Project Synopsis/Project Concept Document

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Project Title	Question Bank Service
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Description

Our task is to create a question bank service. Using this service, users would be able to add and gain access to questions stored on the databases of the client. This would be a credit-based system that would let us add the questions and extract them based on a virtual currency obtained via some means.

We are expected to include features like:
1. User Authentication
2. Question Addition
3. Question Extraction
4. Defining JSON Schema
5. Configuring the Database
6. Create CRUD API (for questions)-subject to user authentication.
7. Creating a front-end application and deploying it on a host.
8. Creating a back-end application and deploying it on a host.

Profile of Users
1. **Admin**
   An Admin is a user who is responsible for moderation of the questions. The admin has all the permissions to Create, Read, Update and Delete (CRUD) any questions as a superuser. Admins can also add and update tags on the request of contributors.
2. **Contributors**
   Contributors are users who are typically willing to add questions and other resources to the platform.
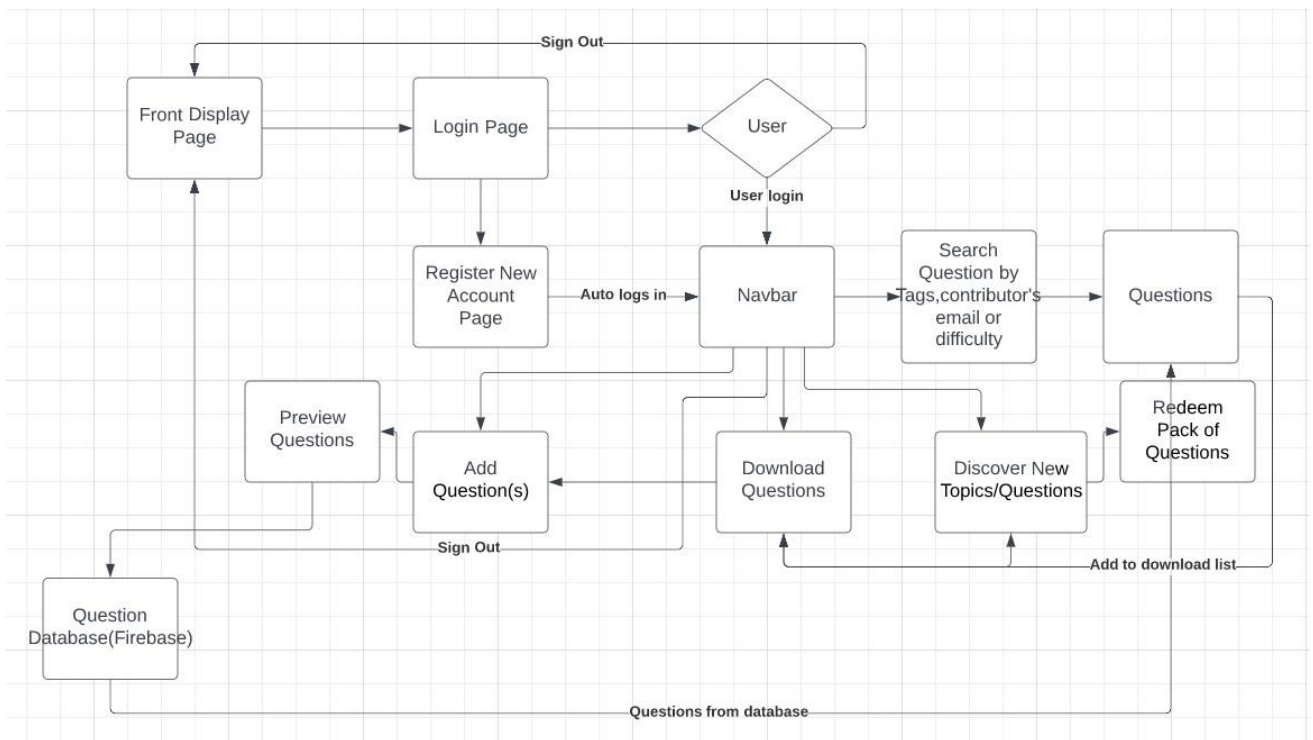3. **General Students**
   General Students are users who serve both the purposes of consumers and producers. They typically access questions and are expected to occasionally add questions to the platform.
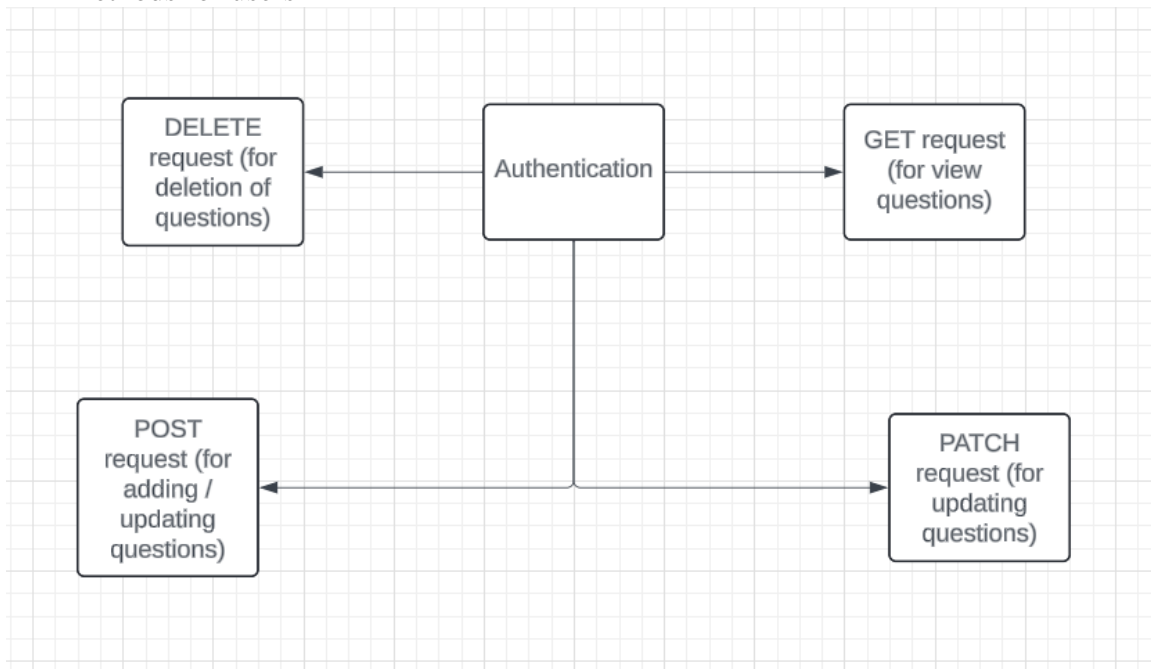4. **General Professors/ Teaching Staff**

Users who would access and occasionally add questions.

Usage Model and Diagrams

(Question Bank Service)
API Methods for users

More insights on the Add Question part:
1. The add question screen displays a set of tools which would be used by the user to add a question. These should include plain text, markdown, and image formats.
2. These questions are checked using a plagiarism checker and validated by a validator defined on a question schema.
3. If everything appears good, these questions would be added to the valid pack of questions.
4. This would grant the users some credits based on a policy defined as the project progresses.

More insights on the Redeem Pack of Questions:
1. User navigates to a topic where certain questions are initially hidden.
2. User selects a particular question pack to redeem.
3. Credits get deducted and the pack is now viewable.