# Project Plan

## SERVICE IT GROUP

### VERSION 1.0, 12 NOVEMBER

Team members:

Polina Zueva

Ruike Yuan

Ameli Fernando

Alexander Vakruchev

# Table of Content

# 1. Background Information

The name of the project is "Service IT ". The project is being commissioned by the team of 4 people based on NHL Stenden university of applied sciences, Emmen, the Netherlands. Team group is creating a web application which helps to automate processes such as paper contracts, service system and attract new customer to Service IT company as well. The company was overtaken 2 years ago by Gerjan van Oenen from another party.

Team Service from NHL Stenden consisting of second year Information Technology students is the organization responsible for carrying out the project. Team Service It is an organization specializing in designing and developing Information System solutions.

The organization consists of 4 members working in the following departments: IT development, Design, Management and Relations, Quality Control. The company possesses a Democratic management type, meaning every member has an input on corporate decisions. A team leader overview the whole team.  The team has previous experience with web development.

The main stakeholders of the project include the It service organization and  Gerjan van Oenen and the team itself.  The company Service IT is interested in developing a product, which could be released to the public with an incentive to make a profit.

The team will ensure that all the requirements will be met and the website will be structured in a user-friendly way for the customers to interact and find their solutions and for the administration to manage well. The prototype will contain a fully functional website with the option to add new features or upgrades in the Future.

# 2. Project results

The Group A project team will be designing a web application for the organization Service-IT to be used by their organization itself, current customers, and future customers. The website will be beneficial for the organization and customers as it will be built in a user-friendly environment and will be easy to navigable. The main purpose of the implementation of this web application is for the customers of the organization and for the new customers to find the suitable IT service and for the organization to keep track of their customers and the service used by them.

Listed below is the group's plan of approach to achieve this goal:
- **Specific –** The main goal of the project, as mentioned above is to create a fully functional web application for the Service IT organization to help their customers

interact with them, helping new customers to register and for the organization to maintain their internal operations.

- **Measurable** - Milestone logs from each of the group members providing visual evidence of where they've reached, on what day/date, time etc..
- **Attainable** - This project is challenging and follows the requirements, making it a realistically planned project, attainable in the given time frame (9 weeks).
- **Realistic** - This project is realistic interns of the timeframe (9 weeks), in which we need to produce a project plan, primary design, and have multiple meetings with the stakeholders to discuss the proposed plans and progress.
- **Time bound** - This project is bound to 9 weeks where the product is to be made available. Following the SCC block plan, this time boundary seems reasonable and is realistic to the project.

The group have a clear understanding of what the end result of the project will be, as well as the challenges ahead. The total duration of active work on the project is about 168 hours.

The end prototype will consist of all the features mentioned in the Moscow analysis and the chapters. All the features which Service-IT web application will have been discussed and agreed upon by the team members.

# 3. Project Activities

There are many activities that are required to complete the project. Each task must be completed in the correct order to achieve success.

## Documentation activities

1. Assign roles to each member.
2. Create a code of conduct and sign it.
3. Preparation for the interview (coming up with questions).
4. Organize and have a kick-off meeting(interview) with the client.
5. Create the mock-ups for the advisory report.
6. Divide the workload of the project plan and set up a deadline.
7. Complete and submit the project plan and improve it if necessary.
8. Divide the workload of the requirements analysis and set up a deadline.
9. Complete and submit the requirements analysis and improve it if necessary.
10. Create the advisory report with the written recommendation and motivation.
11. Organize a meeting with the client to approve the advisory report.
12. Divide the workload of the functional design and set up a deadline.
13. Complete and submit the functional design and improve it if necessary.

## Build activities

1. Creating a version control environment (GitHub).
2. Building a database for the application based on the functional design
3. Organize and have a meeting to initialize the development of the product.
4. Divide the initial load of work among the group members and set up a deadline.
5. Develop the product.
6. Have a meeting with the group to see if everything is on track.
   - Making sure the work meets certain standard (mainly code quality).
   - Making sure the work meets the requirements of the client.
7. Divide the second load of work among group members and set up a deadline.
8. Develop the product.
9. Have a meeting with the group to see if everything is on track.
10. Divide the third load of work among the group members and set up a deadline.
11. Develop the product.
12. Have a meeting with the group to see if everything is on track.
13. Divide the third load of work among the group members and set up a deadline.
14. Develop the product.
15. Connect the work done by each team member.
16. Debugging the application against errors/bugs (php debugger) (w3c validator).
17. Testing the application.

### Finalization

1. Divide the workload of the test plan and Job instruction with job – and role description.
2. Complete and submit the test plan and Job instruction with job – and role description.
3. Double check the documents, functionalities, and code quality of the product.
4. Improve the product if necessary.
5. Write the self-reflections for the project.
6. Hand in or present the product.

# 4. Project Limits

This chapter describes the time boundaries of the project and conditions that must be fulfilled for it to be successful.

### Project length and width

The project will be in development for eight weeks, from the start-up to the final touches and delivery, with no aftercare provided, unless agreed with the clients on the set sum in the "Costs and benefits" chapter.

- The date of starting the project development is 2022-11-11.
- The final product will be delivered by 2023-01-09

The product will not include any features that were not agreed on with the client.

## Conditions that must be fulfilled for the success of the project

Users will be able to issue a new service request or a service ticket (for incidents) by filling out either a form for a new service or a form for a service ticket.

The product itself is an IT service system for a company providing IT-services. It will include a ticket system which can sort the service tickets and new service requests based on their status. The administrator will be able to edit or to renew the status of the service requests or incidents (service tickets).

Users will be able to check the status of their issued new services or service tickets.

The administrator will be able to upload the contract for services to the system so

users can find their service contract on the website and download the contract document.

The website will consist of a fitting design scheme/layout that works well with new service requesting, service ticket issuing and sorting/editing service tickets.

The user and administrator will be able to login and register on the website and the user data will be stored in the database.

# 5. Intermediate Results

**Documentations**:

**-Project Plan**

- Document with an overview of the action plan, which lists all the steps in the creation of the project.

**-Web design Mock-Ups**

- Display of potential designs for the system to be chosen by the clients.

**-Functional Design**

- A document presenting a complete design along with the functionalities for the new system being developed.

**-Requirements Analysis**

- · Document with the functionalities that the users need.
- · These are arranged in order of priority, where the Moscow method, ==where: functions are the new system:==

M =**Must** have

S =**Should** have

C =**Could** have

W =**Would** not have

**-Progress meeting reports**

- · Meetings with the clients to discuss and showcase progress made with some of the features.

**-Corporate document**

- · A document detailing the philosophy behind the design of the logo and website, as well as its concept.
- · A logo made by group Alpha specifically for the project, based on its concept.
- · Typography concept chosen by the team, detailing fonts.
- · Colour scheme picked by Group B technologies matching the concept of the project and the client's vision.

-**Test plan**

- · This covers how the web application's user interaction, as well as the end product, is tested.

-**Accountability document (Self-reflection)**

- · This document examines the decisions taken throughout the project. It also looks back at how it works, what went well and what could be improved.

-**Final product** – The final product will be handed in, including detailed explanation, with all the available documentation.

**-The agreement phase: Week 1 and 2**

- · The stakeholder reviews the plan of action and still has the chance to change any aspects needed of the project.

### -The mock-up phase: Week 3

• All the mock-up designs are presented to the stakeholder.

### -The build in phase: Week 4, 5, 6, 7

• In this phase a blueprint of the website is presented to the stakeholder in week 4, and the whole website is built with all the functionalities and is ready to be presented.

### -The presentation of the project in its pre-final stage: Week 8

• The website is in its pre-final stage and is ready.

### -Handing over the product with the guides: Week 8-9

- · The final product is handed over to the stakeholder with all credentials and full access to the website. And all the user guides are presented and handed over.

## 6. Quality control

This chapter describes how we determine and assure the quality of the project.

**The project is going to be carried out in 7-8 weeks, these weeks consist of 20-30 hours.**

a) Testing (See test plan document for more information)
   - The testers of the web application will check every feature and see if they are up to standard. (This will be determined by the stakeholders and the project group.)
   - After development, the stakeholders will have access to the app, this is so they can assess the final quality of the product.
   - All changes made during the development phase of the project will be discussed with the stakeholders. The reason for this is that everybody involved in the project understands why certain changes have been made.

b) Coding
- English is the only language used for writing the code.
- Code will contain numerous comments to ensure that maintenance can be done more easily, and to make sure anyone who is trying to use a certain part of the code, can find out what it does.
- Version control will be done through GitHub (Available to the stakeholders when coding begins.).

c) Software (list of software that will be used)
- AdobeXD (used for making mockups for the application)
- Visual Studio 2019/2022 (writing and testing the app)
- PHP storm
- Visual Studio code
- MySQL Database (Used for storing certain features of the app online)

d) Programming languages
- PHP (used for writing logic in the web app.)
- HTML/CSS (Used for visual design of the web app)
- MySQL (Used for database connection)

## 7.The Project Organization

The team consists of the following members:

- Polina Zueva (Leader of the project)

The Role of a Project Leader is to guide and lead the rest of the team to a better outcome and to a more successful result of the project, by explaining the details of every task that needs to be archived and give them feedback on their results to improve

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- Ruike Yuan (Team Work)

Team Workers are the people who provide support and make sure that members of their team are working together effectively. These people fill the role of negotiators within the team and are flexible, diplomatic and perceptive

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- Ameli Fernando (Secretary/Minute taker)

The Purpose of Minutes is to have notes on every single important detail when we are gathering information during meetings with our clients or in team meetings which will guide us on what tasks need to be done and which are necessary to do.

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- Alexander Vakhrushev (Team Work)

Team Workers are the people who provide support and make sure that members of their team are working together effectively. These people fill the role of negotiators within the team and are flexible, diplomatic and perceptive

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**Team Availability:**

| Days | Team availability | | | |
|---|---|---|---|---|
| 9:00 - 20:00 | Polina Zueva | Ruike Yuan | Ameli Fernando | Alexander Vakhrushev |
| Monday | █ | █ | █ | █ |
| Tuesday | █ | █ | █ | █ |
| Wednesday | █ | | █ | |
| Thursday | █ | █ | █ | █ |
| Friday | █ | █ | █ | █ |
| Saturday | | █ | | █ |
| Sunday | | | | |

Meetings:

- Scheduled weekly with the stakeholder
- An agenda is drawn up before the meeting

        o    Minutes are taken and sent to the stakeholder after the meeting

Communication:

- Communication with the stakeholder is done via the Email
- Communication inside team is done via collaborative environments such as WhatsApp (Refer to Team Code for further information)

# 8. Planning and Scheduling

This chapter describes the time boundaries of all project actions as well as total time required.

| Task | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **Preparation** | | | | | | | | | | |
| Attending lectures | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 22 |
| Attending workshops | 3 | 3 | 3 | 3 | 1 | 2 | 1 | | | 16 |
| Setting up a version control environment (github) | 1 | | | | | | | | | 1 |
| Client meetings | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| Team meetings | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 45 |
| Establishing team roles | 2 | 1 | | | | | | | | 3 |
| Preparation for interviews with the client | 1 | 1 | 1 | 1 | 1 | 1 | | | | 6 |
| Researching information | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 19 |

NHL Stenden University of Applied Sciences – Service IT group

| Task | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Splitting tasks between team members | 1 | 1 | 1 | 1 | 1 | 1 | | | | 6 |
| Discussing and researching the idea of the pro- ject | 3 | 1 | | | | | | | | 4 |
| **Execution** | | | | | | | | | | |
| Creating a Project Plan | **5** | **5** | | | | | | | | 10 |
| Creating a Team Code of Conduct | 3 | | | | | | | | | 3 |
| Creating a Requirements Analysis document | | | 5 | | | | | | | 5 |
| Creating an Advise Report document | | | 5 | | | | | | | 5 |
| Creating a mock-up desing of the application | | 5 | 5 | 5 | | | | | | 15 |
| Creating the Entity Relationship Diagram (ERD) | | | 2 | | | | | | | 2 |
| Creating the Data Flow Diagram (DFD) | | | 2 | | | | | | | 2 |
| Creating a Functional Design document | | | 5 | 5 | | | | | | 10 |
| Coding HTML/CSS | | | | | 10 | 10 | 10 | | | 30 |
| Coding PHP | | | | | 10 | 15 | 15 | 15 | 15 | 70 |
| Creating a Database | | | | | 10 | 10 | | | | |
| Filling in the Database | | | | | 10 | 20 | 15 | 15 | | |
| Linking all the coded parts together | | | | | | | 20 | 20 | 20 | |
| Improving documents based on feedback | | 5 | 5 | 5 | | | | | | 15 |
| **Finalization** | | | | | | | | | | |
| Testing and debugging the application | | | | | | | 20 | 20 | 20 | 60 |
| Improving the application (coding) | | | | | | 10 | 15 | 20 | 15 | 60 |
| Adding final adjustments | | | | | | | | 10 | 10 | 20 |
| Preparing the portfolio with all the documents | | | | | | | | | 5 | 5 |
| Making a final presentation of the project | | | | | | | | | 5 | |
| Presenting the final product | | | | | | | | | 1 | 1 |
| **Total** | **31** | **34** | **46** | **31** | **54** | **80** | **104** | **108** | **98** | **586** |

# 9. Costs & Benefits

This chapter describes the costs of project development in detail.

**Required approximate time:**

There is an approximated 26 hours of work per week per person. Over the span of nine weeks it sums up to 168 hours of work per person. 672 hours of group work in total.

Costs (21% VAT included):

**Costs (21% VAT included):**

| Item | Price per item | Quantity | Total |
|---|---|---|---|
| Employee salary (for the duration of the whole project) | €500 | 4 | €2000 |
| Total (before VAT 21%) | | | 2000 |
| Total (with VAT 21%) | | | 2420 |

**Total (Costs + benefits + 10% Unexpected Expenses): €**

## 10. Risks

The following chapter will cover the potential internal and external risks associated with establishing this project plan and product.

Along with the risk descriptions, a further examination of their impacts, severity, and likelihood of occurrence will be presented, as well as feasible solutions to these problems and how best to execute them effectively and efficiently.

| ID | Risk description | Likelihood of the risk occurring | Impact if the risk occurs | Severity *Rating based on impact & likelihood.* | Owner *Person who will manage the risk.* | Mitigating action *Actions to mitigate the risk e.g., reduce the likelihood.* | Contingent *action* *Action to be taken if the risk happens.* |
|---|---|---|---|---|---|---|---|
| Internal | Poor Group Attendance | Low | Medium | High | Group Leader/Project Manager | Wherever possible, all group members must promise their commitment to all engagement sessions. If not, communicate ahead of time and submit your contribution. | It may be a good idea to work in pairs. This way at least one of the group members other than the one tasked with an element will have knowledge of what the other member is working on. |
| | Poor Communication amongst Group Members | Low | Medium | Medium | Group Leader/Project Manager | Improve communication by putting all notes, minutes, and finished work on a platform that is always accessible to all members. | Group members to give each other permission to reach out, outside meeting times should clarity be required. |
| | A Group member may lack skills set to perform an allocated task (Technical) | Medium | High | High | All | Conduct a skills gap analysis as to identify skills within the group. | Reassign tasks according to areas of strengths while others observe & learn. |
| | Group may misunderstand/misinterpret Client's Brief. | Low | High | High | All | Ensure that we have completely understood the Client's brief especially the definitions of success and our scope of work. Also, book weekly client meetings to ensure the work completed is meets their needs. | It may be a good idea to obtain a written brief from Client which we can reference from time to time during the course of this project to ensure complete alignment. |
| | Setbacks not taken into account resulting in missed deadlines. | Medium | Medium | Medium | All | Scenario planning must be done, which takes into consideration potential unanticipated scenarios that may obstruct our progress. | The Group may have to commit to work extra hours to make up for the time lost. |

NHL Stenden University of Applied Sciences – Service IT group

| ID | Risk description | Likelihood of the risk occurring | Impact if the risk occurs | Severity *Rating based on impact & likelihood.* | Owner *Person who will manage the risk.* | Mitigating action *Actions to mitigate the risk e.g., reduce the likelihood.* | Contingent *action* *Action to be taken if the risk happens.* |
|---|---|---|---|---|---|---|---|
| | Conflicting priorities & deadlines. | Medium | High | Medium | All | Ensure all group members are aligned in regards to the standard of work that will be produced, and clarify deadlines in advance so that prioritization is not in question and there are provisions made in advance if work cannot be completed on proposed deadline. | Negotiate new deadlines with all parties involved. |
| | Client's brief may lack sufficient clarity and detail resulting in unsatisfactory end product. | Low | High | High | Client | It's tough to try to limit any risks that are beyond our control; nonetheless, the best way to avoid this is to keep as close to the Client's needs/brief as possible at all times, and to ask as many questions as possible. | Ensure warning is given to Project Sponsor. |
| External | Change of Scope from Client midway through the project. | Low | High | High | Client | Document the project scope in a Project Initiation Document or Project Charter and get it authorized by the Project Sponsor/Client prior to commencement. | Making sure the Project Sponsor/Client understands that any changes to the scope will impact delivery timelines. |
| | Unresolved project conflicts not escalated in a timely manner. | Medium | Medium | Medium | Group Leader/Project Manager | Hold regular project team meetings and look out for conflicts. Review the project plan and stakeholder engagement plan for potential areas of conflict. | When aware, immediately escalate Client/Project Sponsor to resolve the conflict. |
| | Added workload or time requirements because of new direction from Project Sponsor/Client. | Low | Medium | Medium | Client | No ability to reduce likelihood. | Continuous communication of what the impact would be to the Project Sponsor/Client. |