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UNIVERSITI TEKNOLOGI MALAYSIA

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Internship Presentation
13/8/2024 - 20/1/2025

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Internship SV: Dr. Zuriahati Binti Mohd Yunos

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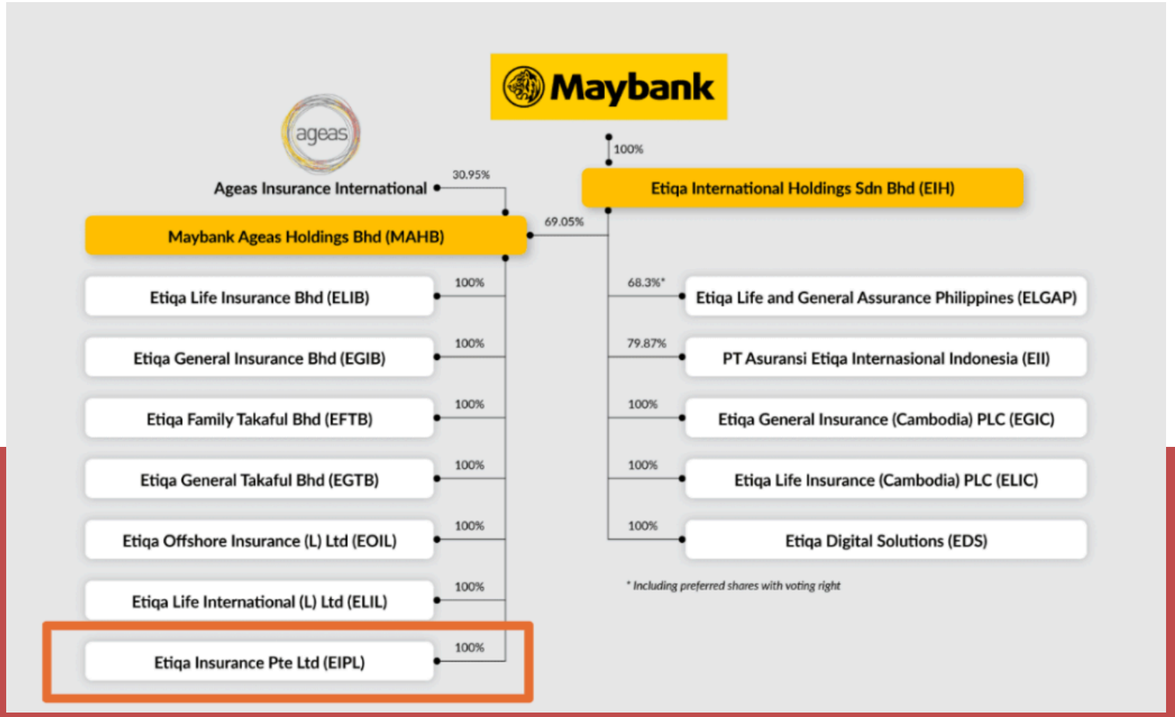
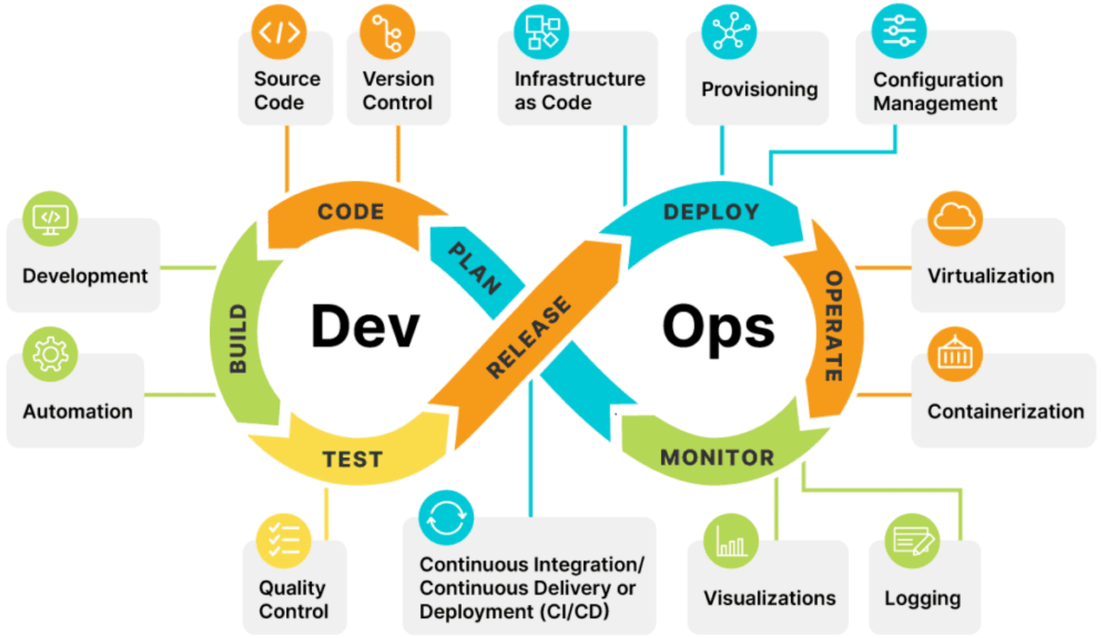
Company Information

- Name: Etiqa Insurance
- Industry: Insurance and Financial Services
- Parent Company: Part of Maybank Group
- Products and Services
  - Life insurance
  - General insurance
  - Takaful products (Shariah-compliant offerings)
  - Corporate and personal solutions



Etiqa is a leading insurance and takaful provider in ASEAN and a part of the Maybank Group, one of the largest banking groups in the region. Etiqa stands out as a forward-thinking company that actively invests in digital transformation to improve customer access, making it a trusted insurance provider in ASEAN. Etiqa is actively expanding its business into other countries, including the Philippines, Indonesia, and Cambodia

Internship Task

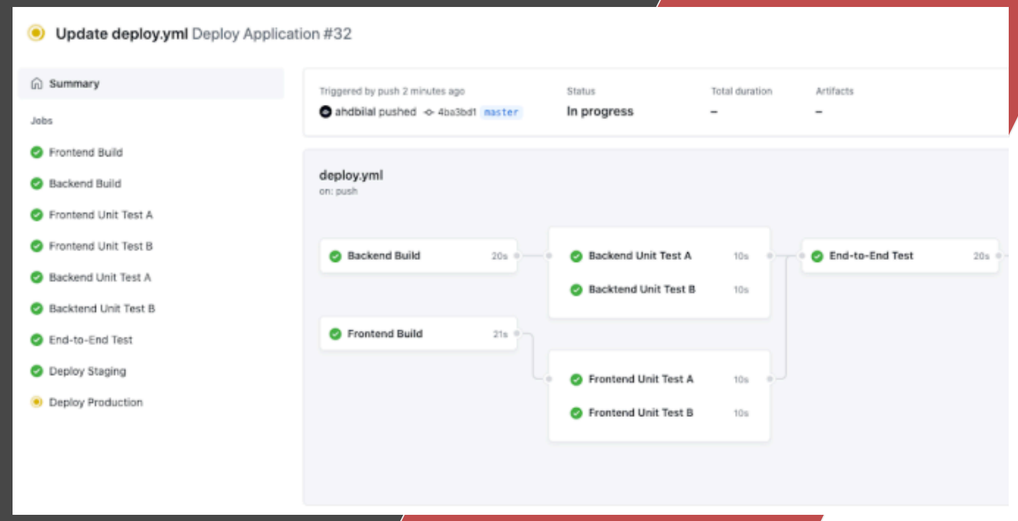


What is DevOps

- DevOps is a culture and set of practices that combines software development (Dev) and IT operations (Ops).
- The goal is to shorten the development lifecycle and provide continuous delivery with high software quality.

Software used

- Mobaxterm
- Visual Studio
- Github Actions
- Github
- Nexus Registry
- Nginx
- MySQL
- Postman
- WinSCP



Code Blame Raw

```yaml
name: CI/CD Pipeline

on:
  push:
    branches: [ master ]
  pull_request:
    branches: [ master ]

jobs:
  build-backend:
    runs-on: ubuntu-latest

    steps:
    - uses: actions/checkout@v3

    - name: Setup .NET Core
      uses: actions/setup-dotnet@v3
      with:
        dotnet-version: '6.0.x' # Altere para a versão do .NET Core que você está usando

    - name: Restore dependencies
      run: dotnet restore Server/Server

    - name: Build
      run: dotnet build Server/Server -c Release --no-restore
```

Deployment automation

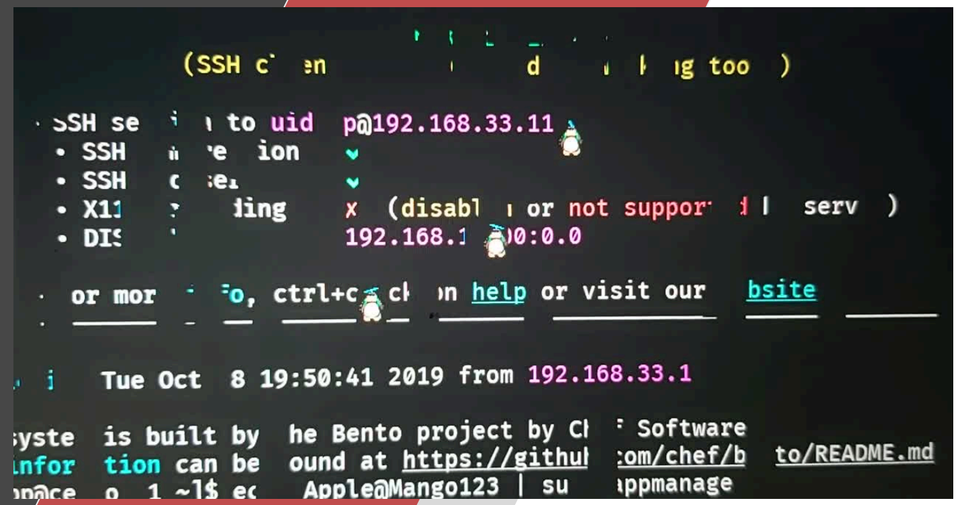
- Compiling developer code and creating automated deployment processes.
- Using GitHub Actions to automate build and deployment with a single button.
- Uses YAML code to define and provision infrastructure, making it consistent and version-controlled.
- Deployment pipelines define the sequence of automated steps, from building the application to deploying it
- Artifacts are built and uploaded to the server.

Server configuration

```
linuxtldr@linux:~$ systemctl cat boot-efi.mount
# /run/systemd/generator/boot-efi.mount
# Automatically generated by systemd-fstab-generator

[Unit]
Documentation=man:fstab(5) man:systemd-fstab-generator(8)
SourcePath=/etc/fstab
Before=local-fs.target
Requires=systemd-fsck@dev-disk-by\x2duuid-BC1D\x2d7F85.service
After=systemd-fsck@dev-disk-by\x2duuid-BC1D\x2d7F85.service
After=blockdev@dev-disk-by\x2duuid-BC1D\x2d7F85.target

[Mount]
Where=/boot/efi
What=/dev/disk/by-uuid/BC1D-7F85
Type=vfat
Options=umask=0077
linuxtldr@linux:~$
```



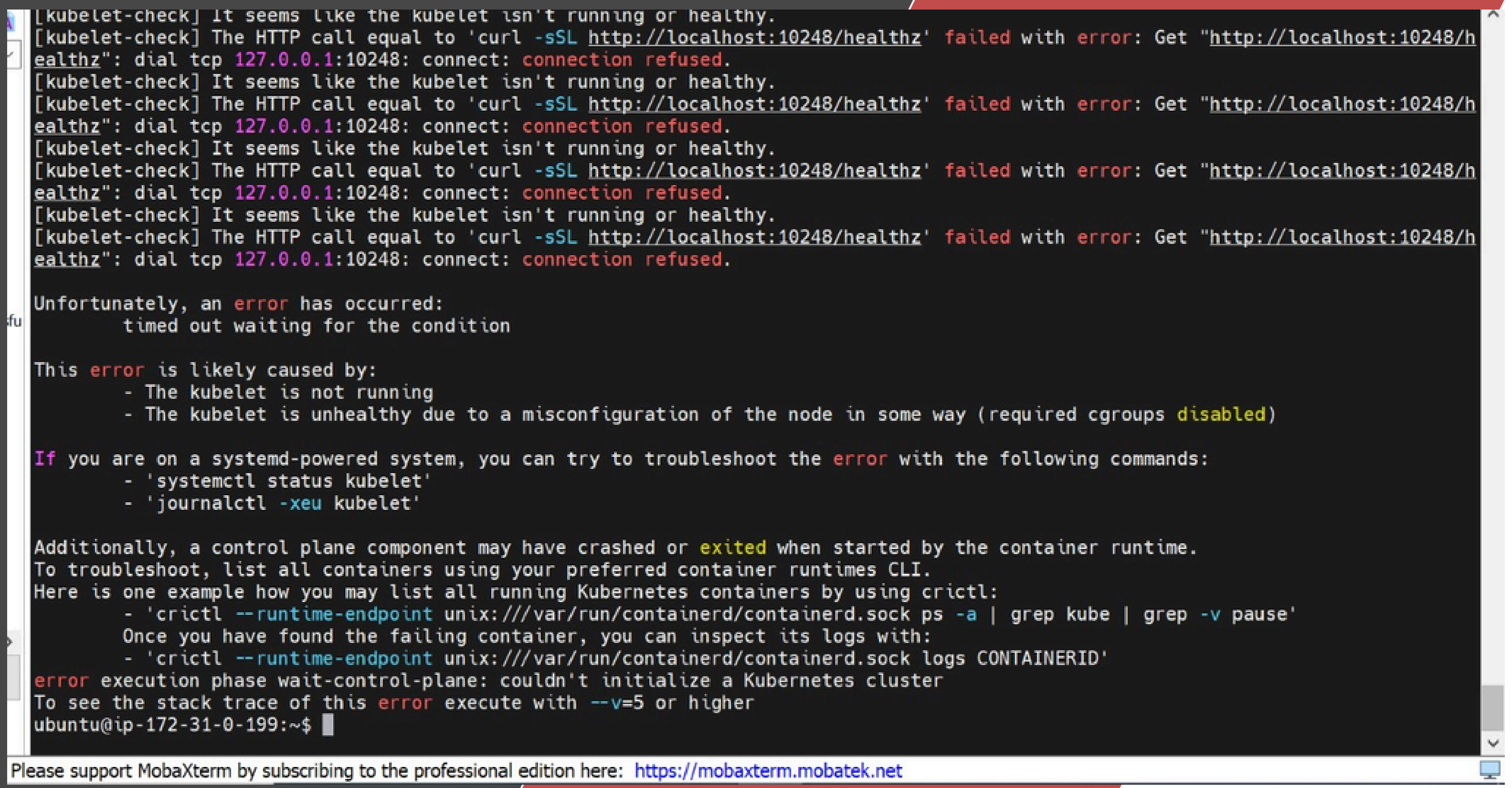
Getting the Server Ready:

- Preparing and configuring server environments for service and UI deployment.
- Setting up unit file configuration (systemd) for the service to run as a background process.
- Configure proxy servers to route requests between the frontend and backend.
- Defining the ports and routing rules for the service.
- Ensuring proper reverse proxy setup and routing to the correct service.

Familiarity with vi Commands:

- Using vi editor to make modifications on Linux servers.
- Updating file permissions, copying files etc.

Monitoring server



Monitoring Services

- Ensuring services are Healthy:
- Regularly checking the health status of all running services.
- Viewing service logs to troubleshoot issues and ensure proper functionality.
- Zoom notification integration

Firewall configuration

- Controls incoming and outgoing network traffic based on security policies
- Open ports and IPs to integrate tools like other team API calls or network services

Conclusion

Positive Aspects:

- Excited to learn new tools and concepts, such as server setup, vi commands, GitHub Actions, and nginx configurations.

Challenges:

- Sometimes stressful because the server is a very important part of the whole software development pipeline and any careless mistake may burden my team
- Learning to manage pressure and keep services alive was a crucial part of the experience.

Special thanks to :

Mr Foo Lim Dick

Mr Soo Yong Yao

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THANK YOU

Kerana Tuhan untuk Manusia