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| --- | --- | --- | --- | --- |
| Date of creation | 12 March 2022 | | | |
| Document version | 0.2 | | | |
| Purpose of the document | This document is intended to present the specification for the system administration module of a medical clinic. | | | |
| Change history | Version | Date | Author | Description |
| 0.0.1.1 | 06.03.2022 | Mateusz Jaruga | Added README.md |
| 0.0.1.2 | 06.03.2022 | Mateusz Jaruga | Generate default project file ASP.NET (.NET Framework) |
| 0.0.2 | 08.03.2022 | Mateusz Jaruga | Updating the workspace |
| 0.0.2.1 | 09.03.2022 | Mateusz Jaruga | Updated once more files hi, started login module. |
| 0.0.2.2 | 09.03.2022 | Mateusz Jaruga | Created new class with some information about user |
| 0.0.3 | 09.03.2022 | Mateusz Jaruga | Working login system with login and password |
| 0.0.3.1 | 09.03.2022 | Mateusz Jaruga | Full login system |
|  | 0.0.3.2 | 09.03.2022 | Mateusz Jaruga | Updated login system |
| 0.0.4 | 09.03.2022 | Mateusz Jaruga | Logout of the system |
| 0.0.4.1 | 09.03.2022 | Mateusz Jaruga | Updated LoginToSystem |
| 0.0.4.2 | 09.03.2022 | Mateusz Jaruga | Added cancel button that clears the textbox |
| 0.0.4.3 | 09.03.2022 | Mateusz Jaruga | Now user can’t enter to the About.aspx page without logging in |
| 0.0.4.3.1 | 10.03.2022 | Mateusz Jaruga | Added comments |
| 0.0.4.3.2 | 10.03.2022 | Mateusz Jaruga | Updating the comments |
| 0.0.4.4 | 10.03.2022 | Mateusz Jaruga | Added label with warning about login attempts |
| 0.0.4.4.1 | 10.03.2022 | Artur Górecki | Updating the comments |
| 0.0.4.5 | 12.03.2022 | Mateusz Jaruga | Update of the warning label |
| 0.0.4.6 | 12.03.2022 | Mateusz Jaruga | Updating the IF conditional in warning label |
| 0.0.5 | 12.03.2022 | Mateusz Jaruga | Updated Administrators’ page and Employees’ page |
| 0.0.5.1 | 12.03.2022 | Hubert Nowicz | Adding the css style and changing the appearance of the login page |
| 0.0.6 | 12.03.2022 | Artur Górecki | Created a new folder to store the documents |
| 0.0.6.1 | 12.03.2022 | Artur Górecki | Added the “Functional Tests – System administration module.xlsx” file |
| 0.0.6.2 | 12.03.2022 | Artur Górecki | Deleted a temp file that was needed to create a new folder |
| 0.0.6.3 | 12.03.2022 | Hubert Nowicz | Branch merging |
| 0.0.6.4 | 12.03.2022 | Hubert Nowicz | Adding the css style and changing the appearance of the login page |
| 0.0.6.5 | 12.03.2022 | Mateusz Jaruga | Scaling branches |
| 0.0.6.6 | 12.03.2022 | Mateusz Jaruga | Reverted changes |
| 0.0.6.7 | 12.03.2022 | Mateusz Jaruga | Reverted changes |
| 0.0.6.8 | 12.03.2022 | Mateusz Jaruga | Scaling branches |
| 0.0.6.9 | 12.03.2022 | Artur Górecki | Added System Documentation.docx to /Documents |
| 0.0.7 | 13.03.2022 | Mateusz Jaruga | Added password hashing |
| 0.0.7.1 | 13.03.2022 | Mateusz Jaruga | Created new page with form to get link for resetting password |
|  | 0.0.7.2 | 17.03.2022 | Mateusz Jaruga | Security updated – prevented SQL injections |
|  | 0.0.7.3 | 17.03.2022 | Artur Górecki | Updated the documents |
|  | 0.0.7.3.1 | 17.03.2022 | Mateusz Jaruga | Branch scaling |
|  | 0.0.7.4 | 17.03.2022 | Mateusz Jaruga | Security update |
|  | 0.0.7.4.1 | 18.03.2022 | Mateusz Jaruga | Merging secondary branch, ‘MedicalWithHashing’, with the main one |
|  | 0.0.8 | 19.03.2022 | Mateusz Jaruga | Added user session system |
|  | 0.0.9 | 22.03.2022 | Mateusz Jaruga | Created the basis for a system to send emails with a link to change the password |
|  | 0.0.9.1 | 22.03.2022 | Mateusz Jaruga | Merging project with a new module: Business Administration |
|  | 0.0.9.2 | 22.03.2022 | Mateusz Jaruga | Changed the file hierarchy, to prevent mixing documents from different modules |
|  | 0.0.10 | 23.03.2022 | Mateusz Jaruga | Added timer and input blocking |
|  | 0.0.10.1 | 23.03.2022 | Mateusz Jaruga | Corrected names of class namespaces |
|  | 0.0.10.2 | 23.03.2022 | Artur Górecki | Changed the message about the remaining locktime and locked input fields |
|  | 0.0.10.3 | 23.03.2022 | Mateusz Jaruga | Branch merging |
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|  |  |  |  |  |

1. System administration module
   1. Login/logout

Functionalities of login into the system and logout from the system is part of the administration module but is actually used for getting access to each of the modules.

All users use this part of the system to log in/log out.

After correct login, the system automatically opens the appropriate module based on logged user’s rights.

**Epic: Login**

**User stories:**

* + 1. Logging into the system

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| --- | --- |
| Name | Login into the system |
| ID | LOG\_01 |
| The aim | Login the user into the system |
| Description | Non-logged user has the possibility to login into the system. For the login user has to put two kinds of information:   * Login name * Password   After the correct login process, the system launches the proper module, based on the user’s rights |
| Author | Jarosław Zając |
| Actor | Non-logged user |
| Start conditions | N/A |
| Final conditions | User logged-in  Appropriate module launched |
| Input data | Login name  Password |
| Output data | N/A |
| Scenarios | Main:   1. User launches system 2. System opens login window 3. User puts input data 4. System checks that data is correct 5. System launches appropriate module, based on user rights   Alternative:  Incorrect input data –not more then two times in a row   1. System checks that input data is incorrect 2. System views message with error details   3rd incorrect data input in a row   1. System checks that input data is incorrect 2. System lock possibility of login data input (login name and password fields are unavailable) 3. System starts to show time to remain to unlock the system |
| Notices |  |

* + 1. Resigning of logging in

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| --- | --- |
| Name | Resigning of logging in |
| ID | LOG\_02 |
| The aim | Cancel logging in process |
| Description | Non-logged user has the possibility to cancels the login process before confirming the login details.   * Once the "Cancel" button is pressed the login form is closed |
| Author | Mikołaj Uznański |
| Actor | Non-logged user |
| Start conditions | N/A |
| Final conditions | User is not logged-in  Empty login form is closed. |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. User launches system 2. System opens login window 3. User can enter his login data or leave the fields empty. 4. User presses the Cancel button. 5. The user is taken to an empty login form. |
| Notices |  |

* + 1. Incorrect login

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| --- | --- |
| Name | Incorrect login |
| ID | LOG\_05 |
| The aim | System checks correction of input login data |
| Description | System checking if user login data is correct which enables safes access to the system for proper users only.  Acceptance criteria:   * Once input data is incorrect, the system generates and views a message with information about incorrect input data |
| Author | Mikołaj Uznański |
| Actor | Non-logged user |
| Start conditions | The non-logged user is trying to get access to system. |
| Final conditions | The system presents a message indicating that the user is entering incorrect data. |
| Input data | Login name  password |
| Output data | N/A |
| Scenarios | Main:   1. System opens login window 2. User trying to login with incorrect login data. 3. System verifies the entered data. 4. The system generates and views a message with information about incorrect input data. 5. The system inform user about two more login attempts before system blocking |
| Notices |  |

* + 1. System blocking

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| --- | --- |
| Name | System blocking |
| ID | LOG\_06 |
| The aim | System blocking the possibility of logging again for entering incorrect data for the third time in a row. |
| Description | The system is blocking the possibility of logging again for chosen time (parameter) X when user trying to entering incorrect input data three times in a row, which provides the security of the system will by higher.  Acceptance criteria   * The third incorrect login data entering causes blocking of the possibility of using next attempt of login (entering input data) * The system starts showing the time remaining to unlock the possibility of entering input data |
| Author | Mikołaj Uznański |
| Actor | non-logged user |
| Start conditions | The non-logged user uses incorrect login data three times |
| Final conditions | System blocking for the user the possibility of logging again for X (parameter) minutes |
| Input data | Login name  password |
| Output data | N/A |
| Scenarios | Main:   1. User launches system. 2. System opens login window. 3. User uses incorrect login data. 4. System verifies the entered data. 5. After third unsuccessful attempt the system blocks input data fields. 6. the login button and the system informs the user about the remaining time during which they cannot log in. |
| Notices |  |

* + 1. Input data unlock

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| --- | --- |
| Name | Input data unlock |
| ID | LOG\_07 |
| The aim | System automatically unlocks the possibility of entering input data |
| Description | The system is automatically unlocks the possibility to enter login in data for non-logged user. When locking time is over, user get access to try to login again.  Acceptance criteria   * If the time of system locking is complete, input data fields are available again and information about time to unlock disappears |
| Author | Mikołaj Uznański |
| Actor | System |
| Start conditions | The system is blocked for X (parameter) minutes |
| Final conditions | System automatically unlocks the possibility of entering input data. |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. The time for blocking access has ended. 2. System unlocks access. 3. User get access to input data login once again. |
| Notices |  |

**Epic: Password changing**

**User stories:**

* + 1. Application for changing password

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| --- | --- |
| Name | Application for changing password |
| ID | PAS\_01 |
| The aim | non-logged in system’s user have possibility to submit an application to change the password |
| Description | The non-logged in system’s user have the option to submit an application to change the password to recover forgotten password. This operation is based on a request from user.  System verifies and unlock this option, only when address entered into the appropriate field contains exactly one "@", otherwise application for changing password is going to be still blocked. When user meeting the requirements and send request to change password, system inform the user by send message with the link to form of password changing. |
| Author | Mikołaj Uznański |
| Actor | Non-logged in system’s user |
| Start conditions | Non-logged in system’s user report a desire to submit an application password changing |
| Final conditions | When user meeting the requirements, system send the link to change password |
| Input data | User’s login User’s e-mail address |
| Output data | N/A |
| Scenarios | 1. Non-logged in system’s user report a desire to submit an application password changing. 2. Non-logged in system’s user entered the email addresses into the appropriate field 3. The system verifies whether the email address entered into the appropriate field contains exactly one "@" character and if so, the "OK" button becomes available 4. Non-logged in system’s user pressed the “OK" button. 5. The system send a message with information about the link to form of password changing is displayed on the screen.   Alternative:  Incorrect email address entered     1. The system verifies whether the email address entered into the appropriate field contains exactly one "@" character and if not, the "OK" button stay be unavailable 2. The "OK" button is unavailable (there is no possibility to push it) 3. The message with link to form of password changing has been not sent |
| Notices |  |

* + 1. Password change link

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| --- | --- |
| Name | Password change link |
| ID | PAS\_02 |
| The aim | The user receives a link to change the password to the e-mail address provided earlier |
| Description | The system generates a link to password change and send it to previously submitted email address. Non-logged in system user will be able to open appropriate form to password change from this link |
| Author | Mikołaj Uznański |
| Actor | System’s user |
| Start conditions | System’s user send previously submitted email address. |
| Final conditions | System’s user receive password change link |
| Input data | N/A |
| Output data | N/A |
| Scenarios | 1. System’s user indicate email address 2. System checks and confirm that email address is the same as address stored in the database 3. System sends the link to change password to the appropriate email address   Alternative:  Wrong address email     1. System found that the email address is not found in the database 2. System doesn’t send the link to change password to the provided email address |
| Notices |  |

* + 1. Password change form launching

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| --- | --- |
| Name | Password change form launching |
| ID | PAS\_03 |
| The aim | System display the password change form after clicking link |
| Description | When non-logged system’s user click the received link to the password change form, immediately gets access to put a new password |
| Author | Mikołaj Uznański |
| Actor | Non-logged system’s user |
| Start conditions | Non-logged system’s user click the link received on address email |
| Final conditions | Non-logged system’s user is able to put a new password |
| Input data | N/A |
| Output data | N/A |
| Scenarios | 1. Non-logged system’s user click the password change link 2. The password change form has been shown to the non-logged system’s user 3. Non-logged system’s user is able to set new password 4. Non-logged system’s user must decide to apply new changes |
| Notices |  |

* + 1. New password entering

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| --- | --- |
| Name | New password entering |
| ID | PAS\_04 |
| The aim | The non-logged system's user changing password to new one and confirm it |
| Description | System uses displayed a form “Password change form launching”. Open the form “OK” button is unavailable. User must enter the data into two fields:  - New password  - Confirm password  Once the two are the same, button “OK” becomes available. After pressing this button, system checks if the data meets validation criteria:  - Password length; not less than 8 characters, not more than 15 characters.  Following types of marks are used at least once:  - Lowercase  - Uppercase  - Digital  - Special sing: “-”, “\_”, “!”, “#”, “$”, “\*”  If the validation process is successful, system will displays a message in form of pop-up window. In the window there is “OK” button, which closes window and the password change form. Password is changed successfully. If the valiidation doesn’t meet criteria, system displays a message in form of pop-up window. On the pop-up window there is “OK” button, which closes the window. |
| Author | Mikołaj Uznański |
| Actor | Non-logged system’s user |
| Start conditions | Link to password change form is pressed |
| Final conditions | Password is changed |
| Input data | New password  Confirm password |
| Output data | Pop-up window with message about successful changing of password |
| Scenarios | Main:  Matching passwords and password meets validation criteria   1. User enters data into:   - New password  - Confirm password   1. System verifies that passwords are matching 2. “OK” button is now available 3. System validates correctness of entered data 4. Pop-up window opens up. 5. User presses “OK” button on pop-up window 6. Pop-up window and password change form closes.   Alternative:  Passwords are not matching   1. System verifies that passwords are not matching 2. “OK” button stays unavailable   Alternative:  New password doesn’t meet validation criteria   1. System validates correctness of entered data 2. Pop-up window opens up 3. User presses “OK” button on pop-up window 4. Pop-up window closes. |
| Notices |  |

* + 1. Password change cancelation

|  |  |
| --- | --- |
| Name | Password change cancelation |
| ID | PAS\_05 |
| The aim | The possibility to resigning from password changing at any time. |
| Description | The non-logged in system's user is able to close password change form at any time user wants. After pressing ”Cancel” button, system presents pop-up window with the request for confirmation, with two buttons “OK” and “Cancel”. After “OK” button is pressed, password change form closes. After “Cancel” button is pressed, system closes pop-up window, but if there was any data entered in password change form, it’s cleared now. |
| Author | Mikołaj Uznański |
| Actor | Non-logged system’s user |
| Start conditions | Password change form is presented |
| Final conditions | Closing password change form |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. User presses “Cancel” button on password change form. 2. Pop-up window opens up. 3. User presses “OK” button on pop-up window. 4. Pop-up window and password change form has been closed   Alternative:  Pressing “Cancel” instead of “OK”   1. User presses “Cancel” button on pop-up window. 2. Pop-up window closes 3. All data previously entered in password change form is cleared. |
| Notices |  |

* + 1. Cancelation of password change cancelation

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| --- | --- |
| Name | Cancelation of password change cancelation |
| ID | PAS\_06 |
| The aim | The possibility to cancel password change cancelation |
| Description | The non-logged in system's user is able to cancel the process of “password changing cancelation”. After pressing ”Cancel” button, system closes the pop-up message window of cancelation of password change, otherwise data entered to the password change form will be lost. |
| Author | Mikołaj Uznański |
| Actor | Non-logged system’s user |
| Start conditions | Cancelation Password change form is presented |
| Final conditions | Closing the cancelation of password change cancelation |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. User presses “Cancel” button on pop-up window 2. Pop-up window closes 3. All data previously entered in password change form is cleared |
| Notices |  |

WORK IN PROGRESS  


**Epic: Logout**

* + 1. Logging out from the system

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| --- | --- |
| Name | Logging out from the system |
| ID | LOG\_03 |
| The aim | Logged-in user have possibility to log out from the system |
| Description | The user has the possibility to ends his work with the system safely and correctly by logging out of it. After that user sees system login form with empty fields. |
| Author | Mikołaj Uznański |
| Actor | Logged-in user |
| Start conditions | The user is logged-in |
| Final conditions | User has been logged out of the system.  User is not logged-in, system presents login form with empty fields |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. User is logged in to the system. 2. The user presses the Logout button. 3. The system displays a logout attempt message. 4. The user presses the OK button. 5. User is logged out from the system   Alternative:  User decided to   1. The users presses the cancel button. 2. Message window is closed |
| Notices |  |

* 1. System user management – clinic staff

**Epic: List of users**

**User stories:**

* + 1. View list of users

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| --- | --- |
| Name | View list of users |
| ID | LIS\_01 |
| The aim | Administrator can list the available users |
| Description | The Administrator have access to list of users, and possibility to see available users from this list. Additionally administrator can perform the following operations:   * Add new user * View user’s details * Edit user data * Deactivate activated user * Activate deactivated user |
| Author | Mikołaj Uznański |
| Actor | Administrator |
| Start conditions | Administrator is logged into the system |
| Final conditions | The list of users is presented |
| Input data | The changes implemented to the list |
| Output data | N/A |
| Scenarios | Main:   1. Administrator choosing “Users” in the system menu, to launch the form with a list of users 2. System opens form with list of users 3. Administrator is able to perform a change to the list of users 4. If administrator implement a change, system apply all changes |

* + 1. Data filtering

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| --- | --- |
| Name | Data filtering |
| ID | LIS\_02 |
| The aim | Administrator can filter the list of the users |
| Description | The Administrator have access to filter a list of users, to be able to quickly find the proper data.  Data can been chosen and filtered by:   * First name of the employee * The second name of the employee * Role the user in the system |
| Author | Mikołaj Uznański |
| Actor | Administrator |
| Start conditions | Administrator opened a list of the users |
| Final conditions | The filtered list is displayed |
| Input data | Data included in this list |
| Output data | N/A |
| Scenarios | Main:   1. Administrator wants to filter the list of the users 2. Administrator input data to starts filtering 3. System display proper data from the list |

* + 1. Data sorting

|  |  |
| --- | --- |
| Name | Data sorting |
| ID | LIS\_03 |
| The aim | Administrator can sort the list of the users |
| Description | The Administrator have access to sort a list of users in ascending or descending order to the selected fields/  Acceptance criteria:  All fields on the list can be used to sort it in ascending or descending order |
| Author | Mikołaj Uznański |
| Actor | Administrator |
| Start conditions | Administrator opened a list of the users |
| Final conditions | The sorted list is displayed |
| Input data | N/A |
| Output data | N/A |
| Scenarios | Main:   1. Administrator wants to sort the list of the users 2. Administrator sort the list ascending or descending order 3. System displayed sorted list |

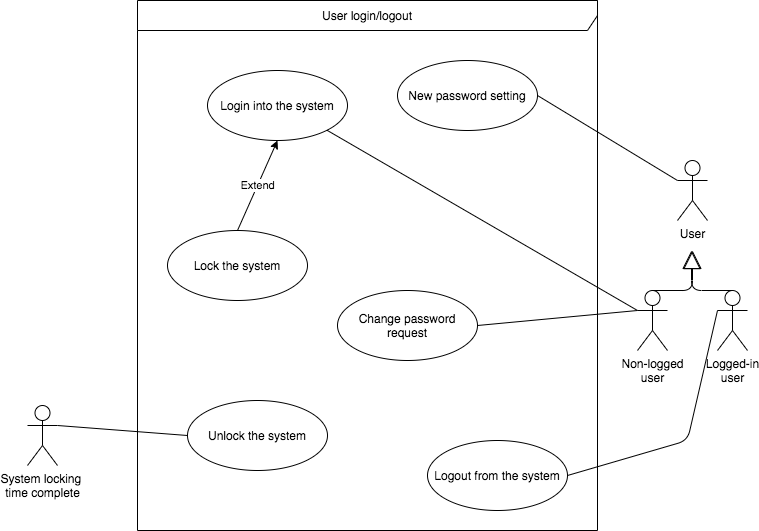
* 1. System parameters and dictionaries management

**EPIC: setting up the time to login page**

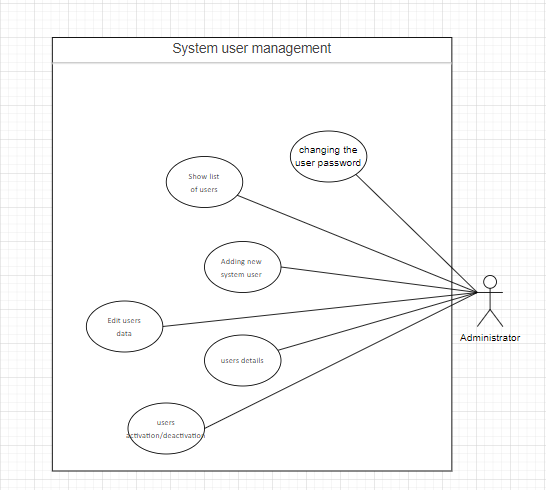
* + 1. Setup the time to unlock login page

|  |  |
| --- | --- |
| Name | Setup the time to unlock login page |
| ID | LOG\_08 |
| The aim | The Administrator has a possibility to set time to unlock login page |
| Description | The Administrator is able to change value of the requested time to unlock login page. They have the possibility to set up time and change value in the “Time to unlock login page” parameter. |
| Author | Mikołaj Uznański |
| Actor | Administrator |
| Start conditions | User logged in as an Administrator User launches the Settings module from the Administrator’s panel |
| Final conditions | Administrator has changed “Time to unlock login page” parameter |
| Input data | A non-negative number corresponding to the page blocking time in minutes |
| Output data | N/A |
| Scenarios | 1. Administrator sets up new time to the “Time to unlock page” parameter 2. Administrator changes the parameter 3. The new parameter of “Time to unlock page” has been changed |
| Notices |  |

1. Diagrams
   1. Login/logout



* 1. System user management – clinic staff



* 1. System parameters and dictionaries management

