# Software Evidence

an application for keeping evidence of sold licenses and software management agreements

# Contents

# 1. Project task

An application is needed for tracking of sold software, licenses and software maintenance agreements (SMAs).

SMAs protects buyer against technological advances such as new industry drivers, new OS releases or a change of PC by providing buyer with access to version upgrades.

License can be sold to a customer which can be reseller or end user. Customer may, or may not, buy SMA code along with license.

Application should provide an easy way to search for, display, create and edit software data, licenses, SMA codes and customers.

Operator will be regularly checking expiration dates of SMA codes in order to warn reseller or end user about it. Reseller/end user will then be able to decide whether to extend or cancel the support.

Needed data fields:

Customer and end user: Company name, street, number, city, country, contact person.

Contact person: first name, last name, phone, email address.

Software: name.

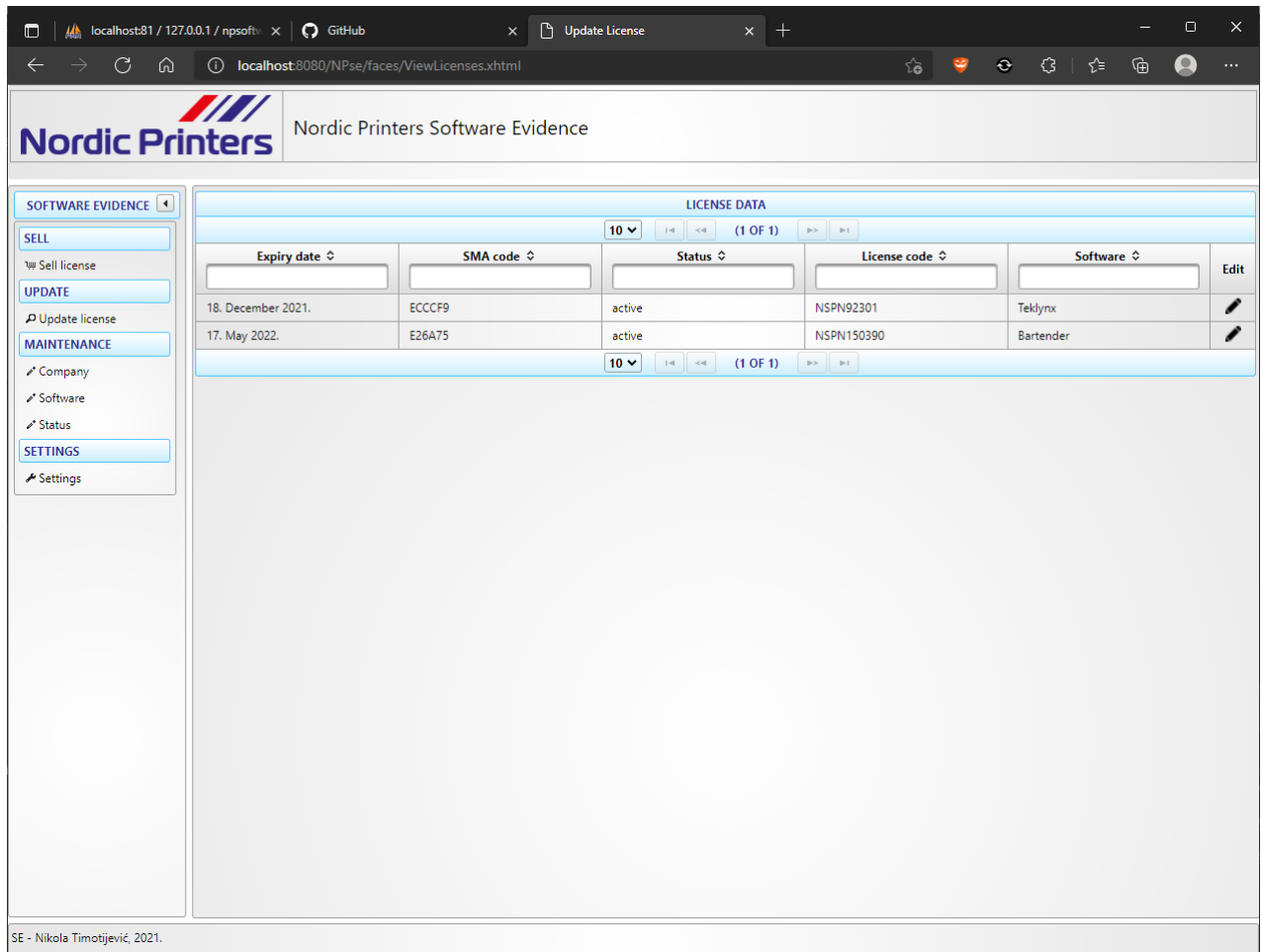License: license code, SMA code, expiration date of SMA code, status.

Status: active, not activated, deleted.

## 2. Prerequisites

Application is written in Java (JDK 8) and uses MySQL database, so both are needed in order to explore it or use it.

Before the first use, database should be created. That is explained at the end of this manual.

## 3. User interface



User interface consists of a collapsible menu on the left side and data which is represented by one or more tables on the right side of the screen.

Menu on the left side is always there unless user decides to hide it by clicking on the left arrow on the upper right corner.

It contains options for selling, searching and updating of licenses, maintenance of data about companies, software, statuses, and settings.

# 4. Sell license



There are three groups of data to be entered and stored about each license:

- Software data
- Reseller data
- End user data.

Software data consists of software name, license code, SMA code and expiration date of SMA code.

Software name and license code are required data, while SMA code and expiration date are optional.

User chooses software name from the drop down menu. If software doesn't exist in database yet, user can create a new one by clicking 'Add new' button next to the drop down menu.

Expiration date is automatically set to current date of the next year minus one.

If SMA is not to be sold, or there should be no expiration date for SMA code, user should delete date from the date picker box.

Reseller should be chosen from drop down menu, as well as relevant contact person. Each reseller can have more than one contact person.

If reseller doesn't exist in drop down menu, new reseller may be created by clicking on 'Add new company' button.

Reseller is optional, but end user is required. End user data should be entered the same way as reseller's.

When all license data are filled in, user should click 'Sell license' button at the bottom. Appropriate message in the upper right corner of the screen is shown to the user afterwards, informing about success or validation failure.

## 5. Search data and update license

This option is one that user sees upon application startup, and it is shown on the first picture.

All licenses are shown in data table on the top of the right part of page. User can choose how many records will be presented in this table, search by applying filters on each column, or sort data ascending/descending by clicking on the header cell of each column.

When user selects any row by clicking it, data tables with reseller's and end user's data will be shown. Company's data is shown on the left, while contact person's data is shown on the right.

Each data group (license, reseller, end user) is editable by clicking on appropriate pencil icon.

If user chooses to edit license, by clicking on the pencil in the rightmost column of the license table, prepopulated edit license dialog is shown.
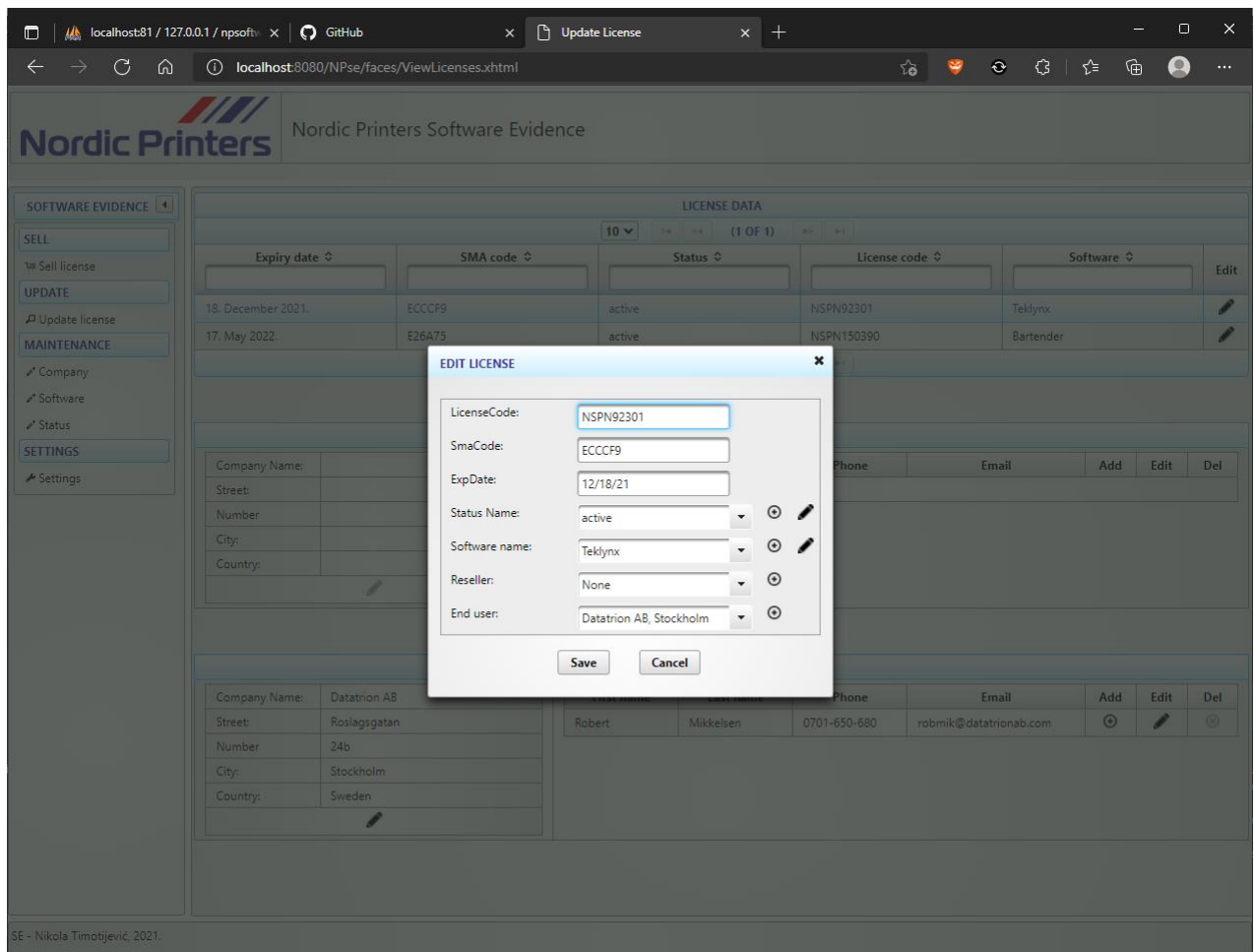


User can change data in this dialog, directly by typing, or by choosing different options from drop down menus for status, software, reseller and end user.

New statuses, software and companies can also be created by clicking on '+' icon.

User can also edit selected status name and software name if needed, by clicking on pencil icon.
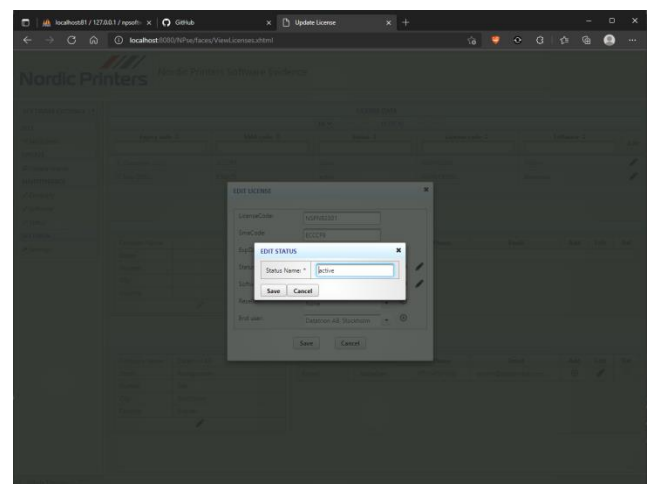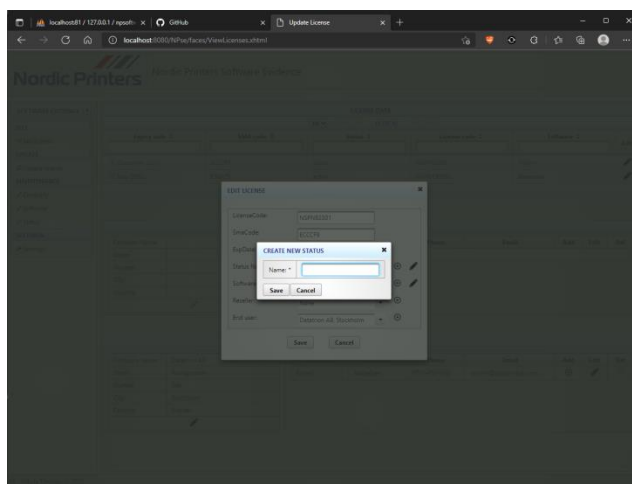
Back on the update page, user can also edit both company's and contact's data for both reseller and end user, by clicking on appropriate pencil icon.
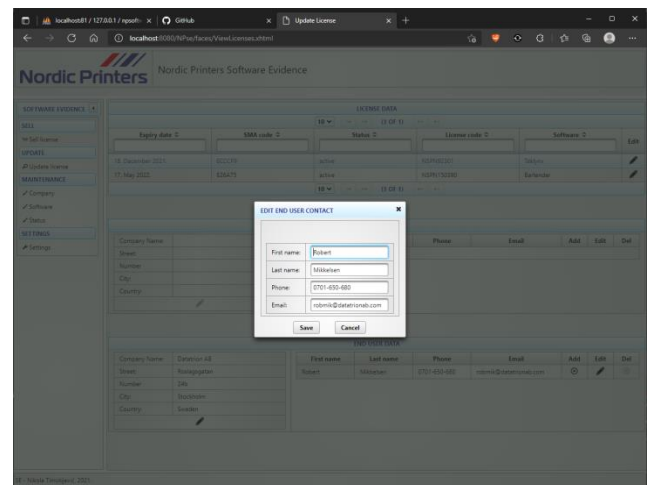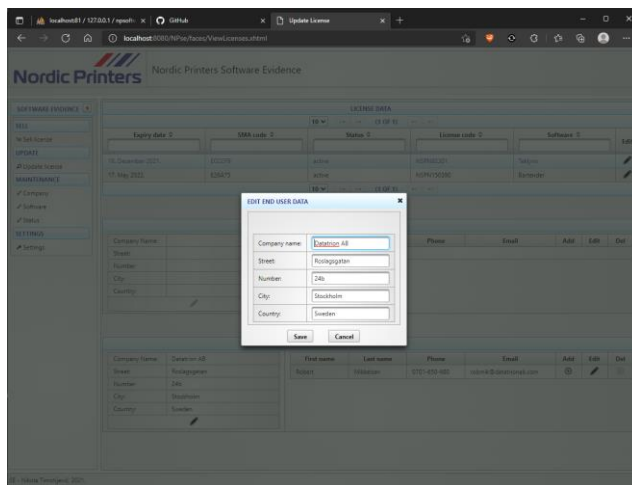


# 6. Maintenance options

Maintenance options are grouped into three categories:

- company
- software
- status.

By clicking on any one of them, table with all corresponding records from database will be shown on the right. User can choose a number of records per page, filter or sort data. There is also 'Add New Company' link below the table.
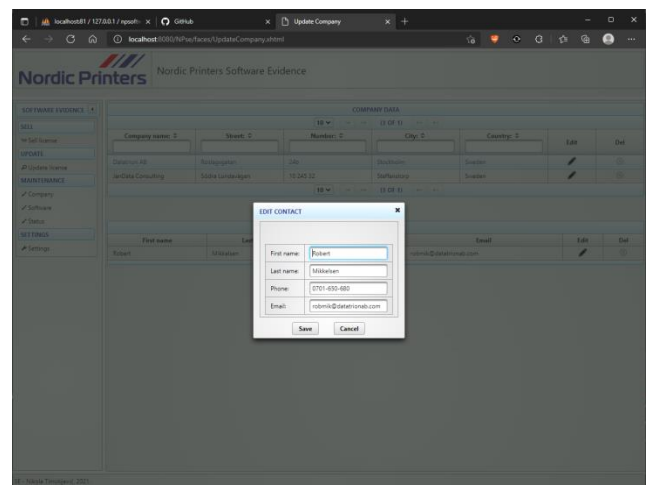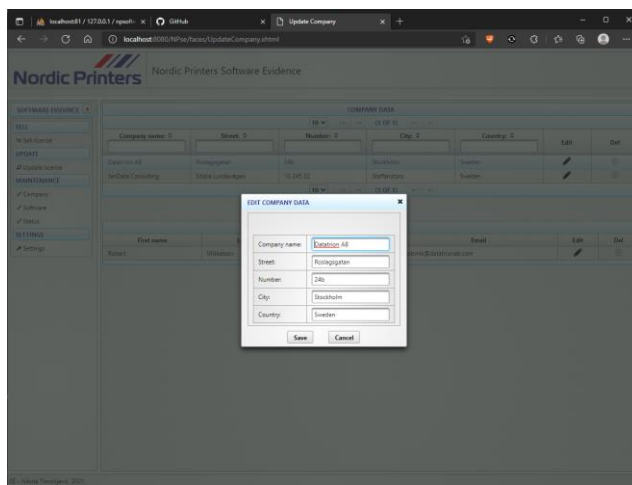
## 6.1. Company maintenance

If user selects any row in company table, contacts table (table with contact persons and their data) will be shown below it, as well as 'Add New Contact' link below.

Each row of both company and contacts tables contain pencil icon and cross icons which are used for editing and deleting data, respectively. Company delete icon is disabled if any license has been sold to that company, or a company has been reseller of any license. Also, if there is only one contact person for the company, delete icon for that contact person will be disabled, until another contact person is added.
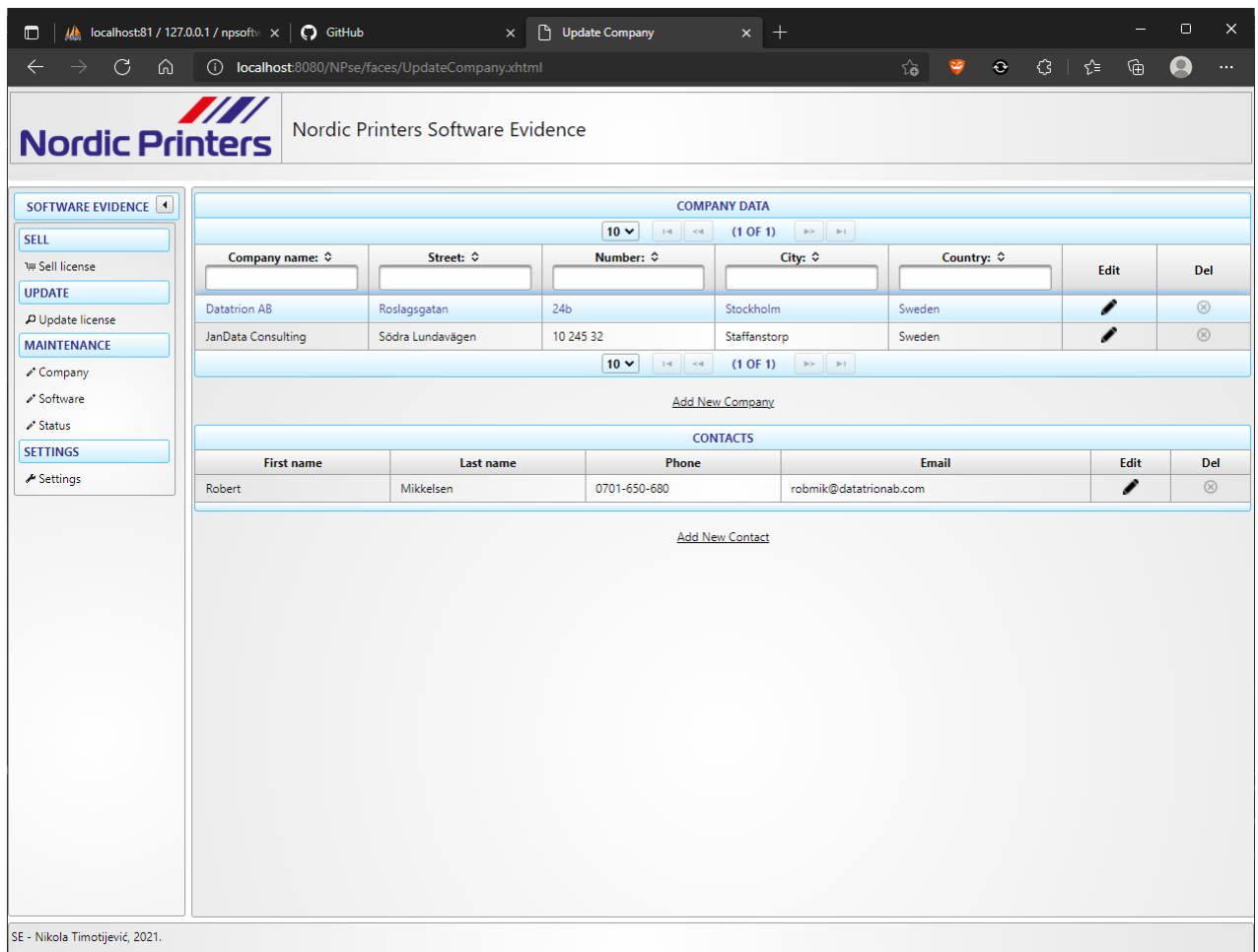
Each data row of each of these two tables contains edit and delete icons on the right. By clicking on edit icon in company data table, prepopulated dialog is shown and user can change any data about the company.

By clicking on the edit icon in the contacts data table, prepopulated dialog is shown and user can change any data about the contact person.

If user clicks 'Add New Company' link, dialog for entering new company data will be shown.
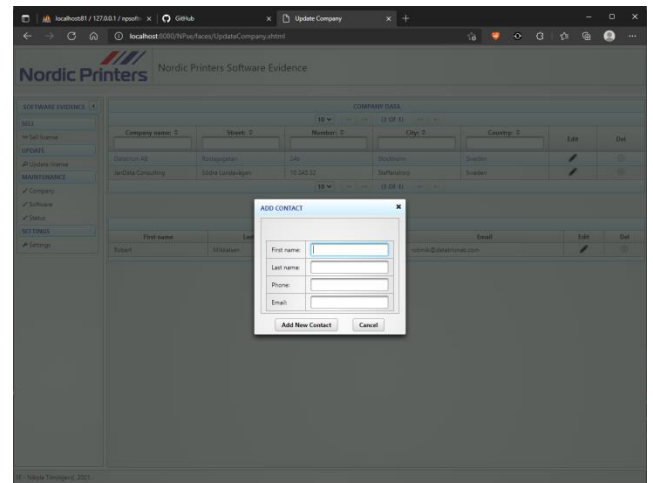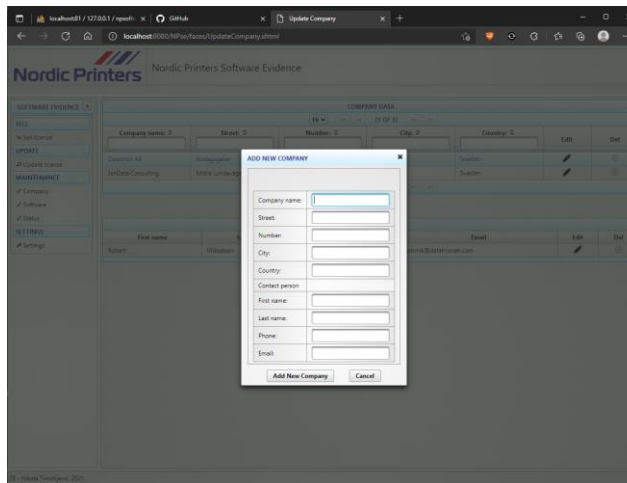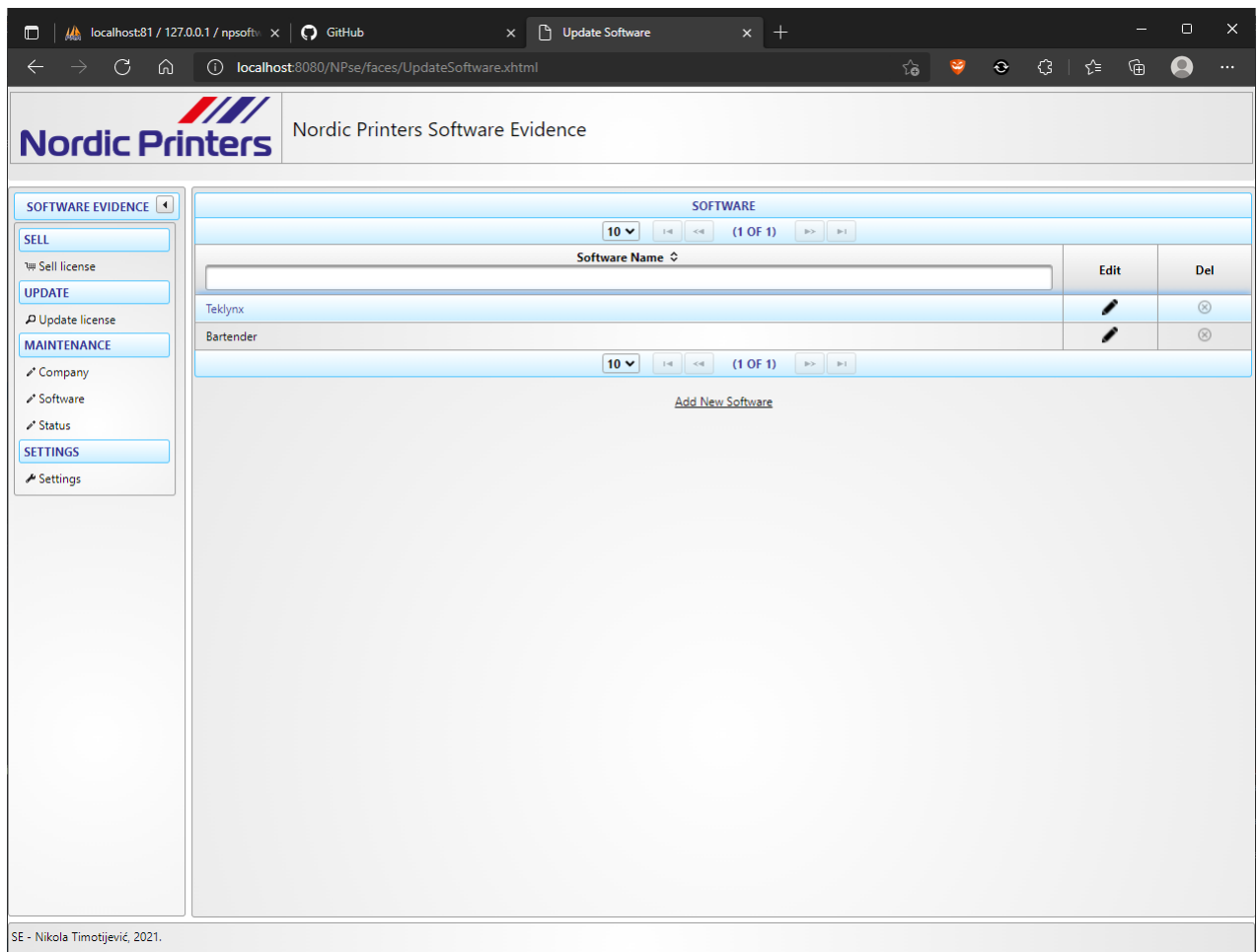


If user click 'Add New Contact' link, dialog for entering new contact info will be shown.
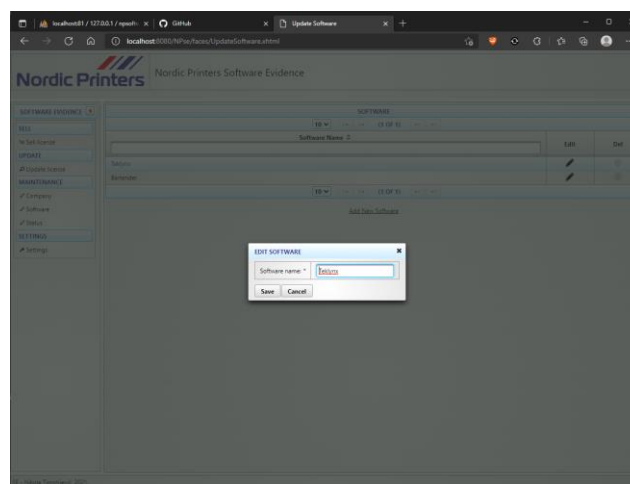
## 6.2. Software maintenance

Each row of the table contains pencil icon and cross icons which are used for editing and deleting of data, respectively.

Software delete icon is disabled if any license of that software has been sold previously.



New software can be created by clicking on the link 'Add New Software' below the table. Software name can be edited by clicking on edit icon.

## 6.3. Status maintenance

Each row of the table contains pencil icon and cross icons which are used for editing and deleting of data, respectively.

Status delete icon is disabled if that status is used in any license data record.



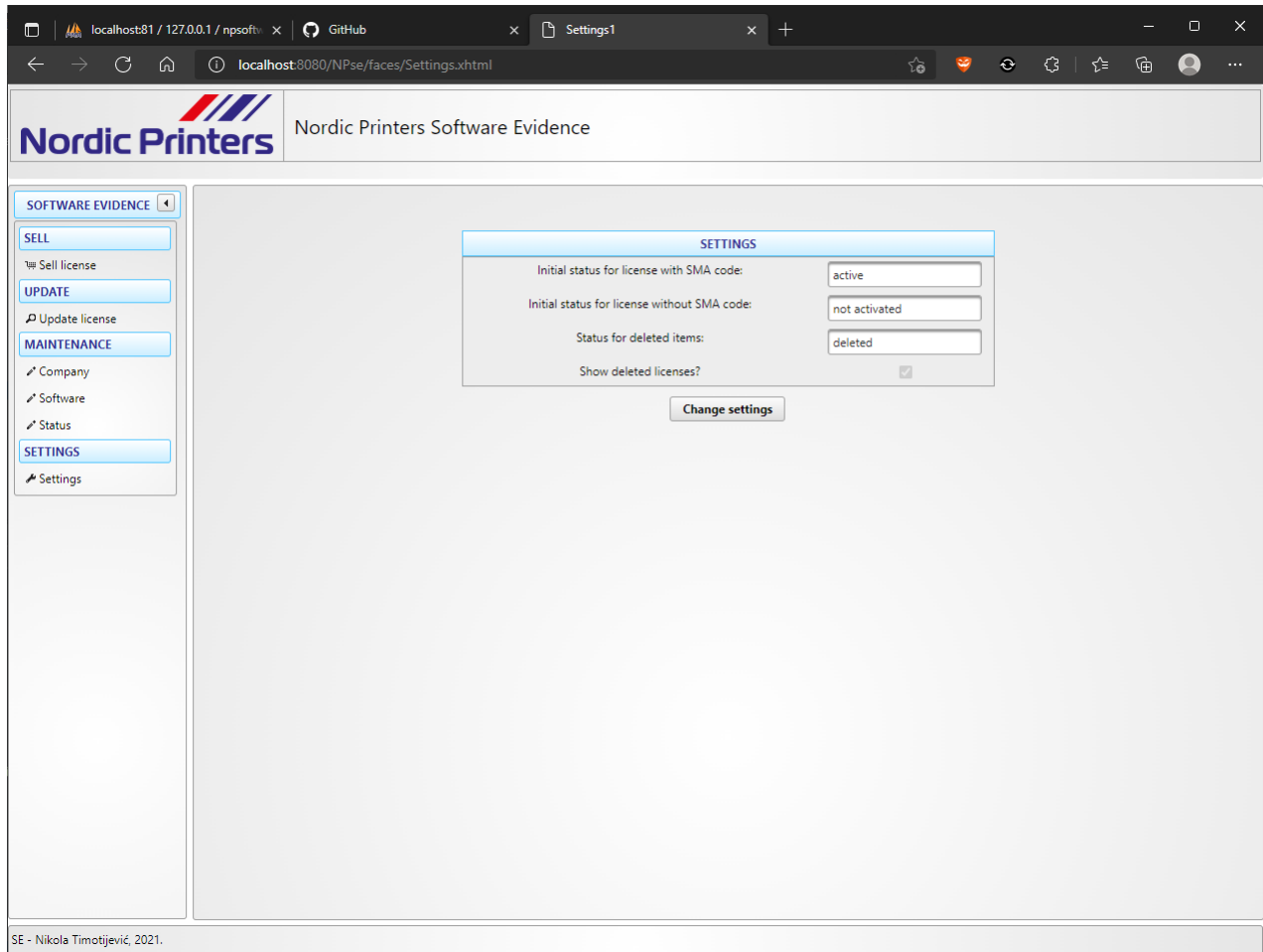New status can be created by clicking on the 'Add New Status' link below the table.

Status name can be edited by clicking on pencil icon.

# 7. Settings

By clicking on the 'Settings' in the menu on the left side of the screen, current settings will be shown on the right.

It is possible to change settings by clicking 'Change settings' button.



User is able to choose status name for each status by using drop down menus. If needed, user can create new status by clicking on cross icon.

On the bottom of dialog, there is an option to choose whether deleted licenses should be shown on update page.

By clicking on 'Save' button options will be saved in database.
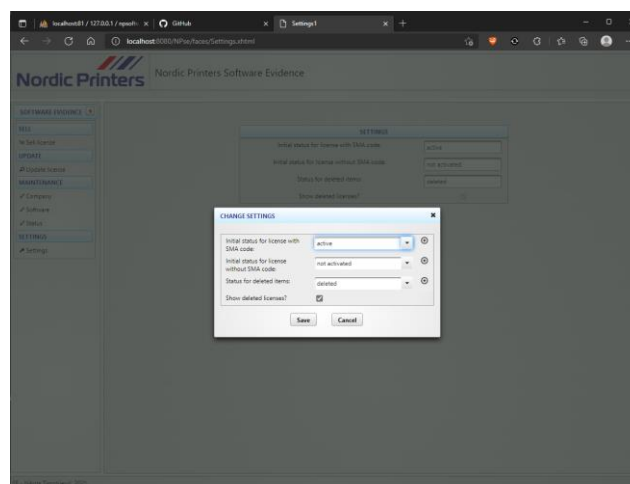
# 8. Database

Database name should be "npsoftwareevidence", and it should be created by using a script located in "NPSoftwareEvidence\src\main\java\tnt\npse\setup" folder.

Database diagram is show below.