**Developing a project in PBL**

**Task 2. Brainstorming and interviewing**

**UniLibrary**

**Project purpose.** UniLibrary is a web platform that facilitates sharing study materials or other resources among students in university.

**Brief classification of the project.** It allows students to upload, browse, and download various materials. The program is developed in the Python (FastAPI) programming language together with a database (SQLite).

**Studying problems for the project**

**Brainstorming.** Brainstorming is a group thinking method for generating ideas. The following thoughts and ideas were expressed by the group:

* User-Friendly Design: Ensure that the platform is optimized for mobile devices, making it easy for students to access and contribute materials on the go.
* User Profiles: Let students create personalized profiles to manage their uploaded and downloaded materials, as well as track their contributions.
* Category-Based Organization: Categorize materials by subject, course, or type (e.g., lecture notes, assignments, textbooks, etc.) to make browsing easier.
* Material Recommendations: Use an algorithm to suggest resources based on user interests, previous downloads, or materials uploaded by students in the same field of study.
* Access Control and Privacy: Allow users to set permissions on uploaded materials, such as making them public, restricted, or accessible only to specific groups or courses.
* Collaborative Features: Enable groups of students to collaborate on study materials, allowing multiple users to edit or annotate a single document.
* Download Limits and Restrictions: Set limits on how many times a material can be downloaded to prevent abuse or to maintain the exclusivity of some resources.

**Interview Results:**

New ideas and suggestions proposed during the interview:

- Integration with University Systems: Integrate the platform with university course schedules, allowing students to easily find materials specific to their current courses.

- User Badges or Achievements: Introduce a gamification aspect by rewarding users with badges or achievements based on their contributions (e.g., number of materials uploaded, number of materials downloaded, quality of materials shared).

- Discussion Forum / Community Space: A space A space where students can discuss study materials, share tips, and help each other with academic challenges. This could be integrated with specific categories of resources (e.g., courses, subjects).

- Timeline for Development: The platform must be developed and ready for testing within a 3-month timeframe, ensuring that the core features are fully operational by then.

- Email Verification: Include email verification during the registration process, where a confirmation message will be sent to validate the user's email address. This will ensure a secure and reliable sign-up process.

**Updated Suggestions:**

- Unified Login System: Streamline the user registration and login process by requiring a phone number for both registration and platform access. This will simplify the user experience, ensuring that students can access their profiles easily and securely with just one phone number.

- Language Support for Testing Phase: Initially, the platform should support one language (Uzbek) for testing. Once the platform is fully tested and functional, it should be expanded to support two languages (Uzbek and Russian) to cater to a broader audience of students.

**Determining the level of problems.**

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|  | Urgent | Not urgent |
| Important | * **User-Friendly Design:** The platform must be easy to use, especially for mobile devices, to ensure accessibility for all students. * **Registration via Email:** The user should be able to register and log in using just their email address to simplify the process. * **Material Upload and Download Functionality:** Ensure that students can upload, browse, and download materials without any issues. * **Profile Management:** Students should be able to create and manage personalized profiles to track their contributions and materials. * **Access Control:** Users should be able to set permissions for uploaded materials (e.g., making them public or restricted). * **Search Functionality:** Implement an efficient search system for users to find specific materials quickly based on keywords, tags, or categories. * **Testing and Launch Deadline:** The platform must be developed and ready for testing within 3 months, adhering to the development timeline. | * **Category-Based Organization:** Categorize materials by subjects, courses, or types to improve browsing experience and organization of resources. * **Material Recommendations:** Implement an algorithm to suggest study materials based on users' activity or interests to enhance engagement. * **Mobile-Friendly Design:** Ensure the platform is optimized for mobile use, making it accessible from any device. * **User Privacy and Security:** Implement proper security measures to ensure user data and uploaded materials are protected, including encryption or secure login systems. |

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| Not important | * **Collaborative Features:** Allow students to collaborate on study materials, which may include annotations or document sharing among groups. * **Material Rating and Review:** Provide a rating and review system to help users assess the quality of materials. * **Download Limits:** Implement download limits for materials to prevent abuse or overuse of certain resources. * **Multi-Language Support:** Initially, the platform will support one language (Uzbek), but later will be expanded to two languages (Uzbek and Russian) to cater to more users | * **Integration with University Systems:** Integrate the platform with university course schedules, allowing students to easily find materials specific to their current courses. * **User Badges or Achievements:** Introduce a gamification aspect by rewarding users with badges or achievements based on their contributions (e.g., number of materials uploaded, number of materials downloaded, quality of materials shared). * **Discussion Forum / Community Space:** A space A space where students can discuss study materials, share tips, and help each other with academic challenges. This could be integrated with specific categories of resources (e.g., courses, subjects). |