PUSP214201

v.0.1

Template

Group 2

Responsible: Project management Group

Authors: Project management group

2021-01-25

Contents

1   Introduction

This document presents requirements for the (Sätt in namn). (Sätt in namn) is a system which purpose and main functionality is to administer time reporting with web-usage capabilities.

2   Reference documents

1. Software Requirements Specification: BaseBlockSystem, v. 1.0, Doc. number: PUSS12002

2. The requirements on the usability of the system applies to this document and are therefore implemented in "System-namn", following requirements are implemented; 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.6, 6.1.8, 6.1.9, 6.2.2

3   Background and goals

3.1   Main goals

The goal is to develop and distribute a web-based system where the user can report time and administrate the system according to their roles.

3.2   Actors and their objectives

The system can be used and administrated by following actors;

- **User:** The user has the authority to log in to the system to report and change past reported time as well as review their reported times. The user also inherits roles as either "SG", "UG", and "TG".

- **Project Leader:** The project leaders main objective is to administer groups within the project, this implies that the project leader has the authority to add and remove as well as assign users from/to designated roles.

- **Administrator:** The administrator has the authority to add and remove users from the system along with creating and removing project groups. The admin is the only role that can assign the role "Project leader" to a user. The main goal of this role is to be able to administrate creation and removal of users.

Image is to complex to understand
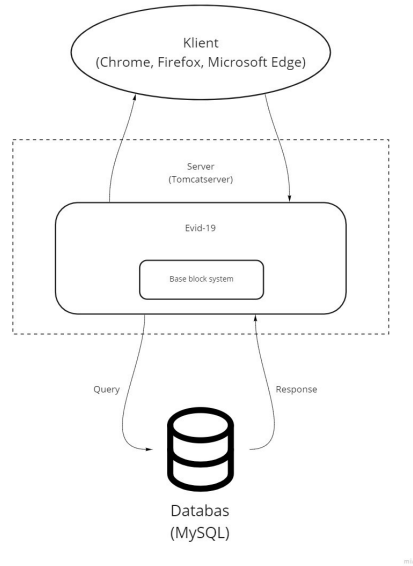
Figure 1: Context diagram

4 Terminology

5 Context diagram

6 Functional requirements

6.1 Login and logout

6.1.1 Requirement

Scenario 6.1.3 should be supported by the system.

6.1.2 Requirement

When a user reaches the system and is not logged in he/she should be asked to provide a username and a password. No other information should be provided to the user.

6.1.3 Requirement

The user should not be able to change their passwords to their previous one.

6.1.4   Requirement

If the user has forgotten their password, they should be able to get a newly generated password from the server by email.

6.1.5   Requirement

New users should be assigned passwords generated by the server according to the password ruleset.

6.1.6   Requirement

Users should be able to change their password on the "My profile" page.

6.1.7   Requirement

Inputs of passwords not existing in the database should return an error message.

6.1.8   Requirement

Inputs of incorrect data (e.g. negative numbers or non-valid dates etc.) should return an error message.

6.1.9   Requirement

Usernames should be unique. Inputs of new users with existing names should return an error message.

6.1.10   Requirement

If the administrator tries to add a new user with a username that breaks the ruleset, an error message should be returned.

6.1.11   Requirement

Inputs of new passwords which are identical to the users previous password should return an error message.

6.1.12   Requirement

Error messages should be in the following format: "Error code – Reason".

6.2   Data

6.2.1   Requirement

A password should consist of at least one character of each type. [a-z][A-Z][1-9] with a minimum of 8 characters.
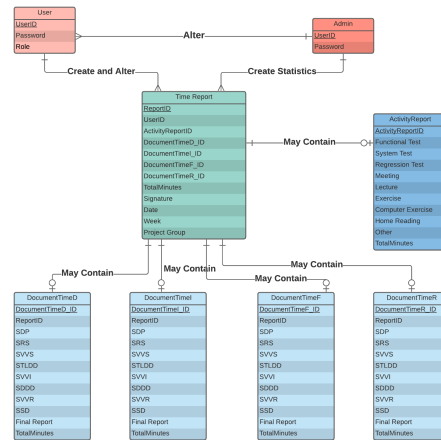
Figure 2: ER-diagram

6.2.2   Requirement (SÄTT NUMMER

6.2.3   Requirement (SÄTT NUMMER

6.3   User

6.3.1   Requirement

A user can create and submit a time report to the project group which they are assigned to.

6.3.2   Requirement

The following scenario should be supported by the system;
   Scenario: The user wants to submit a time report
   Prerequisites The user is logged in to the system

1. The user navigates to the page "Time Report".

2. The user is presented with an overview of their previously reported time.

3. The user presses the button "Create New Time Report"

4. The user fills in the blank textboxes with the time they have spent on the different activities.

5. The user presses the button for "Submit".

6. The user is presented with a popup window confirming that the changes have been made.

7. An updated view of the page is displayed.

6.3.3 Requirement 6.5.3

A user should be able to see a summarized view of previous reported time.

6.3.4 Requirement 6.5.4

The following scenario should be supported by the system;

Scenario: The user wants to see a summary of their reported time.
Prerequisites The user is logged in to the system

1. The user navigates to the page "Time report".

2. A page is displayed which includes the option to report time, edit old time reports but also a summarized view of their previously logged time.

6.3.5 Requirement 6.5.5

A user should be able to change their time report after it has been submitted to the system.

6.3.6 Requirement 6.5.6

A user should be able to delete a previously submitted time report.

6.3.7 Requirement 6.5.7

The following scenario should be supported by the system;

Scenario: A user wants to change or delete previously reported time.
Prerequisites The user is logged in to the system

1. The user navigates to the page "Time report".

2. The user is presented with an overview of their previously reported time.

3. The user presses the button "Edit time report"

4. The user chooses a time report.

5. The user is presented with a new page which includes the previously reported time table and a button for "Delete".

6. The user adds/fills in the new time or chooses to delete the report.

7. The user clicks on the button "Submit Change".

8. The user is presented with a popup window confirming that the changes have been made.

9. An updated view of the page is displayed.

6.3.8   Requirement

A user should be able to change their password.

6.3.9   Requirement

A password should consist of at least one character of each type. [a-z][A-Z][1-9] with a minimum of 8 characters.

6.3.10   Requirement

The following scenario should be supported by the system;

Scenario: A user wants to change their password.
Prerequisites The user is logged in to the system

1. The user clicks on the "Change Password" button in the menu.

2. The user is presented with a page which includes three relevant textboxes.

3. The user fills in the first textbox with their current password.

4. The user fills in the second textbox with their new password.

5. The user repeats their new password in the third textbox.

6. The user clicks the button "Change Password".

7. The user's password is changed in the system.

8. The user is presented with a popup window confirming that the changes has been made.

6.3.11   Requirement

The following scenario should be supported by the system;
Scenario: A user wants to change their password with invalid entry.
Prerequisites The user is logged in to the system

1. The user clicks on the "Change Password" button in the menu.

2. The user is presented with a page which includes three relevant textboxes.

3. The user fills in the first textbox with their current password.

4. The user fills in the second textbox with their new password which does not meet requirement 6.2.1.

5. The user repeats their new password in the third textbox.

6. The user clicks the button "Change Password".

7. The user's password is not changed and a popup window with an error message is displayed.

8. The user is sent back to stage 3.

6.4   Project Leader

6.4.1   Requirement

The following scenario should be supported by the system. **Scenario:** The project leader tries to acquire a summary of reported time. **Prerequisites:** Time to be summarized exists, user has the role "Project leader" and the user is on the "Time Reporting" page.

1. The project leader clicks on the administration page

2. The project leader clicks on the "SHOW SIGNED REPORTS" button.

3. A list with user's name and the total reported time will be displayed,

4. The project leader clicks on a user name and it displays the user's time reports.

6.4.2   Requirement

The following scenario should be supported by the system. **Scenario:** Project leader tries to sign a weekly report **Prerequisites:** User has the role "Project leader", weekly reports exist, and the user has clicked on the "Sign Time Reports" button.

1. A list of all the unsigned weekly reports is shown to the project leader.

2. The project leader can sign the reports by clicking on the corresponding checkbox.

3. The project leader confirms their selection by pressing on the "Confirm" button

4. The system sends the changes to the server.

5. The system returns an updated list of unsigned reports, or an empty list if none exists

6.4.3   Requirement

6.5   Administrator

6.5.1   Requirement

The following scenario should be supported by the system.
   Scenario: The administrator tries to add a user.
   Prerequisites: The administrator is on the "Administration" page

1. The administrator clicks on the button to add a user.

2. The administrator inputs the name of the user.

3. The inputs are sent to the server which adds it to the database and generates a password.

4. The system creates a new entry in the user list and inserts the inputted name.

5. The server returns the password to the corresponding field in the user list.

6. The user clicks the button "Change Password".

7. The updated user list is shown to the administrator.

6.5.2 Requirement

The following scenario should be supported by the system.
Scenario: The Administrator tries to add a user with the same name.
Prerequisites: The administrator is on the "Administration" page

1. The administrator clicks on the button to add a user.

2. The administrator inputs the name of the user.

3. The inputs are sent to the server, which notices that the name already exists in the database.

4. The server does not accept the inputted name.

5. The admin is told that the user already exists with a message.

6.5.3 Requirement

The following scenario should be supported by the system.
Scenario: The administrator tries to remove a user.
Prerequisites: The administrator is on the "Administration" page

1. The Administrator clicks on the button to remove the user.

2. The Administrator must confirm the removal by typing in the user's name and click on the "confirm" button.

3. The information is sent to the server.

4. The user is removed from the database.

5. The page is updated with the new user list, with a message confirming the change.

6.5.4   Requirement

The following scenario should be supported by the system.
    Scenario: The administrator tries to assign a role to a user.
    Prerequisites: The administrator is on the "Management" page

1. Administrator clicks on the user management page.

2. Administrator chooses the user's group role.

3. Administrator should verify it by clicking the "CONFIRM" button.

4. User's role is added.

5. Information is sent to the server.

6.5.5   Requirement

The following scenario should be supported by the system.
    Scenario: The administrator tries to assign a role to a user.
    Prerequisites: The administrator is on the "Management" page

1. Administrator clicks on the user management page.

2. Administrator chooses the user's group role.

3. Administrator should verify it by clicking the "CONFIRM" button.

4. User's role is added.

5. Information is sent to the server.

6.5.6   Requirement

All users in the database should be shown as a list on the "Administration" page.

6.5.7   Requirement

The following scenario should be supported by the system. **Scenario:** The administrator tries to acquire a summary of reported time. **Prerequisites:** Time to be summarized exists.

1. The administrator clicks on the administration page

2. The administrator clicks on the "SHOW SIGNED REPORTS" button.

3. A list with user's name and the total reported time will be displayed,

4. The admin clicks on a user name and it displays the user's time reports.

6.5.8   Requirement

The following scenario should be supported by the system.
   Scenario: The administrator tries to assign a role to a user.
   Prerequisites: The administrator is on the administration page.

1. The admin clicks on "view".

2. A list with all users and their roles is displayed.

3. The administrator clicks on the role-alternative.

4. The admin can change the role of the user by clicking on a new role and confirming it.

5. The information is saved and sent to the server

6. The database is updated with the changes.

7   Quality Requirements

7.1   Maintainability

7.1.1   Requirement

See requirement 7.1.1 in PUSS12002.

7.2   Performance

7.2.1   Requirement

See requirement 7.2.1 in PUSS12002.

8   Project requirements

8.1   Development environment

8.1.1   Requirement 9.1

The back end for the system should use Java JDK 11 as development environment.

8.1.2   Requirement 9.2

The front end for the system should use Bootstrap v.4.5.3.

8.1.3   Requirement 9.3

The database should be developed in MySQL.