

Human Resource Management

1.Introduction

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "Human Resources Management". It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interactions with application.

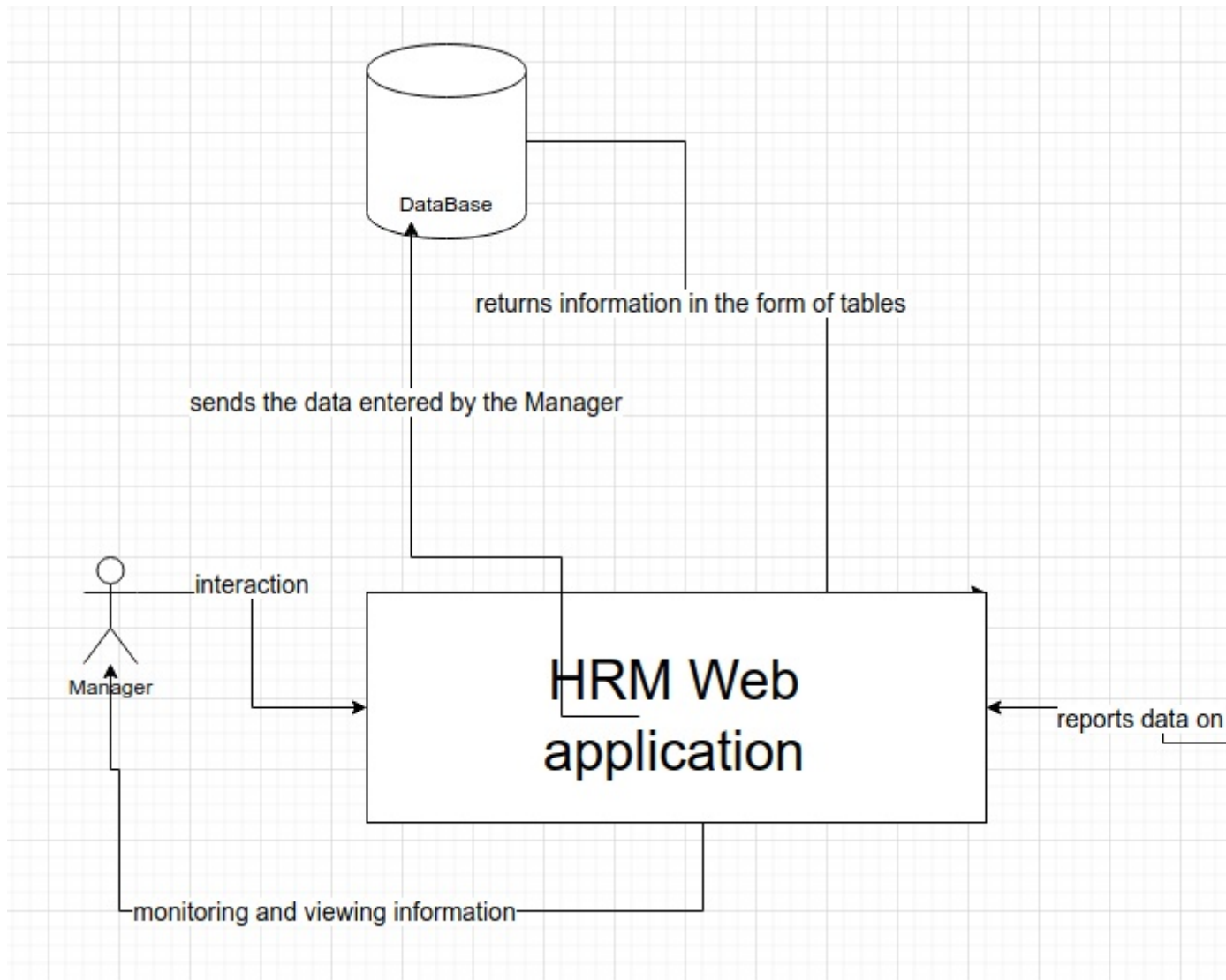
1.2 Scope

"HUMAN RESOURCES MANAGEMENT" is a web application designed for managing departments and personnel.

2.Overall Description

2.1 Product perspective

This system will consist of two parts:databases and web applications. The database will be used for storing and processing information that will come from the web application. The web application will provide managers with all the necessary information on employee management, such as:work schedule, Department names, data about all employees and vacations.



Pic. 2.1 DFD diagram.

2.2 Product functions

With this web application, users can manage the organization's employees and create reports on their work. The Manager will have access to such functions as: entering employee information, viewing employee information, editing and deleting data from the database. This app will also show the working hours of each employee and their activity using an interactive calendar.

2.3 User characteristics

There are two types of users who interact with the system: Manager and employee. The Manager has full access to the app and can view and manage information about all employees. Employees, in turn, when they log in to the app, will confirm the time when they arrived at work and choose what their mood is.

3. Specific requirements

User interfaces

"HRM" - is a web application that automates the management of employees in an organization. The application must provide:

- Displaying information about employee
- Editing employee information
- Updating information about employees
- Delete and add new employees to the database
- Display information about activity of the employee
- Creating work schedules
- Display of work/activity schedules using a calendar

3.1 Registration and Login

3.1.1 Login form

This form is used to log in to your account.

Main scenario:

- The user selects the login form.
- Enters the appropriate data.



A hand-drawn diagram of a login form. At the top, there are two tabs: "SIGN IN" (which is underlined) and "SIGN UP". Below the tabs, there are two input fields: "USERNAME" and "PASSWORD". Under the "PASSWORD" field, there is a checkbox labeled "ON" (with a blue square) and "STAY LOGGED IN". Below the checkbox, there is a large rounded rectangular button labeled "SIGN IN". At the bottom right, there is a link labeled "FORGOT YOUR PASSWORD?". The entire form is enclosed in a rounded rectangular border.

Pic. 3.1.1 Login form.

You can perform the following actions on the page:

- The input of personal data.
- Autofill data every time you log in.
- Log in to your account.
- Recover a forgotten password.

3.1.2 Registration

This form is used to register a new account.

Main scenario:

- The user registers.
- The system checks the entered data.
- If the specified email exists, the corresponding label is displayed.
- Checks whether the user is a robot.
- If the user has not passed verification, it is not registered.
- Otherwise, registration is performed.

SIGN IN **SIGN UP**

FULL NAME

EMAIL

PASSWORD

CONFIRM PASSWORD

reCAPTCHA

☐ I'm not robot

SIGN IN

Pic. 3.1.2 Sign up form.

3.1.3 Password recovery

This operation allows you to restore a lost or forgotten password.

Main scenario:

- The user enters their email address.
- The program checks whether such an email exists.
- A confirmation email.



Pic. 3.1.3 Password recovery.

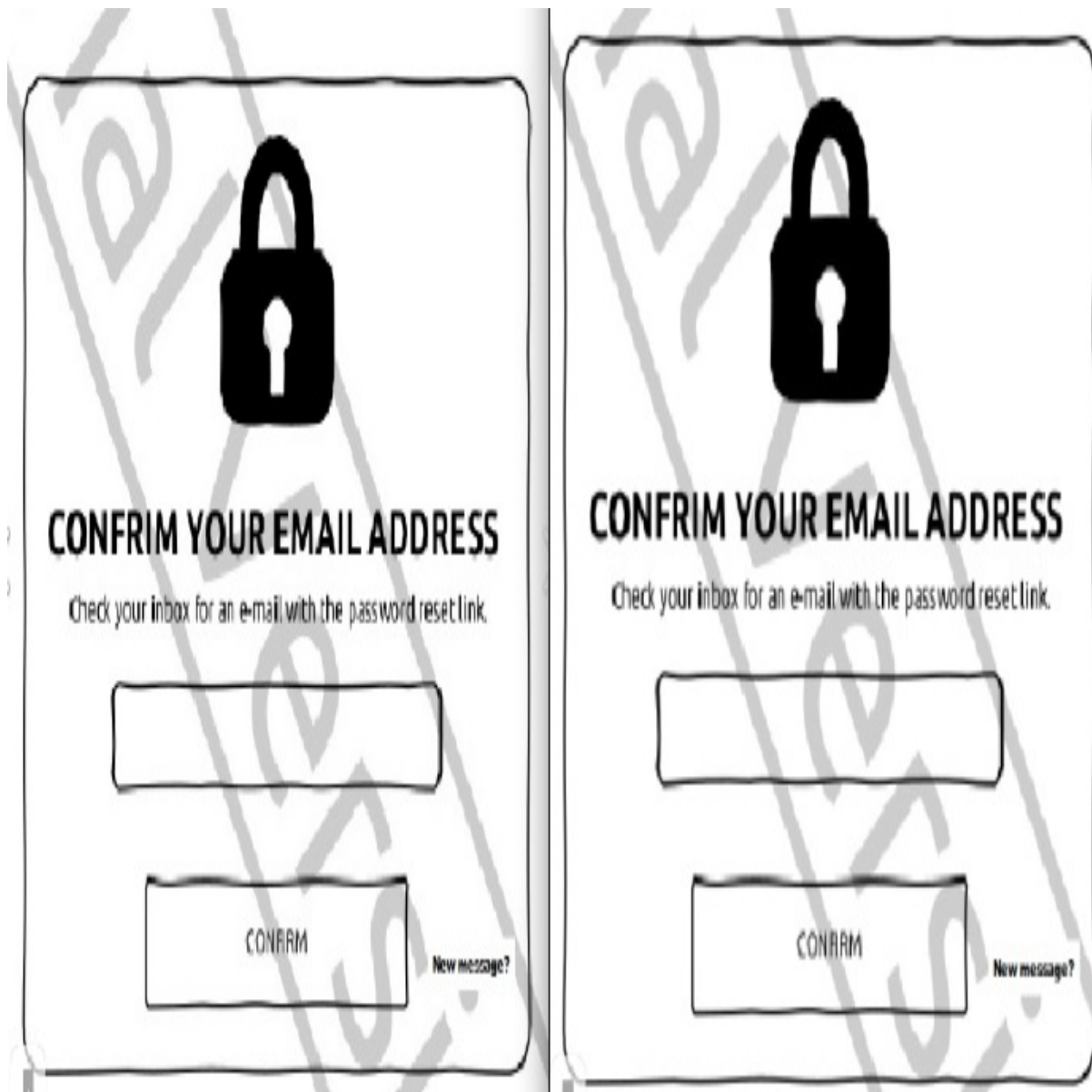
After clicking the confirm button, an email will be sent to your email address with instructions on how to change your password.

3.1.4 Confirm Passcode

In the course of this operation is the confirmation passcode.

Main scenario:

- The user enters the passcode that was sent to their email address.
- If it matches, the user is redirected to a new tab, where they enter a new password.
- If it doesn't fit, the user is prompted to resend the email.



Pic. 3.1.4 Confirm Passcode.

Using the new message button, you can resend the message with a passcode.

3.1.5 Confirm New Password

New password entry field.

Main scenario:

- Entering a new password.
- Re-confirming it.



Change Password

New Password

Confirm Password

Confirm

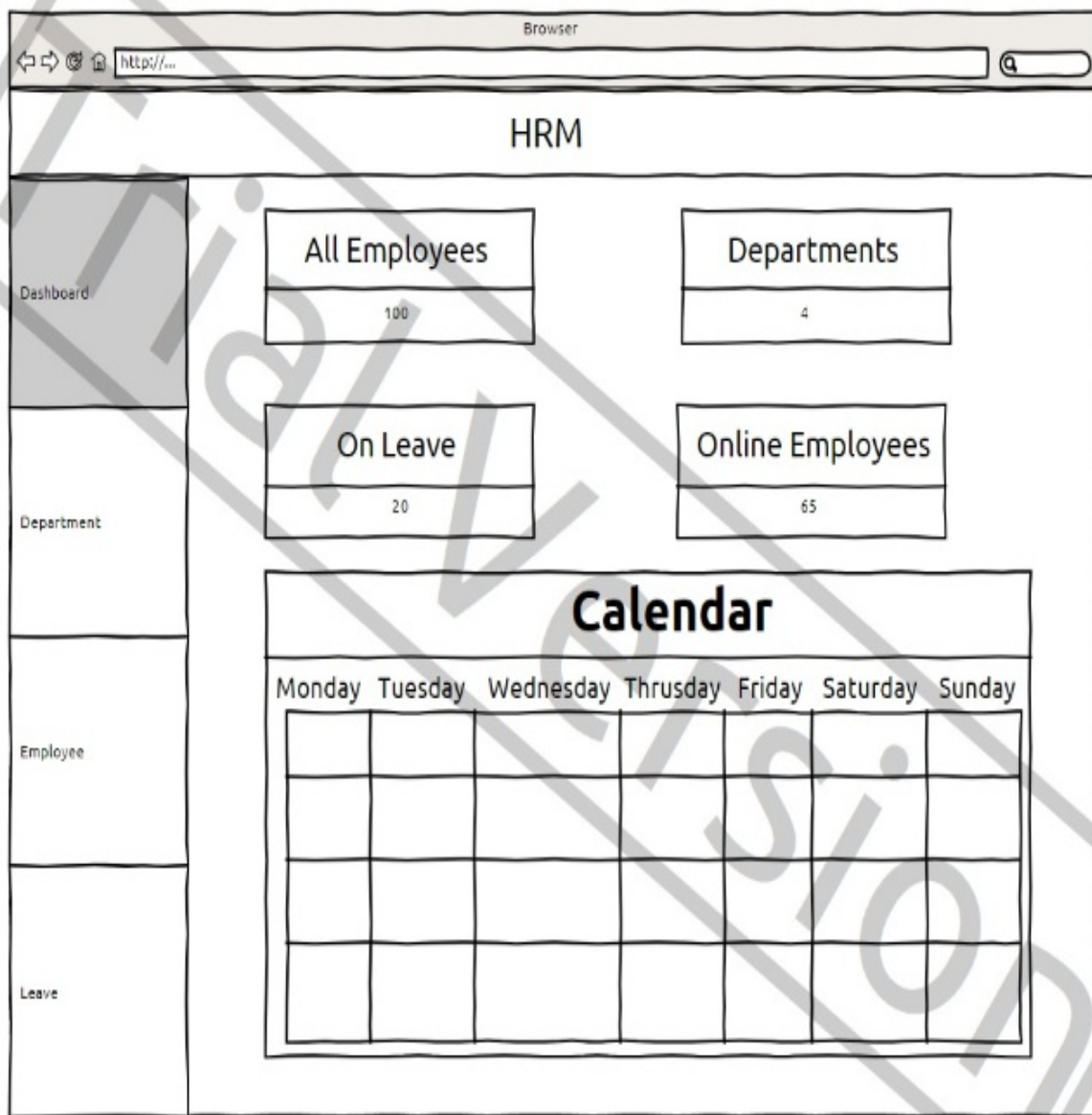
Pic. 3.1.5 Confirm New Password.

3.2 Dashboard

The mode is designed to view information about the organization number of employees, departments, active employees and employees on vacation. The sidebar allows you to switch to other control tabs.

Main scenario:

- The user goes to the main page.
- The app displays information about the organization.



Pic. 3.2 Dashboard.

The page displays the following information:

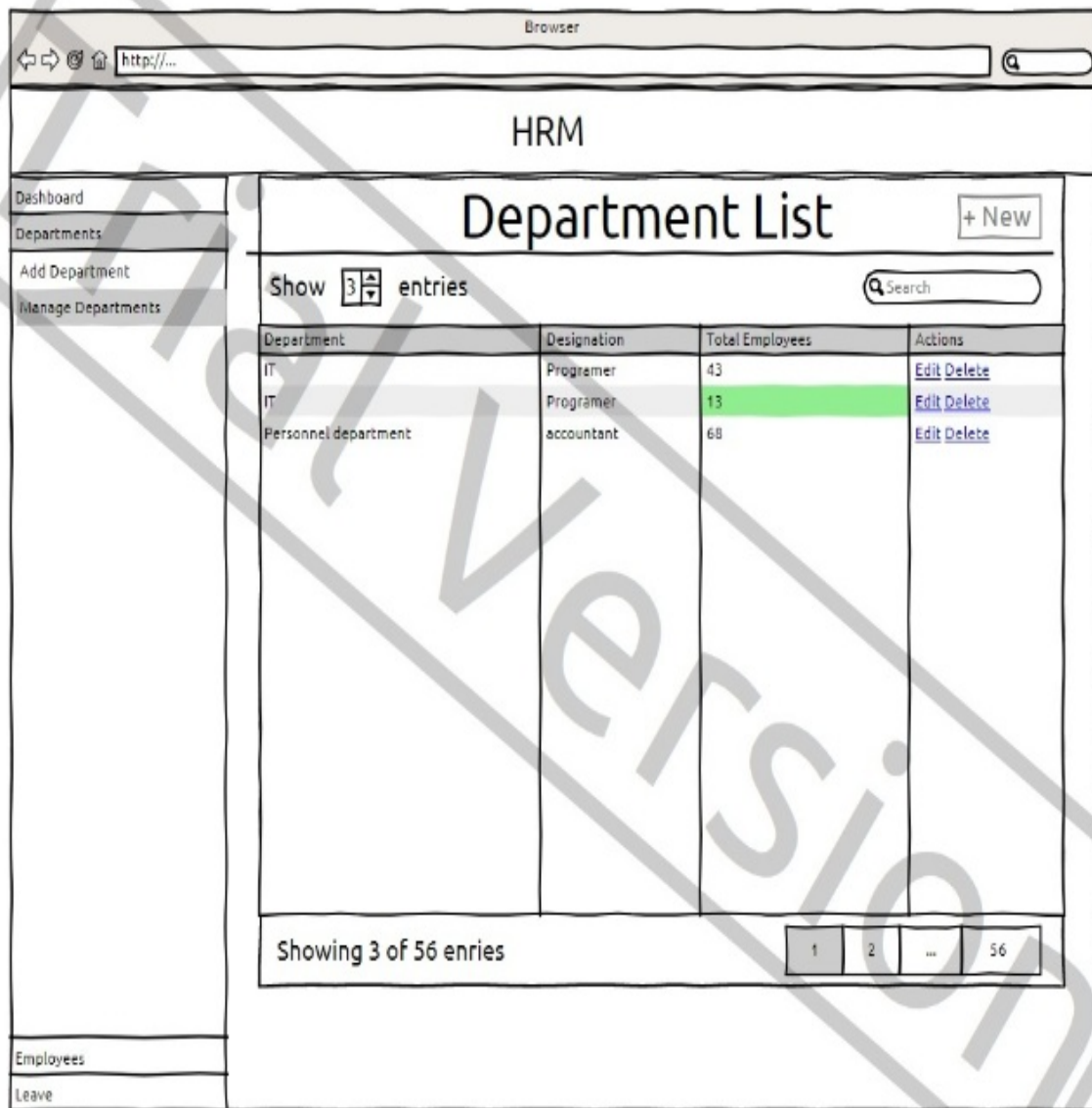
- Number of employees.
- Number of departments.
- Number of employees online.
- Number of employees on vacation.
- Calendar with daily statistics.

3.3 Departments

3.3.1 Department List

Main scenario:

- User selects item "Departments";
- Application displays a list of departments.



Pic. 3.3.1 Department List.

The list displays the following columns:

- Department - department name.
- Designation - designation of the department.
- Total employees - number of employees.
- Action - editing / deleting a table row.

Number of records displayed:

- In the department list view mode, the user sets the number of entries to display;
- The app will display the form with the required number of entries.

3.3.2 New Department

Main scenario:

- User clicks the "+ New" button in the department list view mode;
- Application displays form to enter department data;
- User enters department data and presses "Save" button;
- If any data is entered incorrectly, incorrect data messages are displayed;

- If entered data is valid, then record is adding to database;
- If error occurs, then error message is displaying;
- If new department record is successfully added, then list of departments with added records is displaying.

Cancel operation scenario:

- User clicks the "+ New" button in the department list view mode;
- Application displays form to enter department data;
- User enters department data and presses "Cancel" button;
- Data don't save in data base, then list of departments records is displaying to user.

The image shows a web browser window with the title 'HRM'. The address bar shows 'http://...'. The left sidebar contains a menu with the following items: Dashboard, Departments (highlighted), Add Department, Manage Departments, Employees, and Leave. The main content area is titled 'New Department' and contains two input fields: 'Department' and 'Designations'. The 'Designations' field has a '+' button next to it. A 'Save' button is located at the bottom right of the form.

Pic. 3.3.2 New Department.

When adding a department, the following details are entered:

- Department – department name;
- Designations – department designation;

3.3.3 Edit Department

Main scenario:

- User clicks the “Edit” button in the department list view mode;
- Application displays form to enter department data;
- User enters department data and presses “Save” button;
- If any data is entered incorrectly, incorrect data messages are displayed;
- If entered data is valid, then record is adding to database;
- If error occurs, then error message is displaying;
- If new department record is successfully added, then list of departments with added records is displaying.

Cancel operation scenario:

- User clicks the “Edit” button in the department list view mode;
- Application displays form to enter department data;
- User enters department data and presses “Cancel” button;
- Data don't save in data base, then list of departments records is displaying to user.

The image is a hand-drawn wireframe of a web browser window. The browser's title bar says "Browser" and the address bar shows "http://...". The main content area is titled "HRM" and features a sidebar menu on the left with the following items: "Dashboard", "Departments", "Add Department", "Manage Departments", "Employees", and "Leave". The "Departments" menu item is highlighted. The main content area displays a form titled "New Department". This form contains two input fields: "Department" and "Designations". The "Designations" field has a "+" button to its right and a checkbox below it. At the bottom of the form are two buttons: "Cancel" and "Save".

Pic. 3.3.3 Edit Department.

When editing a department, the following details are entered:

- Department – department name;

- Designations – department designation;

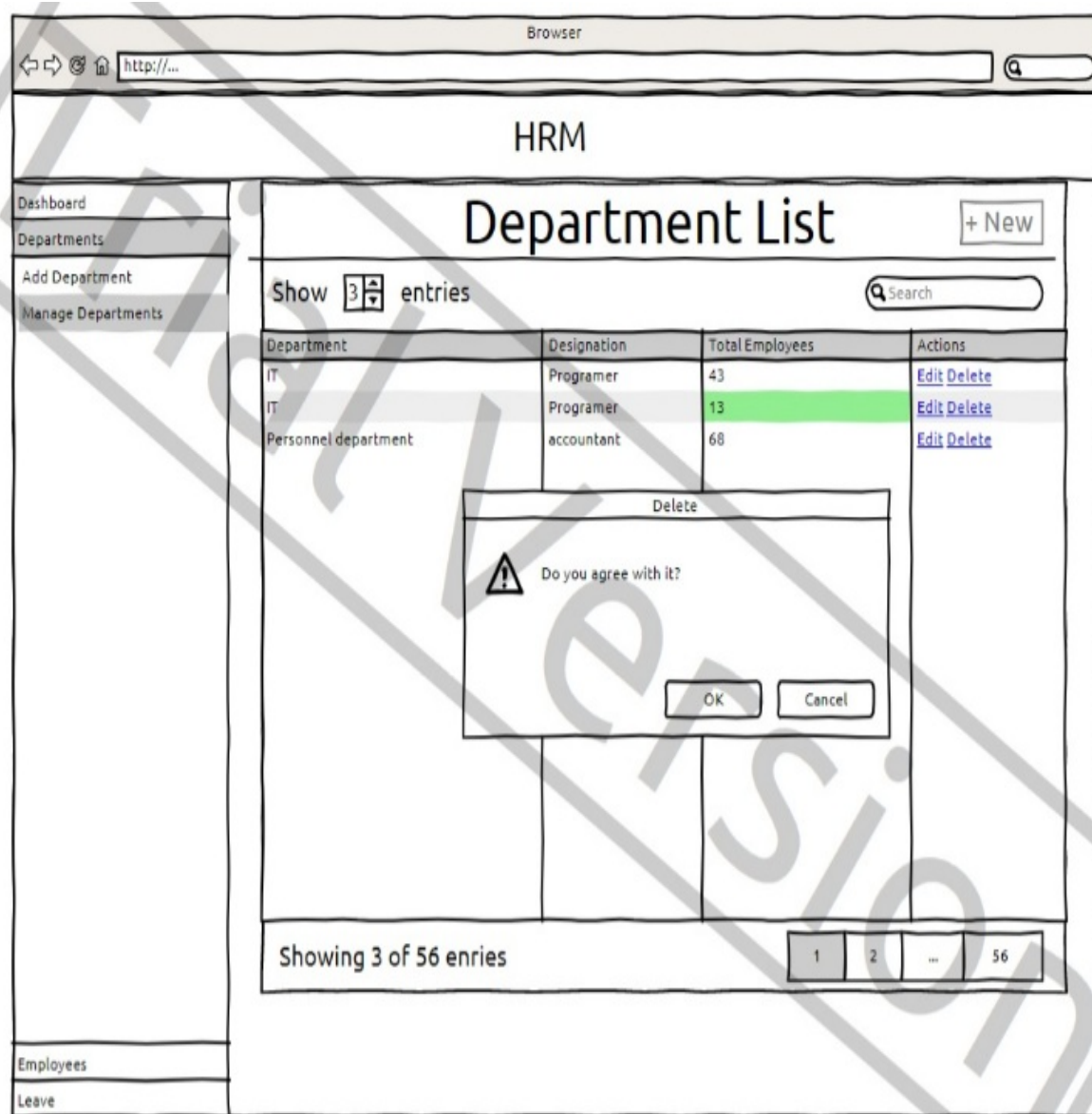
Constraints for data validation:

- Department – maximum length of 90 characters;
- Designations – maximum length of 90 characters;

3.3.4 Removing the Department

Main scenario:

- The user, while in the list of department, presses the "Delete" button in the selected department line;
- If the department can be removed, a confirmation dialog is displayed;
- The user confirms the removal of the department;
- Record is deleted from database;
- If error occurs, then error message displays;
- If department record is successfully deleted, then list of departments without deleted records is displaying.



Pic. 3.3.4 Removing the Department.

Cancel operation scenario:

- User is in display mode of department list and press "Delete" button;
- Application displays confirmation dialog "Please confirm delete department?";
- User press "Cancel" button;
- List of departments without changes is displaying.

3.4 Employee

3.4.1 Employee List

Main scenario:

- User selects item "Departments";
- Application displays a list of departments.

ID	Photo	Name	Department	Position	Salary	Email	Status	Actions
643	Picture	Egor Marashchuk	IT	Programmer	2000 \$	egorkam10@gmail.com	Active ✓	Edit Delete

Pic. 3.4.1 Employee List.

The list displays the following columns:

- ID - employee ID;
- Photo – employee photo;

- Name - employee name;
- Department - employee department;
- Position - employee position;
- Salary - employee salary;
- Email - employee email;
- Status - employee status;
- Actions - employee active.

Number of records displayed:

- In the Employee list view mode, the user sets the number of entries to display;
- The app will display the form with the required number of entries.

3.4.2 New Employee

Main scenario:

- User clicks the "+ New" button in the Employee list view mode;
- Application displays form to enter Employee data;
- User enters Employee data and presses "Save" button;
- If any data is entered incorrectly, incorrect data messages are displayed;
- If entered data is valid, then record is adding to database;
- If error occurs, then error message is displaying;
- If new Employee record is successfully added, then list of Employers with added records is displaying.

Cancel operation scenario:

- User clicks the "+ New" button in the Employee list view mode;
- Application displays form to enter Employee data;
- User enters Employee data and presses "Cancel" button;
- Data don't save in data base, then list of Employers records is displaying to user.

Browser

http://...

HRM

Add employee

- Dashboard
- Department
- Employees
- Add Employee**
- Manage Employee
- Schedules

Personal Details

First Name*

Last Name*

Date of Birth*

Gender*

Passport No

Account Login

Email*

Password*

Contact Details

Present Address*

City*

Country*

Phone 1*

Phone 2

Email*

Company Details

Employee Id

Department*

Designation*

Salary

Date of Joining*

Date of Leaving

Status

Cancel **Save**

Pic. 3.4.2 New Employee.

When you add an employee, you enter information about them.

3.4.3 Edit Employee

Main scenario:

- User clicks the "Edit" button in the Employee list view mode;
- Application displays form to enter Employee data;
- User enters Employee data and presses "Save" button;
- If any data is entered incorrectly, incorrect data messages are displayed;
- If entered data is valid, then record is adding to database;
- If error occurs, then error message is displaying;
- If new Employee record is successfully added, then list of departments with added records is displaying.

Cancel operation scenario:

- User clicks the "Edit" button in the Employee list view mode;
- Application displays form to enter Employee data;
- User enters Employee data and presses "Cancel" button;

- Data don't save in data base, then list of Employee records is displaying to user.

The screenshot displays a web browser window with the URL 'http://...'. The page title is 'HRM'. On the left is a sidebar menu with the following items: Dashboard, Department, Employees, Add Employee (highlighted), Manage Employee, and Schedules. The main content area is titled 'Add employee' and contains four distinct form sections:

- Personal Details:** Includes fields for First Name*, Last Name*, Date of Birth* (with a calendar icon), Gender*, and Passport No*.
- Account Login:** Includes fields for Email* (with an envelope icon) and Password* (with a key icon).
- Contact Details:** Includes fields for Present Address*, City*, Country*, Phone 1*, Phone 2, and Email*.
- Company Details:** Includes fields for Employee Id, Department*, Designation*, Salary, Date of Joining*, Date of Leaving, and Status.

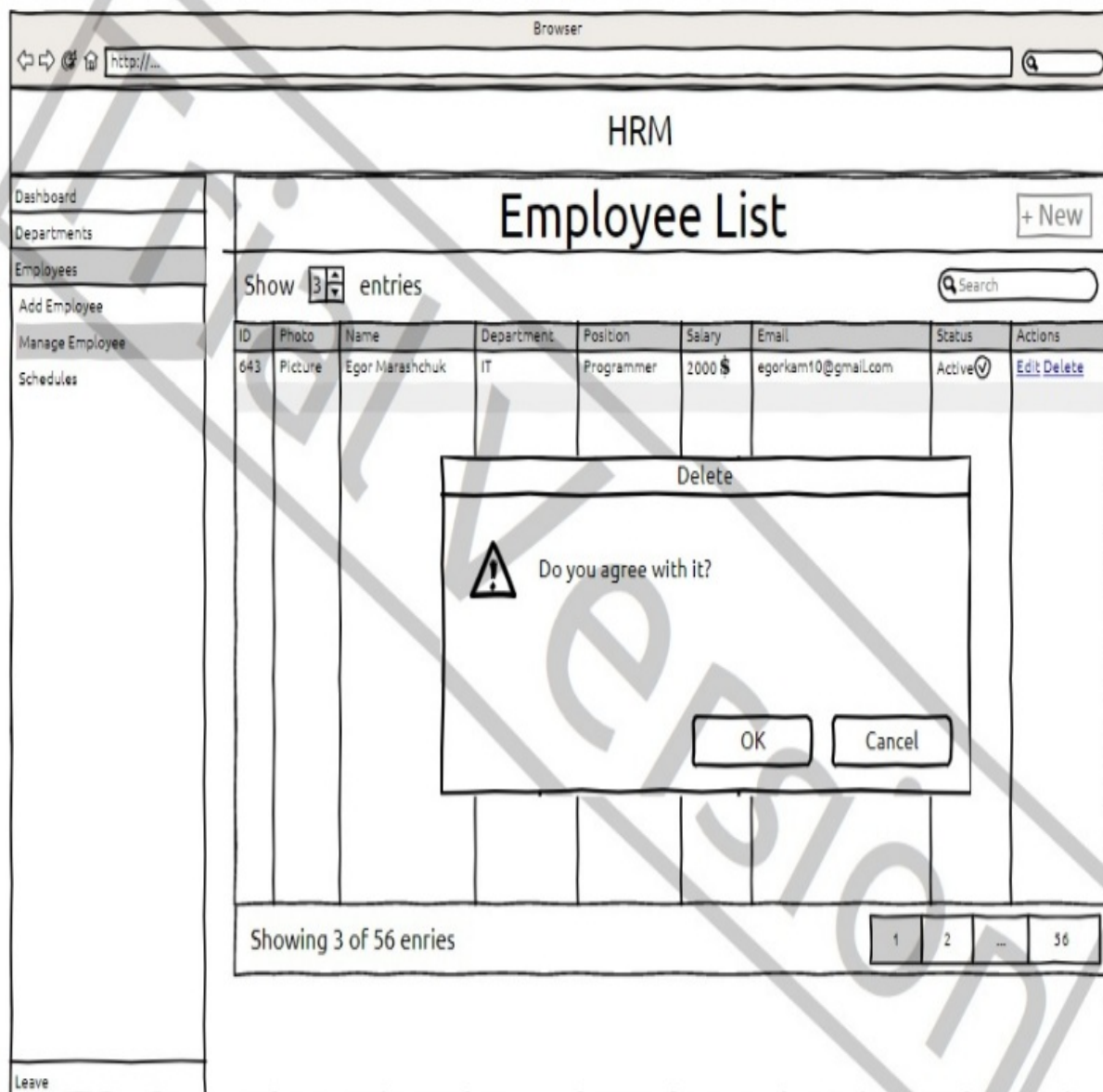
At the bottom right of the form are two buttons: 'Cancel' and 'Save'.

Pic. 3.4.3 Edit Employee.

3.4.4 Removing the Employee

Main scenario:

- The user, while in the list of employee, presses the "Delete" button in the selected employee line;
- If the employee can be removed, a confirmation dialog is displayed;
- The user confirms the removal of the employee;
- Record is deleted from database;
- If error occurs, then error message displays;
- If department record is successfully deleted, then list of employee without deleted records is displaying.



Pic. 3.4.4 Removing the Employee.

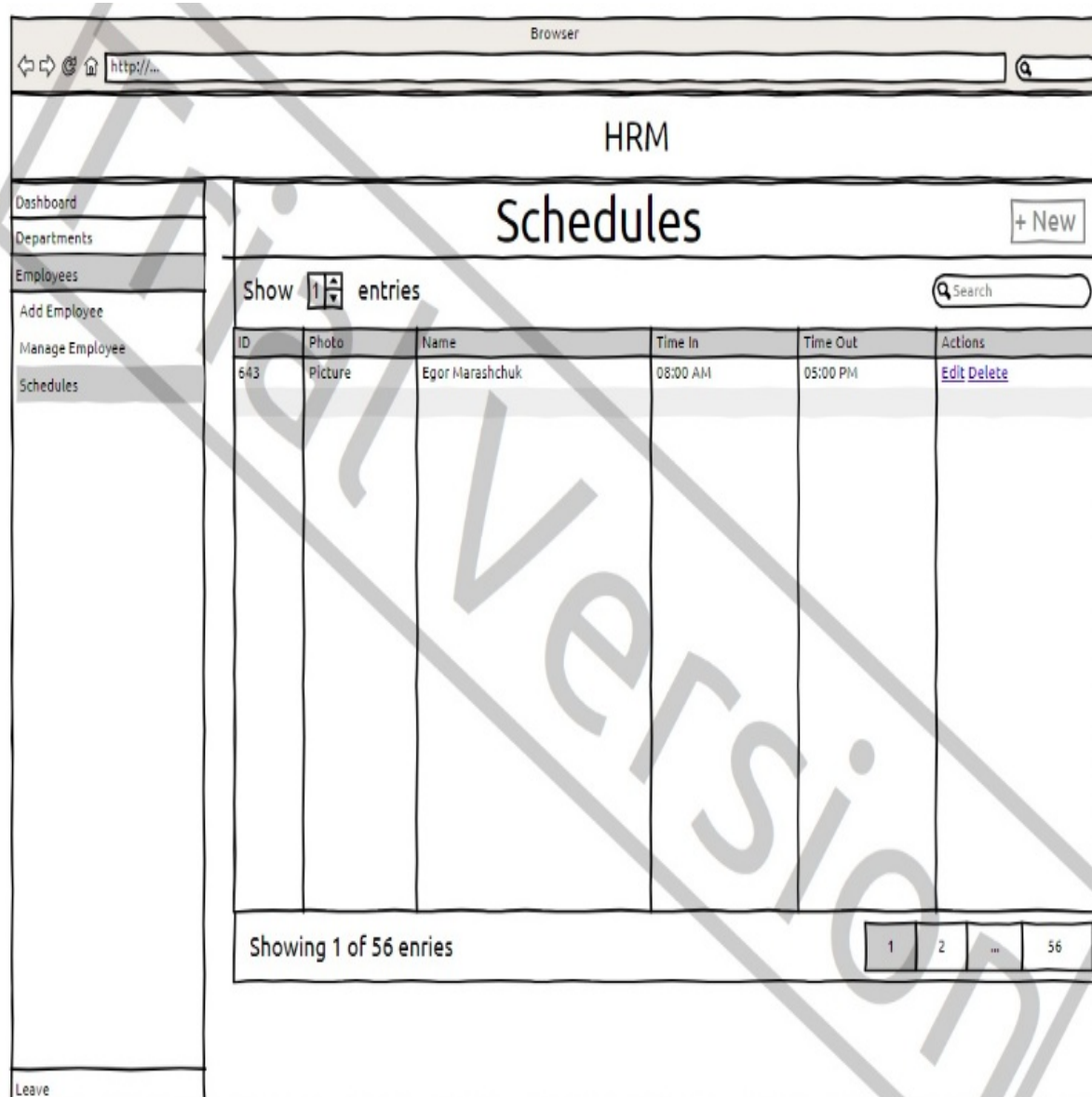
Cancel operation scenario:

- User is in display mode of employee list and press "Delete" button;
- Application displays confirmation dialog "Please confirm delete employee ?";
- User press "Cancel" button;
- List of employee without changes is displaying.

3.4.5 Schedules List

Main scenario:

- User selects item "Schedules";
- Application displays a list of Schedules.



Pic. 3.4.5 Schedules List.

The list displays the following columns:

- ID - employee ID;
- Photo – employee photo;
- Name - employee name;
- Time in - start work time;
- Time out - end work time;
- Actions - editing / deleting a table row.

The table will be generated automatically from the employeelist table and from the user interface shown below.

3.5 Leave

3.5.1 New Leave

On this tab, an employee is added who is temporarily incapacitated.

Main scenario:

- The Manager enters data why employees are temporarily incapacitated;
- Then confirms them.

Pic. 3.5.1 New Leave.

When adding a leave employee, the following details are entered:

- Employee - fullname employee;
- Leave Type - the reason why they is temporarily incapacitated;
- From - start date;
- To - end date;
- Comment - additional comments.

Note: If there is no suitable reason in the Leave Type field,you can write the reason in the Comment field.

3.5.2 Manage Leave

A form showing data about users who are temporarily disabled.

Main scenario:

- The user selects the item leave
- Select Manage Leave and views information about users

Browser

http://...

HRM

Dashboard

Departments

Employees

Leave

Add Leave

Manage Leave

Leave List

+ New

Show 1 entries

Search

ID	Name	Leave Type	Puration	Comment	Action
643	Egor Marashchuk	Sick Leave	1 month	He has corona	Edit Delete

Showing 1 of 56 enries

1 2 ... 56

Pic. 3.5.2 Manage Leave.

The list displays the following columns:

- ID - employee ID;
- Name - employee name;
- Leave Type - the reason why they is temporarily incapacitated;
- Puration - the duration of the absence;
- Comment - additional comments;
- Actions - editing / deleting a table row.

3.5.3 Edit Leave

Main scenario:

- User clicks the "Edit" button in the Leave list view mode;
- Application displays form to enter Leave data;
- User enters "Leave" data and presses "Save" button;
- If any data is entered incorrectly, incorrect data messages are displayed;

- If entered data is valid, then record is adding to database;
- If error occurs, then error message is displaying;
- If new Leave record is successfully added, then list of leave with added records is displaying.

Cancel operation scenario:

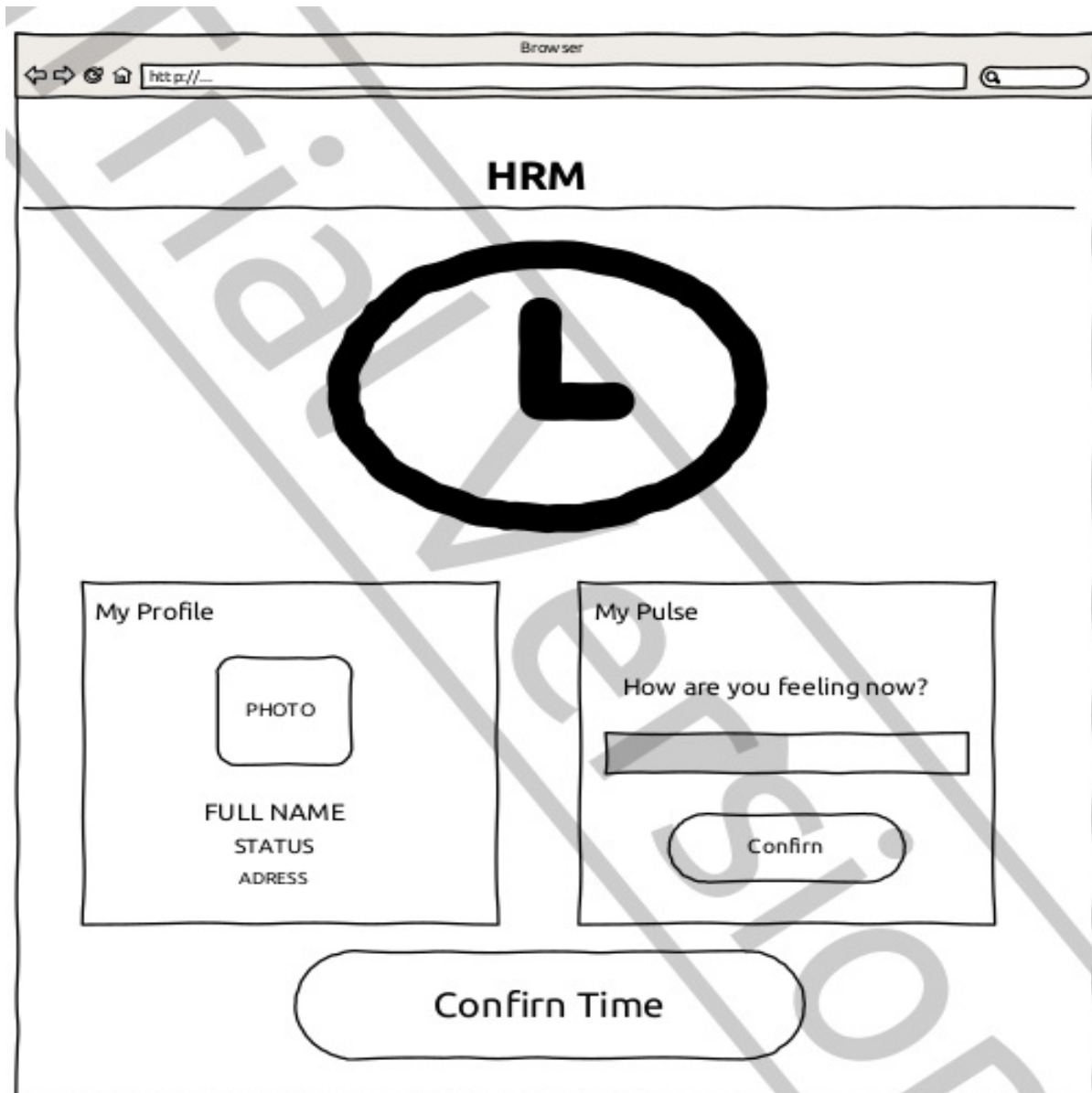
- User is in display mode of add leave and press "Cancel" button;
- The app closes editing mode.

Pic. 3.5.3 Edit Leave.

3.6 User Mode

Main scenario:

- This form opens after the user is logged in to the system;
- If the system determines that this is a user and not a Manager, this tab opens;
- Otherwise, the page for managers opens;
- The user confirms their time;
- Chooses what his mood is.



Pic. 3.6 User Mode

Note: When the user confirms their time, it is entered in the schedules database.