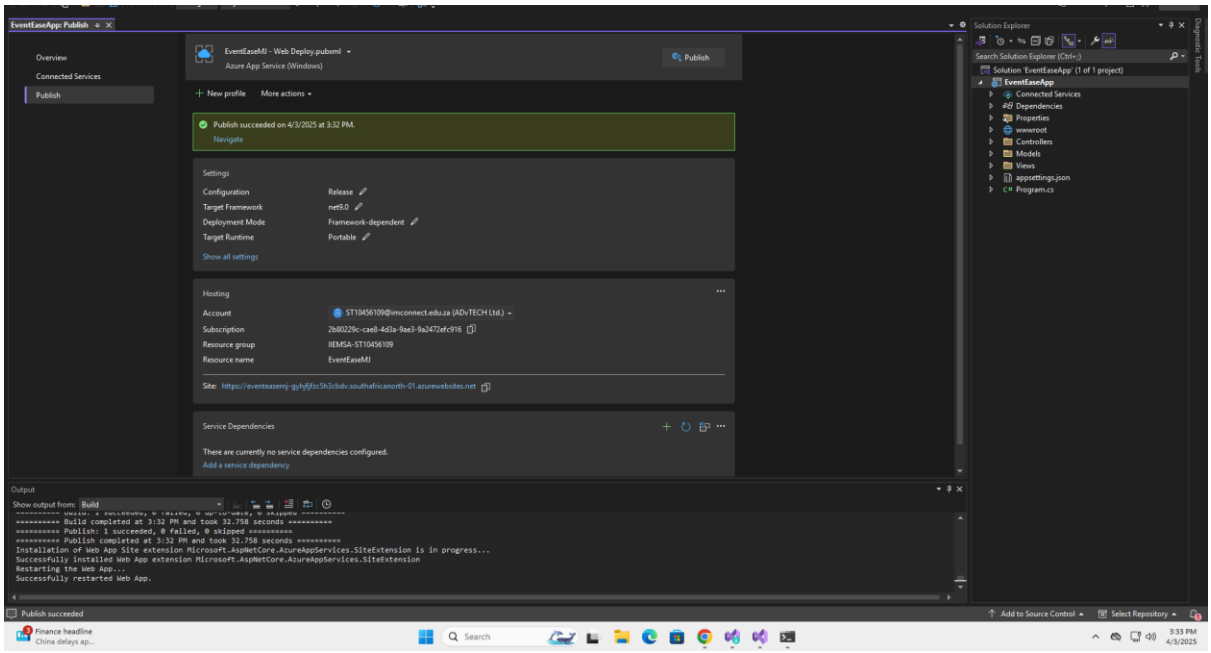
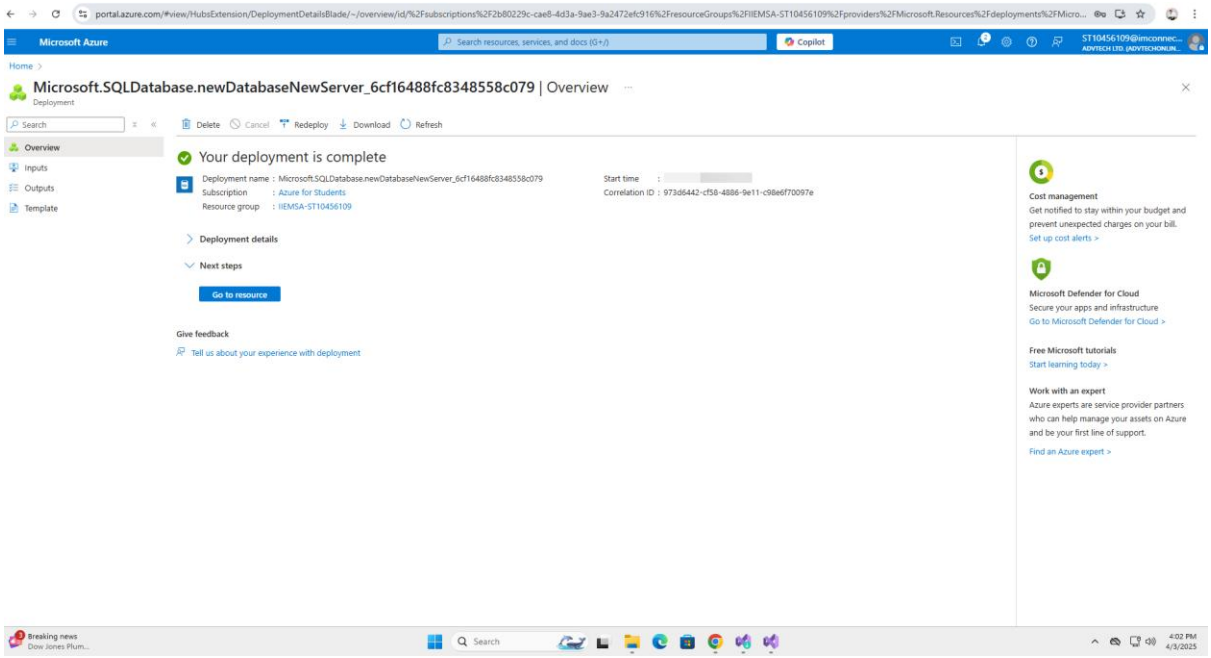


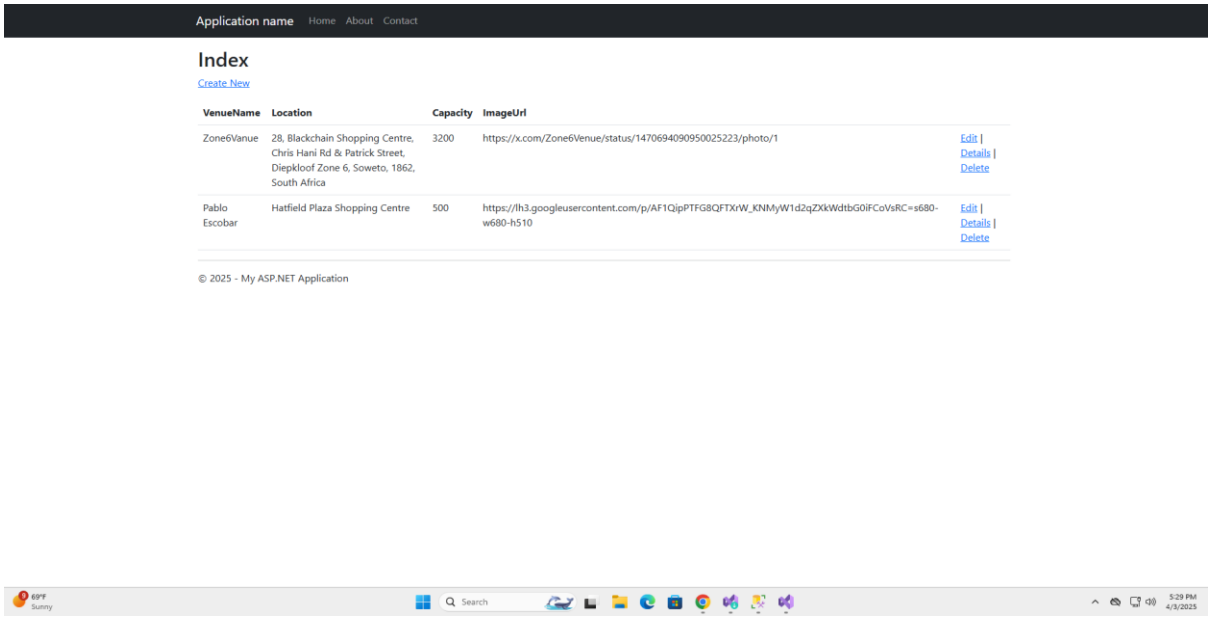
The picture above shows how Visual Studio linked the EventEaseMJ application to Microsoft Azure.



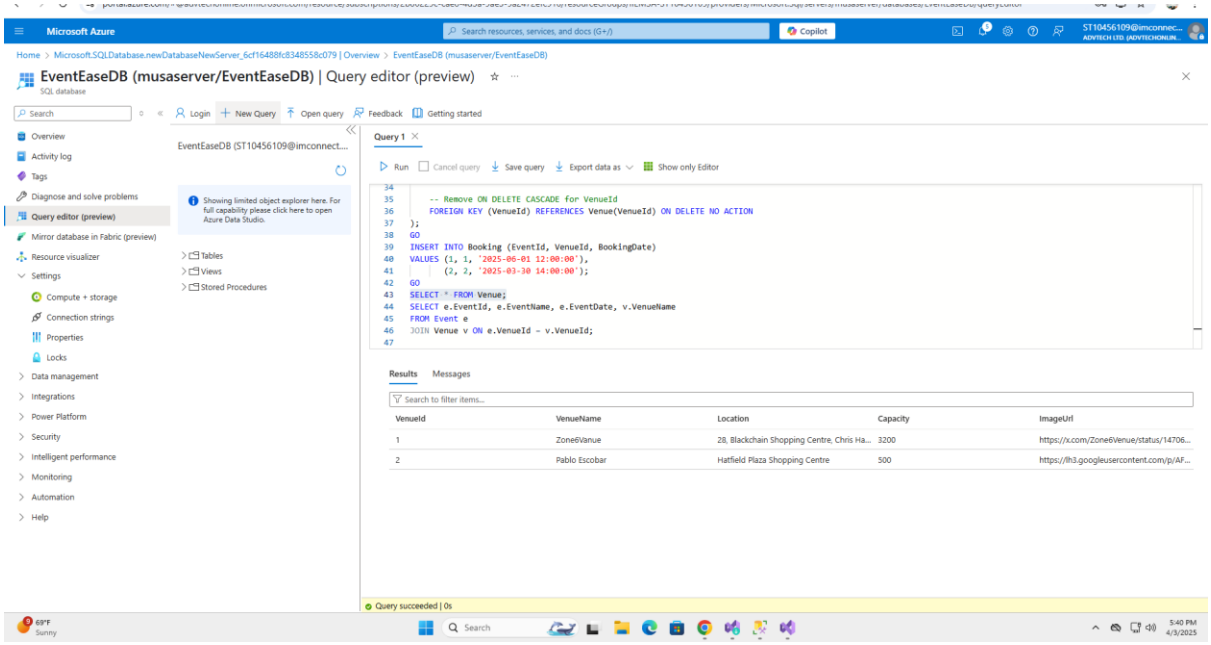
The EventEaseMJ web application was published successfully with the URL: https://eventeasemj-gyhjfjfzc5h3cbdv.southafricanorth-01.azurewebsites.net



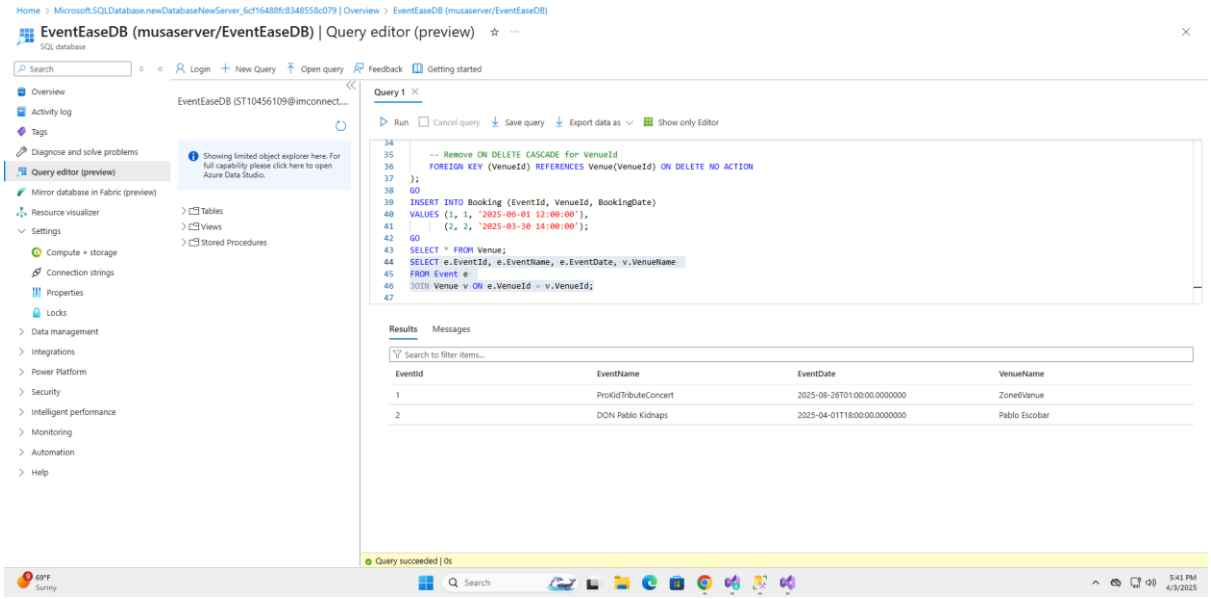
The picture above shows a successful deployment of the SQL Database in Microsoft Azure, with the same subscription and resource group name as the EventEaseMJ application.



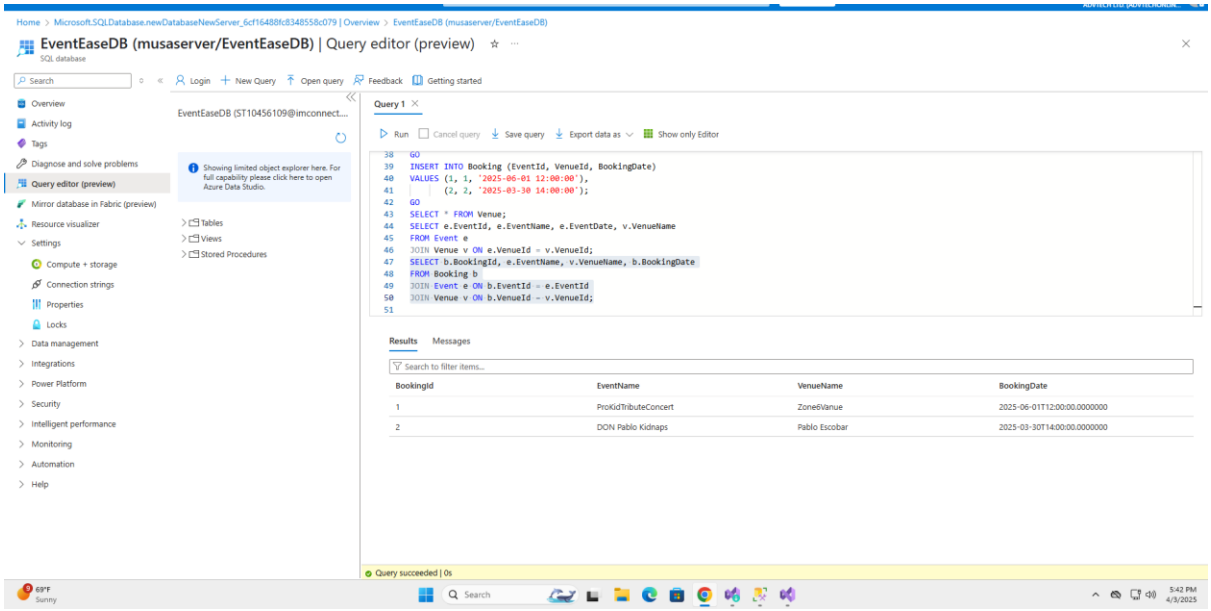
This is the application after linking SQL Management System to Visual Studio for a localhost. It shows the Venue names, locations, capacity, and imageURL.



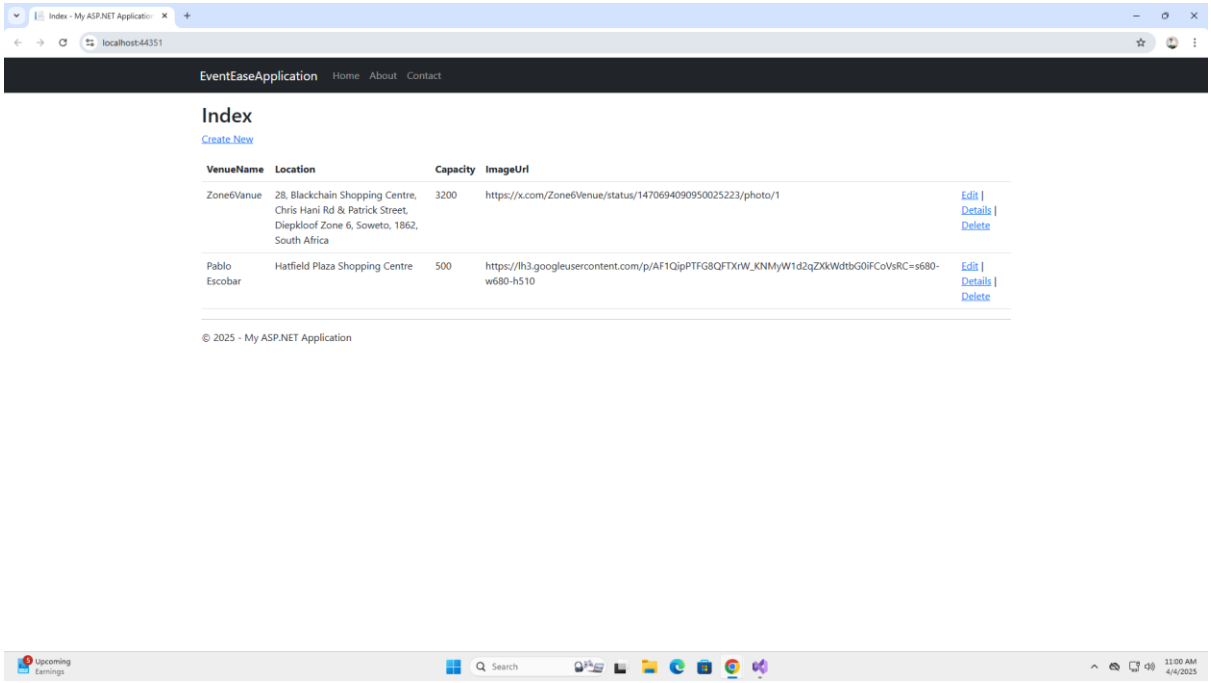
The picture above shows Microsoft Azure EventEaseDB that was successful in executing the Venue Table.



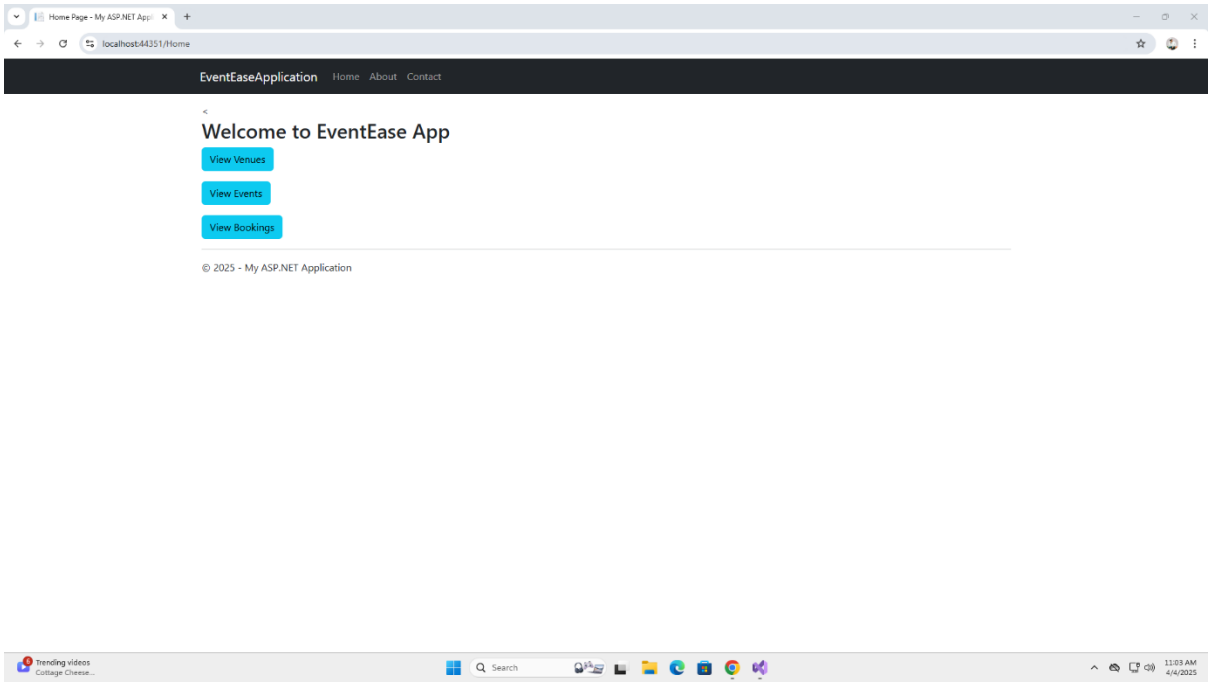
The picture above shows Microsoft Azure EventEaseDB that was successful in executing the Event Table and Venue Names.



The picture above shows Microsoft Azure EventEaseDB that was successful in executing the Booking Table with Event and Venue names.



The EventEaseApplication is on a localhost showing the Venue details.



The EventEaseApplication was published successfully with the URL: https://eventeasemj-gyhjfjfzc5h3cbdv.southafricanorth-01.azurewebsites.net/Home

Theory Question.

Differences between Cloud and On-Premises Deployment

Security:

- **Cloud:** Providers offer robust security measures such as multi-factor authentication, encryption, and regular security audits. For instance, AWS provides security groups and network access control lists (NACLs) to help secure applications. (Amazon Web Services, n.d.)
- **On-Premises:** Organizations have full control over their security measures but must handle all updates and patches themselves. This can be more secure if managed properly but often requires more resources. (Khan, 2019)

Deployment Speed:

- **Cloud:** Faster deployment due to the availability of resources on-demand. For example, deploying a new instance on AWS can be done within minutes. (Amazon Web Services, n.d.)

- **On-Premises**: Requires physical hardware setup and configuration, which can be time-consuming. (Khan, 2019)

Resource Management:

- **Cloud:** Scalable resources that can be adjusted based on demand, such as AWS Auto Scaling. (Amazon Web Services, n.d.)
- **On-Premises:** Fixed resources that might lead to underutilization or overprovisioning. (Khan, 2019)

Examples:

- A small business might choose cloud deployment for a new e-commerce platform to leverage AWS's security and scalability without the need for significant upfront investment in hardware.

Differences between IaaS, PaaS, and SaaS

IaaS (Infrastructure as a Service):

- Provides virtualized computing resources over the internet. Examples include AWS EC2, Google Compute Engine.
- **Pros:** Full control over the environment, flexibility to choose OS, and software.
- **Cons:** Requires more management overhead. (Khan, 2019)

PaaS (Platform as a Service):

- Provides a platform allowing customers to develop, run, and manage applications without complex infrastructure management. Examples include Google App Engine, Heroku.
- **Pros:** Easier to develop and deploy applications, managed infrastructure.
- **Cons:** Less control over the environment, potential vendor lock-in. (Khan, 2019)

SaaS (Software as a Service):

- Provides software applications over the internet. Examples include Salesforce, Microsoft Office 365.
- **Pros:** Easy to use, no need for installation or maintenance.

- **Cons:** Limited customization, reliance on the provider for updates and security. (Khan, 2019)

Why PaaS might be beneficial:

- **Development Speed:** PaaS can accelerate development by providing ready-to-use environments and tools (Khan, 2019).
- **Scalability:** Automatically scales with demand, which is beneficial for applications with fluctuating user bases (Khan, 2019).

Examples:

- A startup might choose PaaS for a new mobile app to quickly deploy and scale without worrying about server management.

References

- Amazon Web Services. (n.d.). *AWS Security Best Practices*. Retrieved from https://aws.amazon.com/whitepapers/aws-security-best-practices/
- Khan, S. (2019). *Cloud Computing: IaaS, PaaS, SaaS, FaaS, and Serverless*. DZone. Retrieved from https://dzone.com/articles/cloud-computing-iaas-paas-saas-faas-and-serverless