# Case Study 2

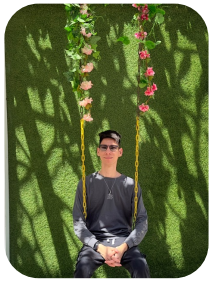
## Final presentation

# Our team

Project members

1

# Our team



**Marc R. Kock**

Web developer

Web app requests

Azure web app

**Farhan Tahmid**

Cloud Manager

RFID

Initial DB migration

Azure VM

KPI Monitoring

**Nikola Hristov**

Team leader

Project navigation & planning

Network managing & configuration

Cost manager

**Rowen de Vries**

Server Manager

Identity and Access Manager

Subscription manager

**Murthid Al Habsi**

Documentator

Documentation

Technical Support

# Research

Methods, implementation & testing

2

# DOT Framework

- Identifying the issue
- Brainstorm solutions
- Implementations & troubleshooting

We've used a more practical approach to our solutions

# System design

Web app and Hardware features

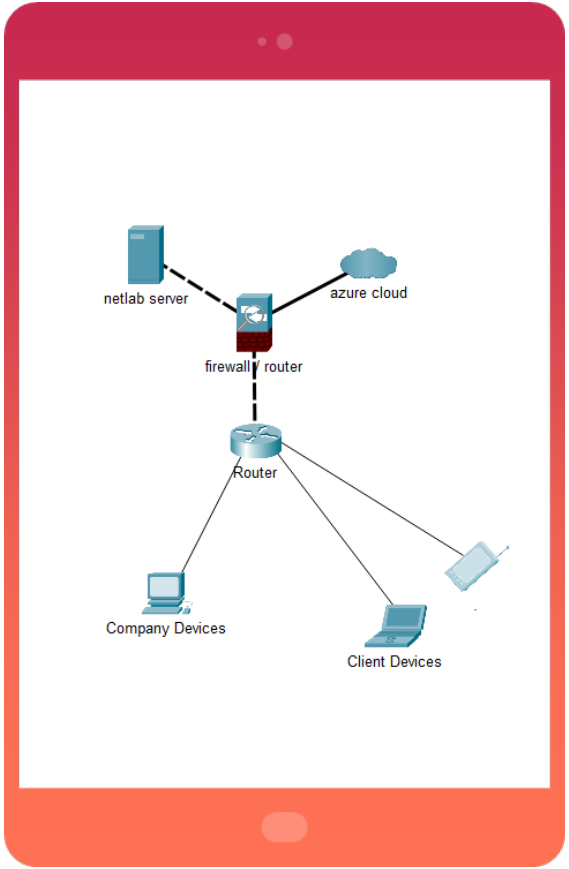
3

# Features: Web Application

- User authentication
- Ticket purchasing/refunding
- Administrative roles

Password hashing using both PBKDF2 & SHA256

# Architecture diagram

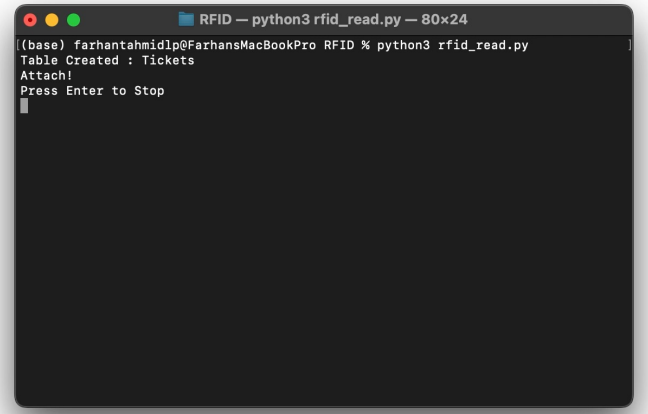


# Hardware Feature: RFID Reader & Writer

- RFID event entry tag
- RFID reader & writer
- RFID Database

RFID Event ticket verification

# RFID Demo


RFID — python3 rfid_read.py — 80×24
(base) farhantahmidlp@FarhansMacBookPro RFID % python3 rfid_read.py
Table Created : Tickets
Attach!
Press Enter to Stop

# Availability

# Conclusion

Ideal things to do

4

# Recommendations

- Pen-testing
- Load Balancing
- Regional Webservers and AD
- More resources for on-prem servers

# Reflections

Technical & professional skills

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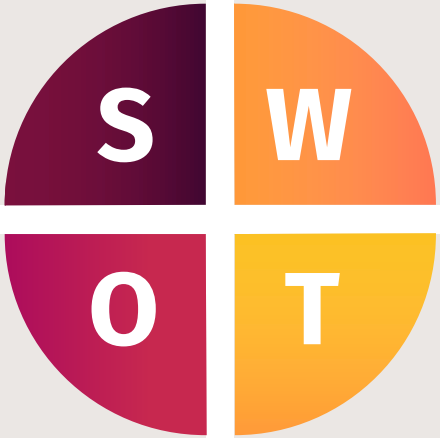
# SWOT & Retrospective




**STRENGTHS**

Team work
Communication
Collaboration

**WEAKNESSES**

Meetings

Learning new systems

Improving on prior knowledge

**OPPORTUNITIES**

Lack of insights
Personal matters
Travelling

**THREATS**

# Reflections

### Project length

Project was too long for given requirements.

### Suitability

Project not suitable for more than 3-4 people.

### Project subjects

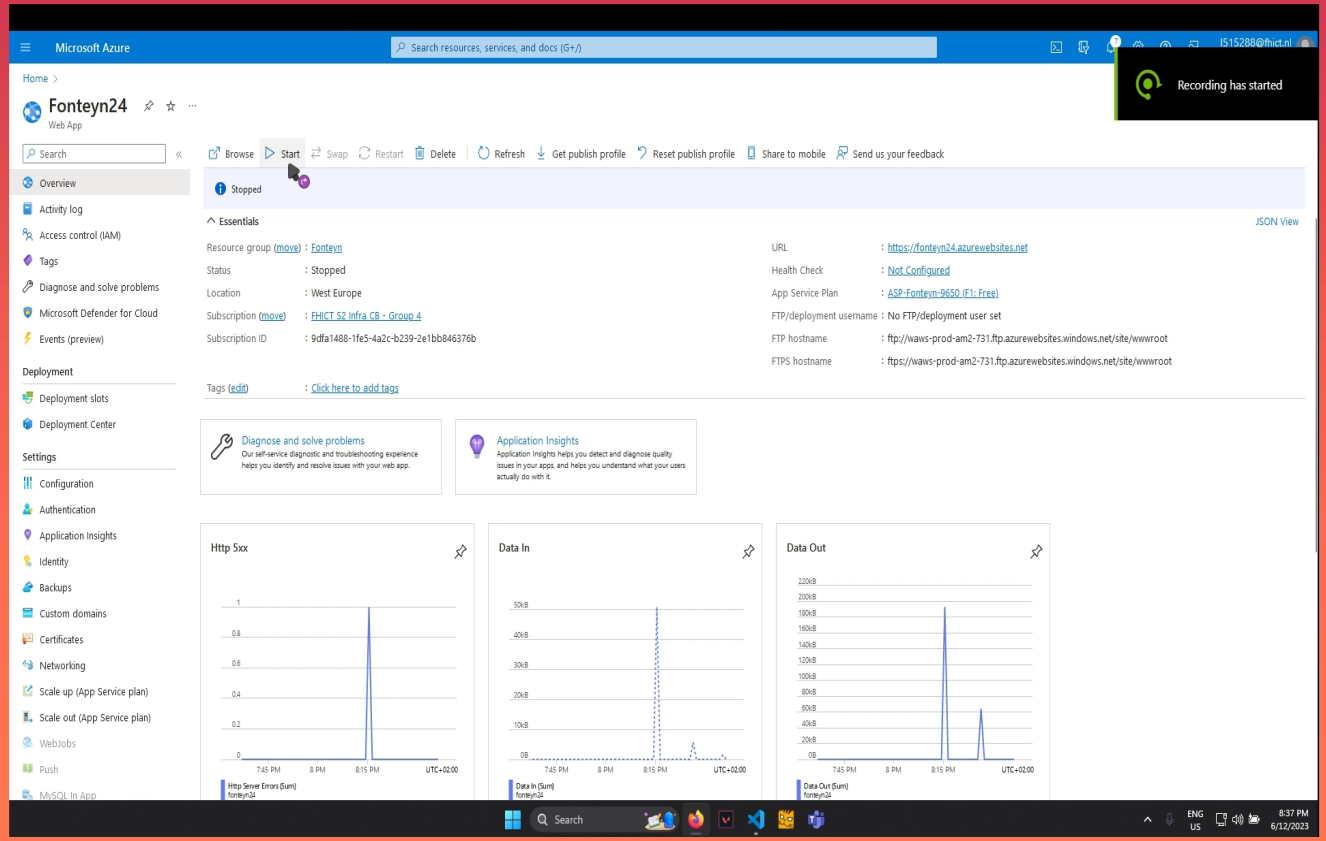
Lack of usability, Docker was helpful.

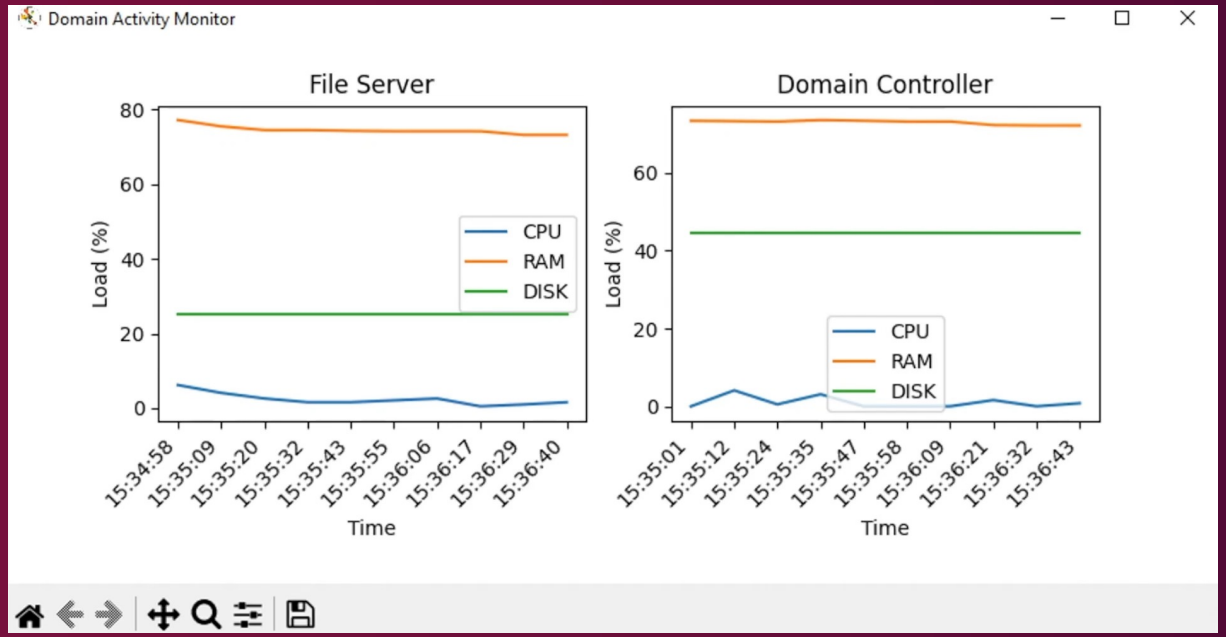
Unrelated assignments

# Demonstration

System capabilities pre-recorded

6


Microsoft Azure
Search resources, services, and docs (G+/)
Recording has started
Home
Fonteyn24
Web App
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Microsoft Defender for Cloud
Events (preview)
Deployment
Deployment slots
Deployment Center
Settings
Configuration
Authentication
Application Insights
Identity
Backups
Custom domains
Certificates
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Push
MySQL In App
Browse
Start
Swap
Restart
Delete
Refresh
Get publish profile
Reset publish profile
Share to mobile
Send us your feedback
Stopped
Essentials
JSON View
Resource group (move) : Fonteyn
Status : Stopped
Location : West Europe
Subscription (move) : FHICT S2 Infra C8 - Group 4
Subscription ID : 9dfa1488-1fe5-4a2c-b239-2e1bb846376b
URL : https://fonteyn24.azurewebsites.net
Health Check : Not Configured
App Service Plan : ASP-Fonteyn-9650 (F1: Free)
FTP/deployment username : No FTP/deployment user set
FTP hostname : ftp://waws-prod-am2-731.ftp.azurewebsites.windows.net/site/wwwroot
FTPS hostname : ftps://waws-prod-am2-731.ftp.azurewebsites.windows.net/site/wwwroot
Tags (edit) : Click here to add tags
Diagnose and solve problems
Application Insights
Http 5xx
Data In
Data Out
UTC+02:00
Search
ENG
US
8:37 PM
6/12/2023


Domain Activity Monitor
File Server
Load (%)
80
60
40
20
0
CPU
RAM
DISK
15:34:58
15:35:09
15:35:20
15:35:32
15:35:43
15:35:55
15:36:06
15:36:17
15:36:29
15:36:40
Time
Domain Controller
Load (%)
60
40
20
0
CPU
RAM
DISK
15:35:01
15:35:12
15:35:24
15:35:35
15:35:47
15:35:58
15:36:09
15:36:21
15:36:32
15:36:43
Time

# Thanks!

Any questions?