**VILNIUS UNIVERSITY**

**KAUNAS FACULTY**

**Description of user requirements**

Documentation

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**File description**

***File prepared by***: Matvii Sovhirenko

***UML activity diagram prepared by***: Illia Bulhar

***Volere template preapred by***: Ihor Milevskyi

***Type***: Part of key result of creation of volere templates corresponding to methodology in Weekdone

**Specification of the functional and non-functional requirements**

***Functional requirements:***

* Register:

Description: Users should be able to create an account with unique credentials to access the platform’s features.

* Log In:

Description: Registered users must have the ability to log into their accounts securely.

* View Threads:

Description: Users should be able to browse and view different conversation threads or topics available on the platform.

* Change Personal Data:

Description: Users should have the capability to modify their profile information or personal details.

* Leave Comment:

Description: Users should be able to add comments to existing threads or posts, contributing to ongoing discussions.

* Search for Content:

Description: Users need the ability to search for specific topics, threads, or content within the platform.

* Manage Profile:

Description: Users should have options to manage their profile settings, including profile picture, bio, and other preferences.

* Create Posts:

Description: Users must be able to generate new threads or posts, initiating discussions or sharing content.

* Send Message to a User:

Description: Users should have the ability to send direct messages or private communications to other users.

* Like Blogs:

Description: Users should be able to express their appreciation or agreement with specific posts by liking them.

* Remove Threads:

Description: Authorized users (like moderators or original posters) should have the capability to delete entire threads they’ve created.

* Remove Comments:

Description: Authorized users (like moderators or thread owners) should be able to delete comments within threads.

* Remove Posts:

Description: Authorized users should have the ability to delete their own posts from threads.

* Remove Likes:

Description: Authorized users should have the ability to remove their likes from posts or comments.

***Non-functional requirements:***

* Performance:

The system should respond to user interactions within a reasonable time frame, minimizing loading delays.

* Security:

User data, including personal information and login credentials, must be encrypted and securely stored.

* Scalability:

The platform should be designed to accommodate increasing numbers of users and content without significant performance degradation.

* User Interface:

The interface should be intuitive and user-friendly, ensuring ease of navigation for users of various technical backgrounds.

* Reliability:

The system should be available and operational consistently, minimizing downtime and service interruptions.

* Accessibility:

The platform should be accessible to users with disabilities, adhering to accessibility standards.

**UML activity diagram description**

A diagram of a chat forum

Description automatically generated

his Use-Case diagram shows actors that will interact with our system (user and Admin). It has 14 functional requirements with 10 allocated to the user and all 14 to the admin. Use-Case diagram depicts crucial functional requirements for different types of actors that will interact with our “EchoesForum - Online Chat and Forum Service system”. This Use-Case diagram has all necessary functional requirements such as register, login create posts, send message to a user, view thread and others for a user to properly use EchoesForum. Additionally, administrator of EchousForum are going to have more functionality with extra functional requirements such as remove threads, remove comments, remove posts and remove likes.

**Volere template description**

1. The “Log in” use case enables users to access EchoesForum, facilitating chat functionalities and profile management. Users initiate the process by entering their login credentials and completing a bot verification step. Upon successful authentication, users gain entry to their profiles. The alternate flows allow for password and login recovery, guiding users through verification steps via phone/email for password resets or account access. Exceptional cases handle potential errors in sending verification codes or links. Post-login, users can engage in various platform activities, including creating posts, managing profiles, messaging others, interacting with threads and blogs, and liking content. Key features include a maximum login attempt rule and an option to remember login credentials for subsequent sessions.

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| --- | --- | --- | --- |
| Use Case Identification and History | | | |
| **Use Case ID:** | IHOR.MI.LYA1.3.2 | | |
| **Use Case Name:** | Log in | **Version No:** |  |
| **End Objective:** | You can chat and manage profile | | |
| **Created by:** |  | **On (date):** |  |
| **Last Update by:** |  | **On (date):** |  |
| **Approved by:** |  | **On (date):** |  |
| **User/Actor:** |  | | |
| **Business Owner Name:** |  | **Contact Details:** |  |
| **Trigger:** | This use case starts when the user clicks on the button (Login) | | |
| **Frequency of Use:** | By demand | | |

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| --- |
| Preconditions |
| Registration |

| **Basic Flow** <The optimal or normal (“good day”) flow of events. The basic flow of events should describe the events that walk through a successful scenario. The basic flow should not include “and/if scenarios”> | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Write login and password and click on the button | Processes data and checks it with the system |
| **2** | Click on the checkmark “I’m not a bot” to choose what is asked of you | The system processes and authenticates data |
| **3** | Click on the final button (Enter) | Welcome to your profile |

| Alternate Flow | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Click on “Forgot the password” | The system suggest you put your number phone or email |
| **2** | Put the number phone or email | The system send you code |
| **3** | Appropriate code must be entered provided in gap | The system check this code, then provide to create the new password |
| **4** | Write the new password in the gap | The system change my old password on new password. |
| **5** | Click on “Forgot the login” | The system suggest you put your email |
| **6** | Put your email | System send you confirmation on enter to account. |
| **7** | User enter to the Email and put the link. | Welcome to the account |
| **8** | Click on the checkmark “I’m not a bot” again | The system processes and authenticates data |

| Exception Flow *<identify system and data error conditions that could occur for each step in the normal and alternate flow>* | | |
| --- | --- | --- |
| 1 | Put the number phone or email for reset your password | The system will not be able to send you code |
| 2 | Put email for enter to account | The system will not be able to send you link |

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| Post conditions |
| Successful enter |

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| Includes or Extension Points |
| 1. Reset password 2. Reset log in 3. Manage profile 4. Create a posts 5. Write a message to anyone 6. Leave a message in blog 7. View threads 8. Like blogs |

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| Special Requirements |
| 1. Button “Forgot password and Forgot Login” 2. Remember user and password in the database the next time you log in. If you don’t want to login again and again, you can choose the option which will remember you the next time. |

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| Business Rules |
| 1. Each user is allowed a maximum of 5 logon attempts to the system (configurable) before being locked out. |

2. The “Registration” use case empowers users to join EchoesForum, enabling them to engage in conversations and manage their profiles. Initiated by clicking the registration button, users input their desired login credentials, which the system securely stores. Users also provide their phone number and email, which the system authenticates for correctness before saving them. Successful completion prompts a welcome to the user’s profile. In the alternate flow, attempting registration when already registered prompts a notification. Exceptions include incorrect symbols in the phone number or email field and registration failure due to poor internet connectivity. Post-registration, users gain access to various platform features, including password and login reset, profile management, content creation, messaging, blog interactions, thread viewing, and content liking. Key requirements include an option to remember login credentials and the ability to change interface windows. A business rule ensures that once registered, a user cannot register again.

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| Use Case Identification and History | | | |
| **Use Case ID:** | IHOR.MI.LYA1.3.2 | | |
| **Use Case Name:** | Registration | **Version No:** |  |
| **End Objective:** | You can chatting and manage profile | | |
| **Created by:** |  | **On (date):** |  |
| **Last Update by:** |  | **On (date):** |  |
| **Approved by:** |  | **On (date):** |  |
| **User/Actor:** |  | | |
| **Business Owner Name:** |  | **Contact Details:** |  |
| **Trigger:** | This use case starts when the user put the button (Registration) | | |
| **Frequency of Use:** | By demand | | |

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| --- |
| Preconditions |
| Nothing |

| **Basic Flow** | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Create the login and password | The system safe those data in system |
| **2** | Put the number phone and Email | The system processes and authenticates data to understand that data was written correctly. Also, system safe this data in system. |
| **3** | Click on the final button (Register) | Welcome to your profile |

| Alternate Flow | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Click on the final button (Register) | You have already registered |

| Exception Flow | | |
| --- | --- | --- |
| 1 | Put the number phone and Email | The gap with phone number or Email is incorrect (symbols are inapplicable in this gap) |
| 2 | Click on the final button (Register) | The registration failed due to bad internet |

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| Post conditions |
| Successful enter |

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| Includes or Extension Points |
| 1. Reset password 2. Reset log in 3. Manage profile 4. Create a posts 5. Write a message to anyone 6. Leave a message in blog 7. View threads 8. Like blogs |

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| Special Requirements |
| 1. Remember user and password in the database the next time you log in. If you don’t want to login again and again, you can choose the option which will remember you the next time. 2. Change interface windows |

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| Business Rules |
| 1. If you have already registered you cannot register again |

3. The “Manage Profile” use case empowers users within EchoesForum to control their profiles and make interface adjustments. Triggered by selecting the Profile or Avatar button, this use case requires user registration. Users navigate to their profiles upon clicking the profile button, where they can change their password, profile details (such as nickname, email, and text area), and avatar, all of which are securely saved in the database. The system also allows users to log out, terminating the session’s data token. The alternate flow involves reporting profile management errors to support, which the system rectifies to ensure smooth profile management. Exceptional cases include network errors hindering profile changes, weak password errors, incorrect email input, and network-related issues during logout. Successful profile management concludes with the implemented changes.

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| Use Case Identification and History | | | |
| **Use Case ID:** | IHOR.MI.LYA1.3.2 | | |
| **Use Case Name:** | Manage Profile | **Version No:** |  |
| **End Objective:** | You can manage profile and make some changes in windows interface | | |
| **Created by:** |  | **On (date):** |  |
| **Last Update by:** |  | **On (date):** |  |
| **Approved by:** |  | **On (date):** |  |
| **User/Actor:** |  | | |
| **Business Owner Name:** |  | **Contact Details:** |  |
| **Trigger:** | This use case starts when the user put the button (Profile or Avatar) | | |
| **Frequency of Use:** | By demand | | |

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| --- |
| Preconditions |
| Registration |

| **Basic Flow** | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Click on the profile | The system navigates you to your profile |
| **2** | Click on the button (change password) | The system gives you an opportunity to change the password and then system safe it in database |
| **3** | Click on the button (change profile) | The system gives you an opportunity to change the profile (Nickname, email, and textarea) in special inputs and then system safe it in database |
| **4** | Click on the button (avatar) | The system gives you an opportunity to change the avatar and then system safe it in database |
| **5** | Click on the button (Log out) | The system make log out (delete the token with data in this session). |

| Alternate Flow | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| 1 | Write to support and tell about error with managing the profile | The system will get the error, fix the bugs and provide opportunity to manage profile |

| Exception Flow | | |
| --- | --- | --- |
| 1 | Manage the profile | The system will not allow you to change something due to the network error |
| 2 | Change the password | Error the password is not strong |
| 3 | Change the profile | Error the email is not correct |
| 4 | Log out | The system will not allow you to change something due to the network error |

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| Post conditions |
| Successful managing |

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| Includes or Extension Points |
| Nothing |

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| Special Requirements |
| 1. Service 24/7 |

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| Business Rules |
| Nothing |

4. The “Create Posts” use case enables users within EchoesForum to share blogs and witness interactive communication among users. This use case initiates when the user selects the “Create the post” button, requiring prior user registration. Upon clicking, the system presents users with fields to input blog content, guiding them with additional rules to ensure compliance. Users set the rules and proceed to post the blog, after which the system displays it in the blogs list, facilitating interaction among users through messages. The alternate flow involves reporting errors to support, which the system resolves to enable smooth post creation. Exceptional cases may occur if the system restricts post creation due to a full buffer or other reasons.

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| Use Case Identification and History | | | |
| **Use Case ID:** | IHOR.MI.LYA1.3.2 | | |
| **Use Case Name:** | Create Posts | **Version No:** |  |
| **End Objective:** | You post some blog and view how people communicate wit each other | | |
| **Created by:** |  | **On (date):** |  |
| **Last Update by:** |  | **On (date):** |  |
| **Approved by:** |  | **On (date):** |  |
| **User/Actor:** |  | | |
| **Business Owner Name:** |  | **Contact Details:** |  |
| **Trigger:** | This use case starts when the user click on the button (Create the post) | | |
| **Frequency of Use:** | By demand | | |

|  |
| --- |
| Preconditions |
| Registration |

| **Basic Flow** | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| **1** | Click on the button (Create the post) | The system provides you a list of gaps to fill in them. |
| **2** | Fill in all possible gaps to create the post | The system loads and provides the additional rules to set them, so that, users follow the rules. |
| **3** | Set the rules and click on the post the blog | The system posts the blog in the blogs list, so that other users could see and leave the messages. |

| Alternate Flow | | |
| --- | --- | --- |
| **Step** | **User Actions** | **System Actions** |
| 1 | Write to support and tell about error wit managing the profile | The system will get the error, fix the bugs and provide opportunity to manage profile |

| Exception Flow | | |
| --- | --- | --- |
| 1 | Create the post | The system will not allow you to create the post due to the full buffer or something else |

|  |
| --- |
| Post conditions |
| Successful creation of post |

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| --- |
| Includes or Extension Points |
| 1. View who leaves comments and read them 2. Delete the comments in your blog 3. Leave the comments 4. Click on someone else’s avatar and start the chatting |

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| Special Requirements |
| 1. Service 24/7 2. View who leaves comments and read them 3. Delete the comments in your blog 4. Leave the comments 5. Click on someone else’s avatar and start the chatting |

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| Business Rules |
| 1. You can create the post only once per 5 min 2. You can add only 4 images to your post |