

Company: Senet Eindhoven B.V.

Supervisors: Geurt jan Van Ek   
Lars van der Sangen

Presented by: Phat Tran (PS126942)

Assessor: Lambert Rombouts

Requirements and wishes

TwentyFour: Accounting module

Version 1.3

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# Document

## Version table

| Version | Date | Author | Comment |
| --- | --- | --- | --- |
| 0.1 | 02/09/2017 | Phat Tran | Initial version |
| 0.2 | 02/09/2017 | Phat Tran | Pre-check version |
| 0.3 | 02/10/2017 | Phat Tran | Edited pre-check version date formats and minor content corrections |
| 0.4 | 02/10/2017 | Phat Tran | Added student number and changed project document names |
| 0.5 | 02/10/2017 | Phat Tran | Edited company name on the Title page and date format under Project information |
| 0.6 | 02/13/2017 | Phat Tran | Title and subtitle swapped + minor edits |
| 0.7 | 02/13/2017 | Phat Tran | Post-check version, elaborate priority list 50% |
| 0.8 | 02/14/2017 | Phat Tran | Added a recipient to Project documents table |
| 0.9 | 02/16/2017 | Phat Tran | Elaborated priorities, edited describing text and fixed layout |
| 1.0 | 02/16/2017 | Phat Tran | Post-check version, added links |
| 1.1 | 03/10/2017 | Phat Tran | Template wide fixes, project documents headers naming and footer date format. |
| 1.2 | 03/22/2017 | Phat Tran | Techniques renamed to Technologies. |
| 1.3 | 03/31/2017 | Phat Tran | Description corrected |

# Project

## Client information

Company name : Senet Eindhoven B.V.

Client name : Geurt Jan van Ek

Function : Director

E-mail : gvanek@senet.nl

## Project information

Project name : TwentyFour: Accounting module

Start date : 02/09/2017

End date : 06/23/2017

### Project Documents

| Document | Recipient(s) | Responsible | Update responsible |
| --- | --- | --- | --- |
| Requirements and wishes | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Plan van Aanpak | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Functioneel Ontwerp | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Technisch Ontwerp | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Risicoanalyse | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Planning | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Testplan | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Testrapport | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |
| Technische documentatie | Lambert Rombouts and Lars van der Sangen | Phat Tran | Phat Tran |

## Team

The goal of this team is to meet the demands of the client before the agreed end date of this project. Responsibilities of the members include the design, realization, implementation and maintenance. They are also expected to regularly inform the client about the progress and report issues that may threaten the outcome of the project.

### Team members

At the time of writing this document, the team consists of one member. It is unlikely that more members will join the team during the project, although not impossible.

**TwentyFour: Accounting module project team**

| Team member | E-mail |
| --- | --- |
| Phat Tran | phat7tran@gmail.com |

# Requirements and wishes

Senet uses a self-made ‘SaaS’-application (Software as a Service) named ‘TwentyFour’. It is built using the ‘Zend Framework 2’, written in the scripting language ‘PHP’, and connected with ‘Twinfield’, a financial accounting software. Functionalities of TwentyFour include managing clients, employers, employees, assignments, billing, reports and hour declarations.

For this project, the client wants the SenetAccounting module, which is responsible for communication with Twinfield, to be rebuilt. The current module uses ‘ReactJS’, a ‘JavaScript’ library. It is instead desired to have the module be rebuilt with jQuery and AJAX for consistency, since the rest of TwentyFour is built with it.

Furthermore, the client wants the module to be documented and improved once the module has successfully been rebuilt.

A connection with Twinfield is required to manage invoices. Unpaid invoices are to be shown in an overview and should include a reminder functionality. A reminder and an admonishment are sent to the debtor after a set amount of time between. They also need to show necessary information such as debtor information and invoice information with emphasis on the date, total sum and paid sum. The client also would like to have an overview of paid invoices if possible.

Currently the module contains the following functionalities:

* One-way connection with Twinfield, able to send but not retrieve data;
* Link debtors in the TwentyFour to Twinfield;
* An overview of all invoices (unpaid or paid);
* A view of the invoice and the related debtor;
* Finalizing invoices when it has been paid.

## Priority table (MoSCoW)

The following requirements are to be added or edited in this project, ‘Must haves’ are necessary for the project to be considered successful.

| Requirement | Must have | Should have | Could have | Would have |
| --- | --- | --- | --- | --- |
| Rewrite module with jQuery instead of ReactJS | x |  |  |  |
| Accounting connection with Twinfield | X |  |  |  |
| Observing the status of invoices | X |  |  |  |
| Sending reminders and admonishments to the related debtor | X |  |  |  |
| Observing the total to be paid sum | X |  |  |  |
| Observing the current paid sum | x |  |  |  |
| Observing an overview of paid invoices |  | x |  |  |

## 

## Technologies

| Technology | Homepage link | Wikipedia link |
| --- | --- | --- |
| Zend Framework 2 | https://framework.zend.com/ | https://en.wikipedia.org/wiki/Zend\_Framework |
| PHP | http://php.net/ | https://en.wikipedia.org/wiki/PHP |
| MySQL | https://www.mysql.com/ | https://en.wikipedia.org/wiki/MySQL |
| Doctrine | http://www.doctrine-project.org/ | https://en.wikipedia.org/wiki/Doctrine |
| jQuery | https://jquery.com/ | https://en.wikipedia.org/wiki/JQuery |
| JavaScript | https://www.javascript.com/ | https://en.wikipedia.org/wiki/JavaScript |
| CSS | https://www.w3.org/Style/CSS/ | https://en.wikipedia.org/wiki/Cascading\_Style\_Sheets |
| HTML | https://www.w3.org/html/ | https://en.wikipedia.org/wiki/HTML |
| PHPUnit | https://phpunit.de/ | https://en.wikipedia.org/wiki/PHPUnit |
| ReactJS | https://reactjs.net/ | https://en.wikipedia.org/wiki/React\_(JavaScript\_library) |
| SOAP | https://www.w3.org/TR/soap/ | https://en.wikipedia.org/wiki/SOAP |

## Development tools

| Tool | Homepage link | Wikipedia link |
| --- | --- | --- |
| PHPStorm | https://www.jetbrains.com/phpstorm/ | https://en.wikipedia.org/wiki/PhpStorm |
| MySQL Workbench | https://www.mysql.com/products/workbench/ | https://en.wikipedia.org/wiki/MySQL\_Workbench |
| Twinfield API | http://www.twinfield.nl/ | https://en.wikipedia.org/wiki/Twinfield |
| Apache2 | https://httpd.apache.org/ | https://en.wikipedia.org/wiki/Apache\_HTTP\_Server |
| MySQL Server | https://www.mysql.com/ | https://en.wikipedia.org/wiki/MySQL |
| Debian | https://www.debian.org/ | https://en.wikipedia.org/wiki/Debian |