FONTEYN VAKANTIEPARKEN

Project plan

Version 4.0

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Group 4 CB-01

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Version Control

Version	Client	Changes
1	Stan	Booking system
2.0	Mehrzad	Password changes, ticket refunds, booking changes.
2.1	Mehrzad	Change requests, Enable administrative panels.
2.2	Mehrzad	Role specific portals/access pages
3.0	Mehrzad	Business Continuity Plan
3.1	Mehrzad	Database Migration
4.0	Mehrzad	RFID entry system.

Project definition

Project background

Our client is a holiday park resort that in the recent past has experienced significant growth. The company has grown into an international business because of that. Fonteyn Holiday Parks has up to 300 employees during the high season. Those could be cleaners, hotel managers and regular staff, as well as lawyers and IT personnel. Their current IT infrastructure is hosted in their own private cloud. It has several servers and, separated networks.

Problem definition

Due to the company's rapid growth a lot of the infrastructure is no longer suited to perform optimal performance. There are a lot of issues such as ineffective file distribution – there is no synchronization between documents that leads to multiple versions of important files existing.

Management also is unsure about the permissions that staff members have over the documents. Maintaining and scaling the private cloud is getting expensive. It also has some security issues. In the current scenario, the company has decided to move to cloud and has purchased Azure and Office 365 subscription.

Project goal

The goal that our team is aiming to achieve is an efficiently working robust environment for the hotel staff members and visitors to make use of. Our team wants to migrate most of the company's servers onto a cloud that's easy to use and maintain by the staff. We also aim to improve the overall security of the new and improved environment – fault management system for the servers, a management dashboard, and some innovation to help them grow. Finally, we need an effective cost management measure.

Expected results

This is what we expect to be done before / at the delivery date.

i. Documentation

1. Project plan.
2. Design document.
3. Research report.
4. Security Analysis Report

ii. Services and Configuration

1. Migrating necessary components to cloud
2. A management dashboard
3. A fault management system
4. Improved website
5. Cost management system
6. RFID Entry system

We expect the project will be up to the client's expectations - robust and flexible, suitable for growth, and secure.

Way of working

We work on the project maintaining a schedule and planning, and after every sprint, we present our work to the client and the group teacher. If we get any feedback from the client or the teacher, that task gets the highest priority. The workload among the team will be divided equally and based on the expertise/strength of the group members. The team always works on the project simultaneously. This way, troubleshooting (if needed) is done several times faster and the workload is always distributed evenly.

The roles of the group members are as follows:

1. Farhan
    i. RFID and KPI Monitoring system Developer
    ii. Software Developer
    iii. Cloud Manager
    iv. Problem and Change Manager

2. Rowen
    i. Agile team manager
    ii. Server Maintainer
    iii. Problem solver

3. Nikola
    i. Network Engineer
    ii. Security Engineer
    iii. Scrum Master

4. Marc
    i. Web Developer
    ii. Co-Ordinator
    iii. Identity and Access Manager

5. Murthid
    i. Documentator
    ii. Quality Assurance
    iii. Technical Support

Scope

The new system will have a cost management functionality to set up efficient cost management. It will also have a fault management system that will alert IT personnel in case of any error in the servers, there will also be a management dashboard to monitor the KPIs of the servers. It will help to decide how much headroom is available in the infrastructure. Therefore, scaling will be easier. There will also be service management features and security measures. The team will try to incorporate some innovations as well.

Resources

The project requires necessary resources to be available. Every member of the group has a computer to work on. The computer will be used to code and access the hypervisor and the server. The servers are hosted on premises in a server room and can be accessed through Microsoft Remote Desktop provided that the user is connected to the Virtual Private Network. This ensures that the servers can be accessed even if the members are not in premise to access it directly. The necessary softwares are provided by the organization. The required software for sprint 2 are:

1. Microsoft 365
    i. Microsoft Word – To document the project.
    ii. Microsoft PowerPoint – To create Presentations for the client.
    iii. Microsoft Excel – To create and visualize necessary data and statistics.
2. Microsoft Teams – To collaborate and share files.
3. Microsoft Remote Desktop – To access the servers.
4. Microsoft Windows Server OS – As the server OS.
5. Microsoft Hyper-V – As the virtualization software.
6. Microsoft Azure Cloud – As the main cloud provider.
7. Visual Studio Code – To do necessary coding and scripting.
8. OpenVPN client – To connect to the organization VPN.
9. pfSense – As the firewall of the network.
10. Trello – As the main planning board for the project.
11. GitLab – As a repository for the project codes.

The OILs and meeting rooms are also considered as resources for the team for collaboration. The most important resource however is the server hosted on premises.

The Git link for the webpage is: https://git.fhict.nl/I506275/cb01-group2-kabv

Project structure

Development team

Name	Strengths		Weaknesses	
Marc	Flexibility	Refactoring	Problem solutions	Teamwork
Nikola	Coordinating	Research	Cloud interactions	Web service management
Farhan	Open to learn	Teamwork	Research	Memorize
Rowen	Implementing	Teamwork	Reading things	English language
Murthid	Creativity	Adaptability	English language	Attention to detail

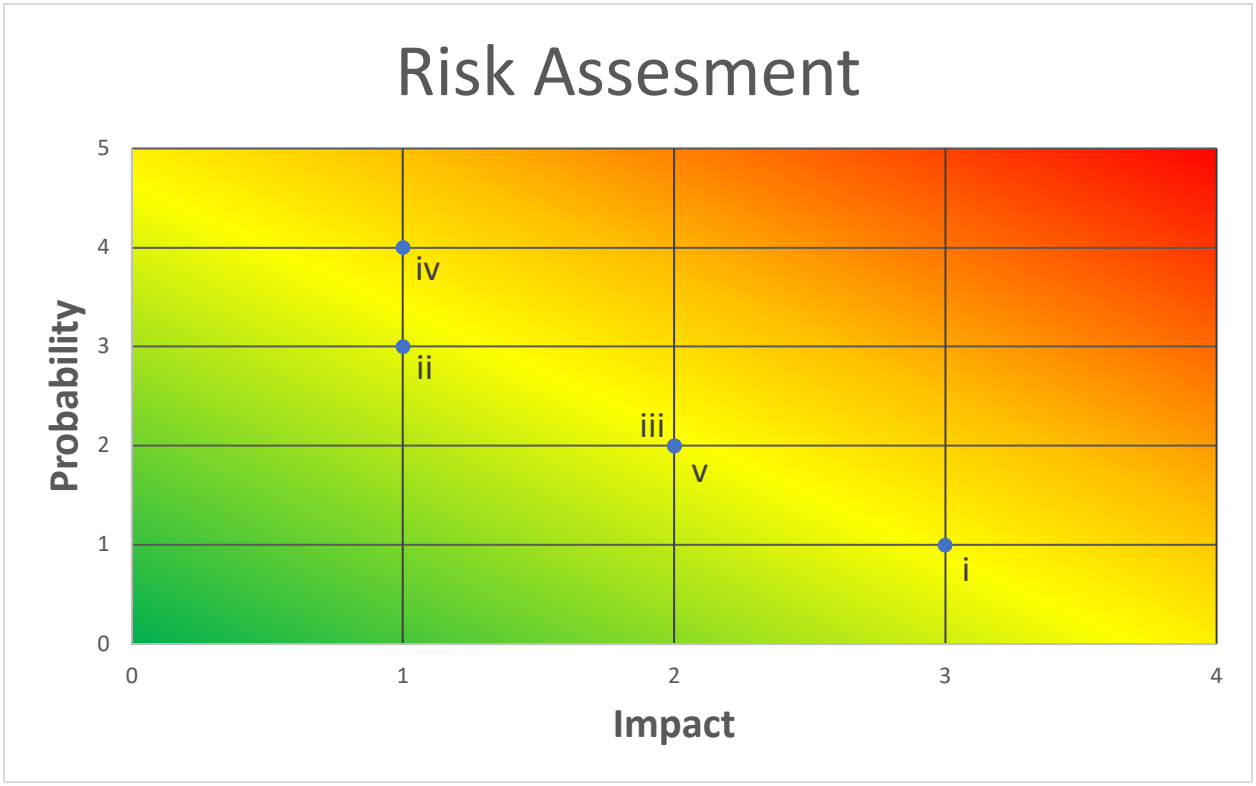
Every project member is responsible for working on his part of the work according to the group feedback and communicating with other members. For this project, Marc, Nikola, Farhan, Rowen & Murthid are the project members. Farhan is the project leader. Farhan ensures proper communication among the team members.

Risk assessments

Risks:

1. **Decisions are incomplete:** Issue resolutions that do not address the issue or create more issues.
2. **Failure to follow methodology:** If your organization asks you to streamline your project management methodology, which can be documented as a risk.
3. **System outages:** Communication services stop working may lead to small or big delays depending on how long the outage is.
4. **Getting sick:** Getting sick may lead to members not being able to attend meetings and may put the team behind schedule which may lead to overwhelming work schedules.
5. **Hardware/Software issues:** Hardware issues could lead to delays due to being defective and/or not working as intended. Similar issues could be caused by the hardware's software.

Risk	Probability	Impact	Mitigation
1	Highly unlikely	Extremely harmful	Having a good plan, schedule and discussions will prevent incomplete resolutions
2	Likely	Slightly harmful	By not following the methodology it might cause delays and misinformation in the project, so we can prevent this by frequently referring to the project plan
3	Unlikely	Harmful	By having a few alternatives for communication, we can mitigate this risk.
4	Highly likely	Slightly Harmful	By trying to schedule everything well with a week or 2 to rest so we can be sure to finish on time if anything comes up
5	Unlikely	Harmful	Would need to find a replacement or fix before the implementation.


Risk Assesment
Probability
Impact
0
1
2
3
4
5
iv
ii
iii
v
i

Deliverables

MoSCoW prioritization:

Must Have	Should Have	Could Have	Will Not Have
Cost Management	RFID Entry System	SoD (Segregation of Duty) Analysis	IPv6
Cloud Migration			
Management Dashboard	Backup Servers		
Fault Management			
Security	Failover Measure	Environment sensors	
Service Management			
Website			

Analysis Table for Migration:

Item	**Pros**	**Cons**	**Suggestion**
Active Directory	Online identification. MFA and SSO.	No OU and no GPO.	Move to Cloud.
File server	Backup data servers, easy scalability. Integrated load balancing.	Security and access issues. Costly for limited data.	Stay on-prem.
Database	Azure SQL has more maintenance and easier access from all over the world.	On-prem database is easier to modify and less costly.	Either option is feasible.

Planning

For the planning we chose to use Trello, this way we can keep ourselves UpToDate on what already is done and what not. We also can give detailed information on what needs to be done for a certain task, within a description.