Khmelnytskyi National University

Department of Computer Engineering and Information Systems

**Report**

Laboratory work №1

Discipline: “Software Requirements and Quality Analysis”

Topic: “Analysis of problems. Setting the task”

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***Purpose of work:*** To form skills: Work with real customers of software systems; learn to identify interested persons and conduct interviews with them and analyze the received material; acquire knowledge to formulate the problem, its relevance and needs of interested persons. ­

**1.1** **Tasks for laboratory work**

1. Make a list of interested persons.

2. Conduct interviews and/or questionnaires with each interested person.

3. Analyze the information received and formulate the relevance of the problem and the needs of stakeholders. ­

**1.2 Completion of the task**

**List of interested persons:**

* **Social network users**: Registered users who create publications, edit their profile (avatar, nickname, login, email), search for other posts and users by tag, leave "likes", can delete your account or change your password.
* **Administrators of levels 1-3**: Moderators of content with different levels of access: Moderation of reports about violations, editing and deleting posts, changing user roles, account ban, etc. Each level of administrator has its own set of powers (from handling complaints to moderating other administrators).
* **System owners**: The interest is to increase the number of active users, the stability of the platform, the possibility of integration with other services (OAuth for Google) and the collection of analytical data.

**Table 1: User Interview**

|  |  |
| --- | --- |
| Question | Answer |
| 1. Name | Kovalchuk Igor Olegovich |
| 2. How would you like to register on the platform? | I wish to register on the site through third-party services such as Google |
| 3. What do you think the process of creating and editing posts should look like? | I want to support emoji, hypersilki and pictures. You can also edit your posts |
| 4. What should be the interface of user search and posts by tags? | Like on X.com |
| 5. What would you like to change in your personal data and how should it be implemented? | Nickname, Email, Username, Password, Avatar. Real with additional checking |

**Table 2: Admin Interview**

|  |  |
| --- | --- |
| Question | Answer |
| 1. Name | Daniil Kudin Hrehori |
| 2. What should be the administrator interface for easy operation? | Convenient, intuitive, with the ability to view users, change roles, respond to reports, ban and remove users and posts. |
| 3. How should content moderation take place so that it is as convenient as possible? | You could see the one who got the reporter, the reason, the post that was reported. Possibility to sort the ports. |
| 4. How would you like to handle user complaints? | Quickly, efficiently and without any information. To make a verdict. |
| 5. What should the management of roles and user rights look like? | In the form of a plate in which you can change some user data depending on the admin level. |

**Table 3: System owners Interview**

|  |  |
| --- | --- |
| Question | Answer |
| 1. Name | Rudyk Dmytro Andriyovych |
| 2. What business goals do you expect to achieve with this system? | The system should increase user engagement, keep active users and attract new ones. It should also generate revenue through premium features, advertising or partnerships. |
| 3. What functionality can increase user activity? | Ability to share content on social networks and ease of use of the system. |
| 4. How should the system interface look to stimulate the growth of the number of active users? | The interface should be intuitive, quick and easy to navigate. It should reduce the frustration of users due to clear calls to action and minimal download time. |
| 5. What new features or improvements can help achieve your goals? | Implementation of analytics to track user behavior, integration of third-party services (for example, login options through OAuth). |

#### ****User Interview****

* **Registration through third-party services:** The user wants to register through third-party services (Google), which indicates a desire for convenience and quick access. Integration with popular sign-in services is a critical factor as it reduces barriers to new users.
* **Creating and editing posts:** Support emoji, hyperlinks, pictures and the ability to edit posts indicates that users expect a multifunctional platform for interaction. This means the need to provide an editor with a wide range of features for the content.
* **Search for users and posts by tag:** A search query by tag similar to X.com shows that users seek simplicity and efficiency in finding information. The convenience of searching and filtering content should be at a high level.
* **Change of personal data:** The user wants to be able to change such data as a nickname, email, username, password and avatar, which requires a system with security checks and a simplified editing process. Flexibility in changing personal data is important for keeping users.

#### ****Admin Interview****

* **Administrator interface:** The main emphasis is on convenience and intuition. Administrators should have access to basic features such as user browsing, role changing, handling complaints, ban and deleting users and posts. This indicates the need to build a clear and simple control panel to perform these tasks.
* **Content moderation:** Administrators need transparency about reports, i.e. have information about who sent a complaint, who and why. It is important to ensure the possibility of filtering and sorting complaints for rapid response. This indicates the need for a powerful system of reports with sorting and filtering options.
* **Complaint handling:** Administrators want to handle complaints quickly and without undue information. This requires process automation to provide clear context and quick decision-making options.
* **Role management:** Table format for managing roles and user rights shows that administrators prefer a structured and understandable interface to manage roles with the ability to edit data depending on the level of access.

#### ****System Owners Interview****

* **Business goals:** The main goal is to increase user engagement, keep active and attract new ones, and monetize the platform through premium features, advertising or partnerships. This indicates the need to create a model of monetization and implementation of functionality that will encourage users to actively use the platform.
* **Increased user activity:** The key factors are usability and the ability to share content on social networks. This emphasizes the importance of creating engaging and interactive content, as well as providing users with tools to share content outside the platform.
* **An interface to increase activity:** Intuitive, fast, easy-to-navigate interface is a basic requirement that should help reduce frustration and increase user activity. This indicates the need for a high-quality UX/UI design, which will facilitate the interaction of users with the system.
* **New features:** Implementing analytics to track user behavior and integrating third-party services (such as OAuth) can help attract new users and improve content personalization. This indicates the need to implement analytics tools and integration with popular services to simplify the login process.

**Conclusion:**

Interviews with users, administrators and system owners have shown that the main priorities are ease of use, intuitive interface, transparency in working with content and users, as well as the introduction of functions to stimulate engagement. Each group has its own specific needs, but they all boil down to creating a system that provides powerful tools for interaction and management with a focus on security and flexibility.