# Final Project Cloud Engineer - DigitalSkola

### 1. Git Repository

🔗 [final-project-digitalskola](https://github.com/gndhmwn/final-project-digitalskola)

\*Contains:\*

- Application source code

- Jenkins pipeline configuration

- Monitoring setup scripts

- Documentation

### 2. CI/CD Pipeline

🛠️ [Jenkinsfile](https://github.com/gndhmwn/final-project-digitalskola/blob/main/Jenkinsfile)

\*Manual pipeline configuration featuring:\*

- Build automation

- Deployment scripts

- Quality checks

### 3. Deployed Application

🌐 [Production Environment](https://final-project.ninja-sawit.tech/?name=Ganda+Himawan&security\_code=nikah2025)

<div align="center">

<img src="repo-images/website.png" width="600"/>

<p><em>Figure 1: Website</em></p>

</div>

### 4. Monitoring System

#### A. Performance Metrics

📊 \*\*Grafana Dashboard\*\*

<div align="center">

<img src="repo-images/dashboard-monitoring.png" width="600"/>

<p><em>Figure 2: System Metrics Dashboard</em></p>

</div>

#### B. Log Management

📝 \*\*Loki Log Monitoring\*\*

<div align="center">

<img src="repo-images/log-monitoring.png" width="600"/>

<p><em>Figure 3: Application Logs Explorer</em></p>

</div>

### 5. Scaling Demonstration

⚖️ \*\*Manual Scaling Implementation\*\*

<div align="center">

<img src="repo-images/manual-scaling.png" width="600"/>

<p><em>Figure 4: Scaling Configuration</em></p>

</div>

### 6. Security

⚖️ \*\*Security rules for Nginx (Reverse proxy)\*\*

<div align="center">

<img src="repo-images/security.png" width="600"/>

<p><em>Figure 5: Security Rules</em></p>

</div>

---