**Functional Requirements**

Product Perspective

The application offers such features:

● Database of users and consumed water information.

● Calculate how much water the user should drink taking into account the age, gender, climate, activity during the day and height, weight.

● Statistics of consumed water during one day, one week, one month, one year and also from a certain date. Users can track their progress using diagrams. Quantity of water a person need to drink.

Product features

● To use this application user must be registered. To register user have to enter username, email and password (twice). Username and email must be unique, password must contain at least 8 characters (1 uppercase, 1 lowercase, 1 digit, 1 sign)

○ In case of entering not unique username or email or too simple password user will be notified about it and will be asked to try to enter unique username/email or more complicated password.

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○ In case of entering correct data user is registered.

● Registered user can log in. To do this, user have to enter username and password.

○ In case of entering wrong username or password user will be notified about it and will be asked to try to enter correct username/password.

○ In case of entering correct username and password user is logged in.

○ In case of losing password user can restore it.

● Users can add consumed fluid during a day

○ water by default;

○ to choose another fluid.

● After at least one day of using user can view statistics and diagrams (by default statistics display 1 week of use, but user can change it).

● User can edit his profile.

● User can change password.

● Admin can log in, use application like any other registered user.

● Admin can watch users statistics and time when users were registered.

**Nonfunctional Requirements**

Performance Requirements

This application aims to help people in the water balance control by sending notifications. It is very important to provide notification sending on time (especially when there are a lot of users use application).

Safety Requirement

This application can be used in one scenario: for the personal use. Many users can use the same passwords for different accounts, including bank ones, therefore it is important to provide protection against brute-forth and other attacks.

Security Requirement

As this application is for the personal use it is enough to exclude possibility to access database directly.

Software Quality Attributes

● Availability: The application functionality should be available at any time in full.

● Correctness: The application should contain only valid formulas for calculations.

● Maintainability: The administrators should maintain user information database. But no one could be able to edit other users’ information.

● Usability: The application should satisfy the maximum number of customers’ needs.

Acceptance criteria

**Scenario 1: Sign up with new login and correct password**

Given: The login has not been taken and password correct

When: User is not signed in

Then: The new user created

**Scenario2: Sign up with new login and invalid password**

Given: The login has not been taken and password invalid

When: User is not signed in

Then: The new user is not created, error displayed

**Scenario3: Sign up with taken login**

Given: The login has not been taken

When: User is not signed in

Then: The new user is not created, error displayed

**Scenario4: Sign out**

Given: Sign out button pressed

When: User is signed in

Then: The session for current user is closed

**Scenario5: Add consumed water**

Given: The user is signed in

When: Add water page is displayed

Then: The amount of consumed water increased by specified number.

**Scenario6: Change information**

Given: The user is signed in

When: Settings page is selected

Then: User changes information and confirms it.

**Scenario7: View statistics**

Given: The user is signed in and use application at least one day

When: User select “Statistics” button

Then: Diagrams and statistics information are displayed

**Scenario8: Close statistics**

Given: The user is signed in

When: Statistics page is open

Then: Close statistics and redirect to the main page

**Scenario9: Change notification schedule**

Given: The user is signed in

When: User want to change notification frequency

Then: Notifications are sending with a given frequency

**Scenario10: Change the fluid**

Given: The user is signed in, main pave with drunk water are loaded

When: The user presses the fluid icon

Then: The fluid icon is changed and user can add this fluid to “consumed per day”