

# Requirements Document for 2b |! 2b

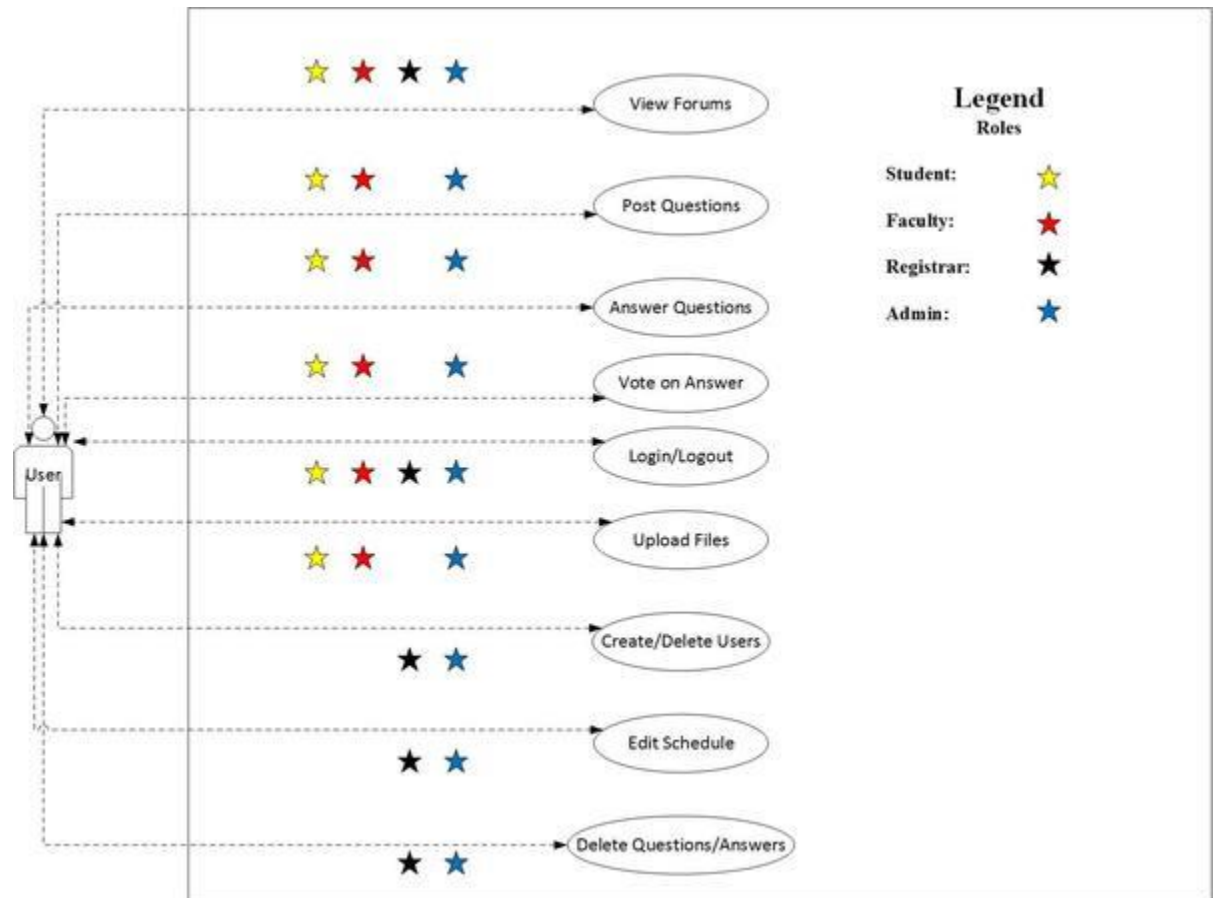
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## Discussion of Changes

We added a new diagram which shows how the questions and answers can be voted upon. Essentially, the User interacts clicks on the vote, which tells the Question/Answer Controller that the database needs to be updated. We updated the diagram for creating a question. When a Question is made, there is a title, course ID, and a description passed as parameters.

## Use Case Model



# Use Cases

## Use Case UC1: View Forums

Primary actors: Student, faculty, admin, and registrar Stakeholders

and Interests:

1. Student: Wants to view questions posted in forums
2. Faculty: Wants to view questions posted in forums
3. Admin: Wants to view questions posted in forums
4. Registrar: Wants to view questions posted in forums

Preconditions: Questions must be posted in forum to view; user registered in system Post

conditions: Can view questions in the forum.

Summary: Students, faculty, admin, and registrars can view questions that are posted in the forums

Basic Flow:

1. User logs into system to access
2. User selects question to view
3. System directs the user to the corresponding forum page Alternate Flow:
  1. User unable to sign in
    - a. Ensure log in credentials are correct
    - b. If password forgotten, request to reset password
  3. Page not found (404)
    - a. Alert user and redirect to homepage
    - b. Notify admin about the broken link

## Use Case UC2: Post Questions

Primary actors: Students, faculty, and admin Stakeholders

and Interests:

1. Students: Want to view and ask questions posted in the forums
2. Faculty: Want to view and ask questions posted in the forums
3. Admin: Want to view and ask questions posted in the forums for testing

functionality Preconditions: Must have proper permissions to ask questions.

Post conditions: Question forum started; other users can comment/answer the question

Summary: Students, faculty, and admin will be able to ask questions in the forums Basic

Flow:

1. User logs in
2. Select post new question
3. Submit question Alternate Flow:
  2. User does not have permission to post question
    - a. System notifies user and redirects to homepage
  3. Error processing the request
    - a. System notifies user and refreshes the page to try again

### **Use Case UC3: Answer Questions**

Primary actors: Students, faculty, admin

Stakeholders and Interests:

1. Students: Want to view and answer questions posted in the forums
2. Faculty: Want to view and answer questions posted in the forums
3. Admin: Want to view and answer questions posted in the forums

Preconditions: Questions must be posted in the forum to answer, must have proper permissions to answer questions.

Post conditions: User answers the question.

Summary: Students, faculty, and admin will be able to answer questions in the forums to be voted upon.

Basic Flow:

1. User logs in
2. Selects question to answer
3. Posts a new answer to the question Alternate Flow:
  - 3a. User does not have the proper permissions to answer the question
    - a. System notifies users and redirects to homepage
  - 3b. Error processing answer
    - a. System notifies user and refreshes the page to try again

### **Use Case UC4: Vote on Answer**

Primary actors: Students, faculty, and admin Stakeholders

and Interests:

1. Students: Can up vote or down vote questions and answers
2. Faculty: Can up vote or down vote questions and answers
3. Admin: Can up vote or down vote questions and answers to test system functionality

Preconditions: Questions must be posted in forum to vote on, must have proper permissions to vote on questions and answers.

Post conditions: Answer is voted upon once but can be changed Summary:

Students, faculty, and admin can vote on answers.

Basic Flow:

1. User logs in
2. Selects question to view
3. Upvote/Downvote specific answers Alternate Flow:
  3. Tries to vote multiple times on same answer
    - a. Alerts user that answer can be voted upon once, but can be changed from upvote to downvote or vice versa

### **Use Case UC5: Delete Questions and Answers**

Primary actor: Admin

Stakeholders and Interests:

1. Admin: Can delete questions and answers if they are deemed inappropriate

Preconditions: Must be admin to delete questions and answers

Post conditions: Admin can delete questions and answers they deem inappropriate.

Summary: Admin will determine if questions and answers are appropriate to be posted to the forum.

Basic Flow:

1. User logs in
2. Selects inappropriate question/answer to edit/delete
3. Edits/deletes question/answer Alternate Flow:
  1. Not admin user
    - a. System redirects and notifies user that they do not have the proper permissions to edit/delete posts.
  3. Can't process request
    - a. Notifies user and refreshes page to try again

## **Use Case UC6: Create and Delete Users**

Primary actors: Admin and registrar Stakeholders

and Interests:

1. Admin: Can create and remove users
2. Registrar: Can create and remove users

Preconditions: Must be Admin or registrar to create and remove users; new user must not exist in system already

Post conditions: Can create and remove users

Summary: Admin and registrar can create and remove users Basic

Flow:

1. User logs in
2. Select to create a new user
3. Attempt to create new user if does not already exist in system
4. New user is created Alternate Flow:
  1. User does not have permissions to create new users
    - a. System redirects to homepage and alerts user they do not have proper permissions
  3. User already in system
    - a. System notifies user that the user already exists in the system and cancels request
  4. Cannot process request
    - a. System notifies user and refreshes page to try again

## **Use Case UC7: Edit Schedule Primary**

actors: Admin and registrar

Stakeholders and Interests:

1. Admin: Can edit the students/faculty schedule
  2. Registrar: Can edit the students/faculty schedule
- Preconditions: Must be admin or registrar to edit schedules.

Post conditions: Semester schedules updated

Summary: Admin and registrar can edit the schedules of students/faculty for the current semester

Basic Flow:

1. User logs in
2. Navigates to the edit schedule page
3. Submit form to edit the schedule Alternate Flow:
  1. User does not have permissions to edit schedules
    - a. System notifies user and redirects to homepage
  3. Cannot process form
    - a. System notifies user and refreshes page to try again

### **Use Case UC8: Upload Files**

Primary actors: Student and Faculty

Stakeholders and Interests:

1. Students: can upload educational materials (diagrams/tutorials) to profile
2. Faculty: can upload educational materials (diagrams/tutorials) to profile

Preconditions: Must be student or faculty to have an individual profile in order to upload files to said profile.

Post conditions: Files uploaded to profile

Summary: Students and faculty can upload pertinent educational materials to their profile for public viewing

Basic Flow:

1. User logs in
2. Navigates to individual profile
3. Select to upload a file
4. Select file to upload
5. File uploaded and added to profile

Alternate Flow:

2. User does not have proper permissions to have a profile
  - a. System notifies user they cannot have a profile
- 3a. File not acceptable format
  - a. Request cancelled and user notified
- 3b. File size too large
  - a. User notified and prompted to select a different file



### **Use Case UC9: Login/Logout**

Primary actors: Student, Faculty, Registrar, and Admin

Stakeholders and Interests:

1. All: Allows stakeholders to access site by logging in then leaving by logging out

Preconditions: Must have user account

Post conditions: User can either login or logout

Summary: The users with proper credentials can login to the site then logout

Basic Flow:

1. User logs in
2. User logs out

Alternate Flow:

1. User doesn't have an account
  - a. Contact registrar
2. User forgot credentials
  - a. Contact registrar

### **Use Case UC10: Change User Role**

Primary actors: Admin

Stakeholders and Interests:

1. Admin: Allows stakeholders to change other users' role.

Preconditions: Must be an admin

Post conditions: Admin changes other users' role

Summary: The admins can change a users' role

Basic Flow:

1. Admin logs in
2. Admin chooses user
3. Admin changes that users' role

### **Use Case U11: Search Users**

Primary actors: Student, Faculty, Registrar, and Admin

Stakeholders and Interests:

1. All: Allows stakeholders to search the users of the site

Preconditions: Must be logged in

Post conditions: User has searched other users

Summary: The users can search other users of the site

Basic Flow:

1. User logs in
2. User types in user info in search engine
3. User selects another user

Alternate Flow:

3. There are no results
  - a. Type in another username

### **Use Case UC12: Search Courses**

Primary actors: Student, Faculty, Registrar, and Admin

Stakeholders and Interests:

1. All: Allows stakeholders to search courses

Preconditions: Must be logged in

Post conditions: User has searched courses

Summary: The users can search the courses of the site

Basic Flow:

1. User logs in
2. User types in course info in search engine
3. User selects course

Alternate Flow:

3. There are no results
  - a. Type another course

### **Use Case UC13: Solved Question**

Primary actors: Student, Faculty, Registrar, and Admin

Stakeholders and Interests:

1. All: Allows stakeholders to mark a question as solved

Preconditions: Must be logged in

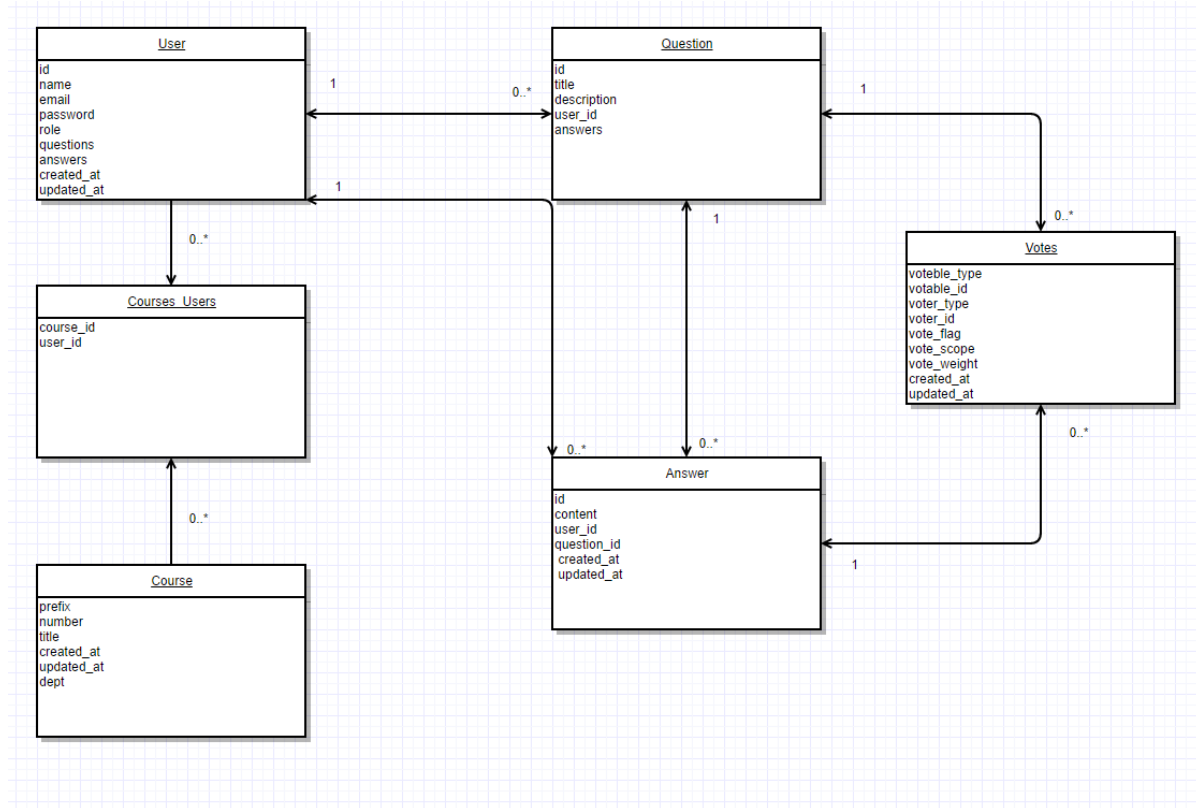
Post conditions: User can mark question as solved

Summary: The users can mark a certain question as solved

Basic Flow:

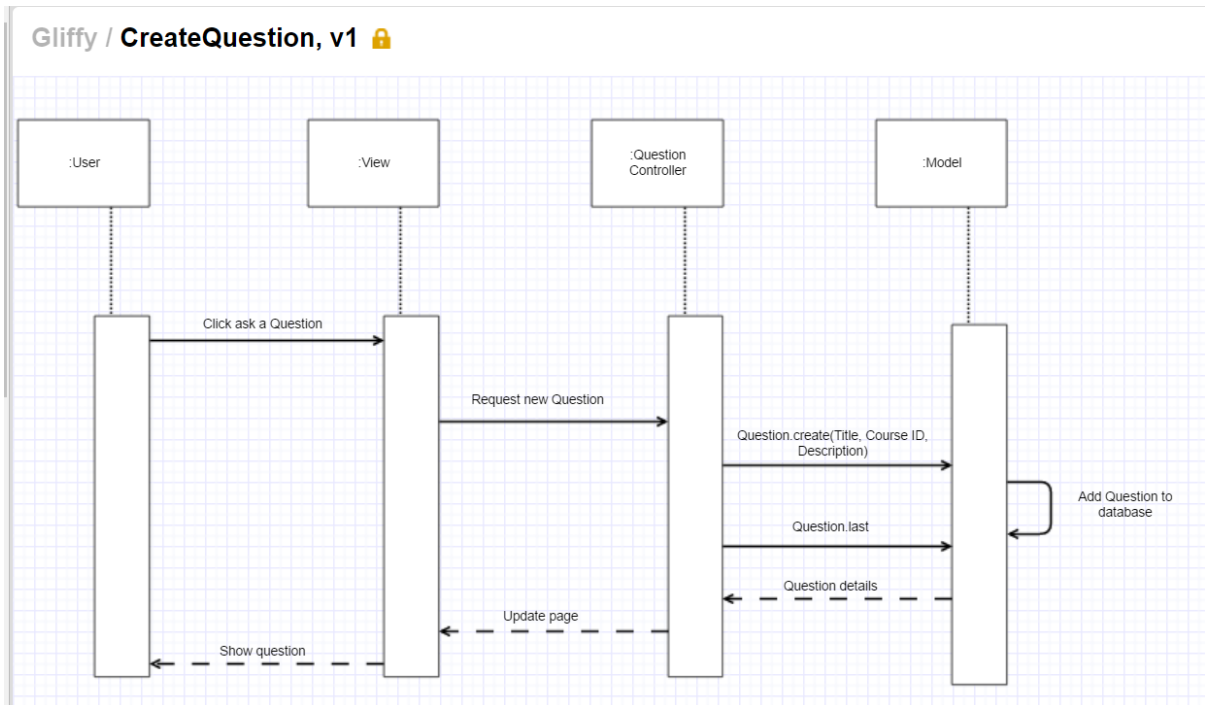
1. User logs in
2. User selects a certain question
3. User marks said question as answered

# Domain Model

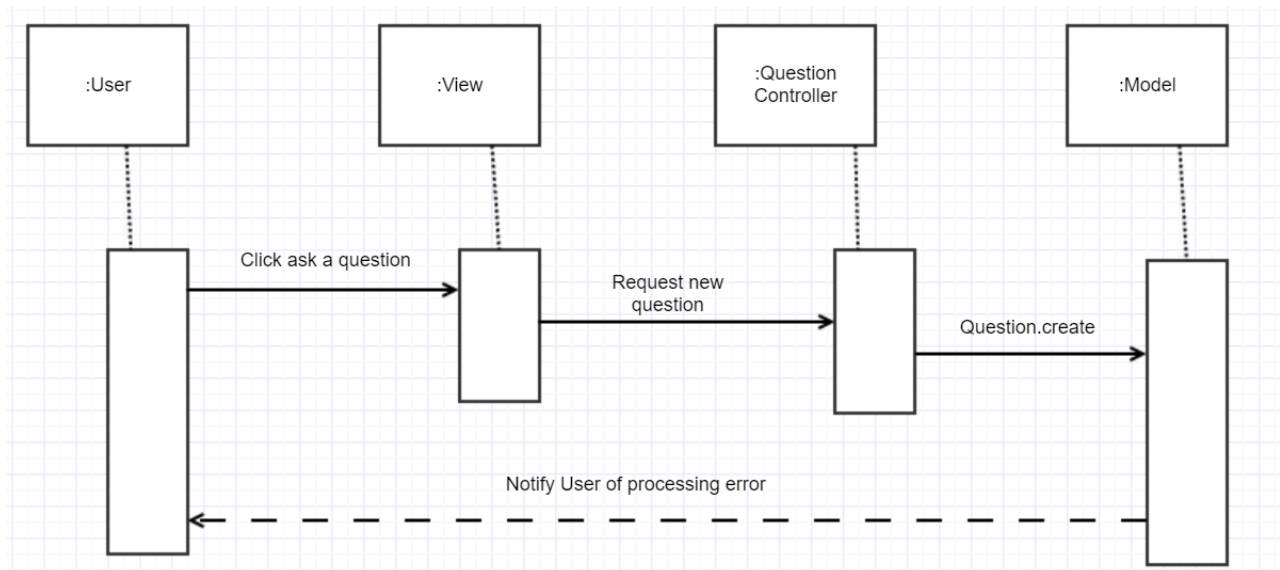


# System Sequence Diagrams

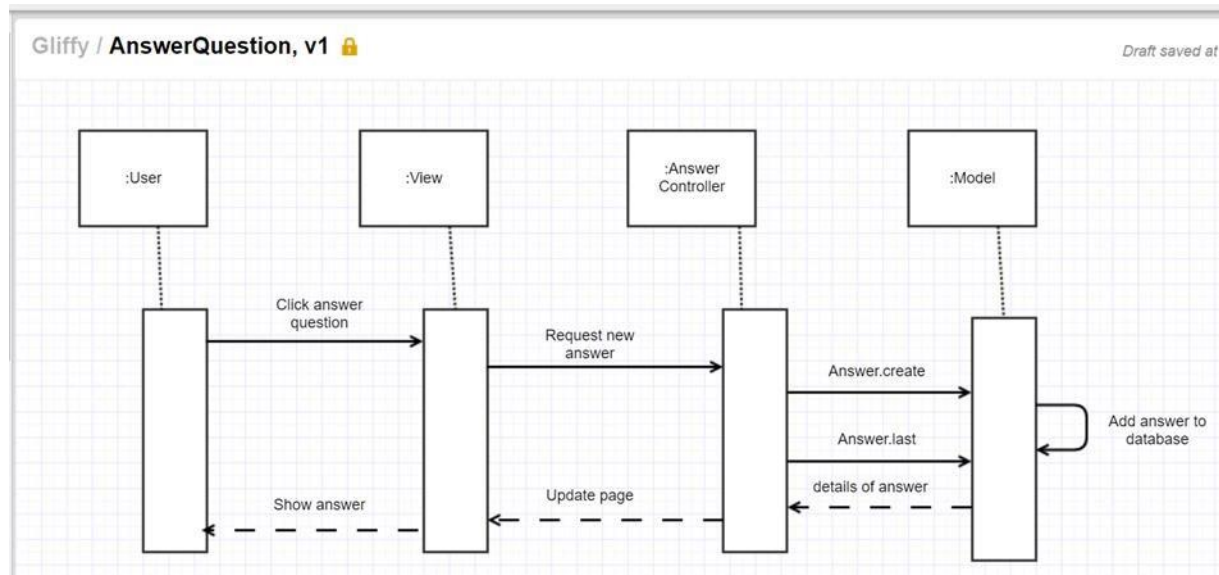
## Create a Question



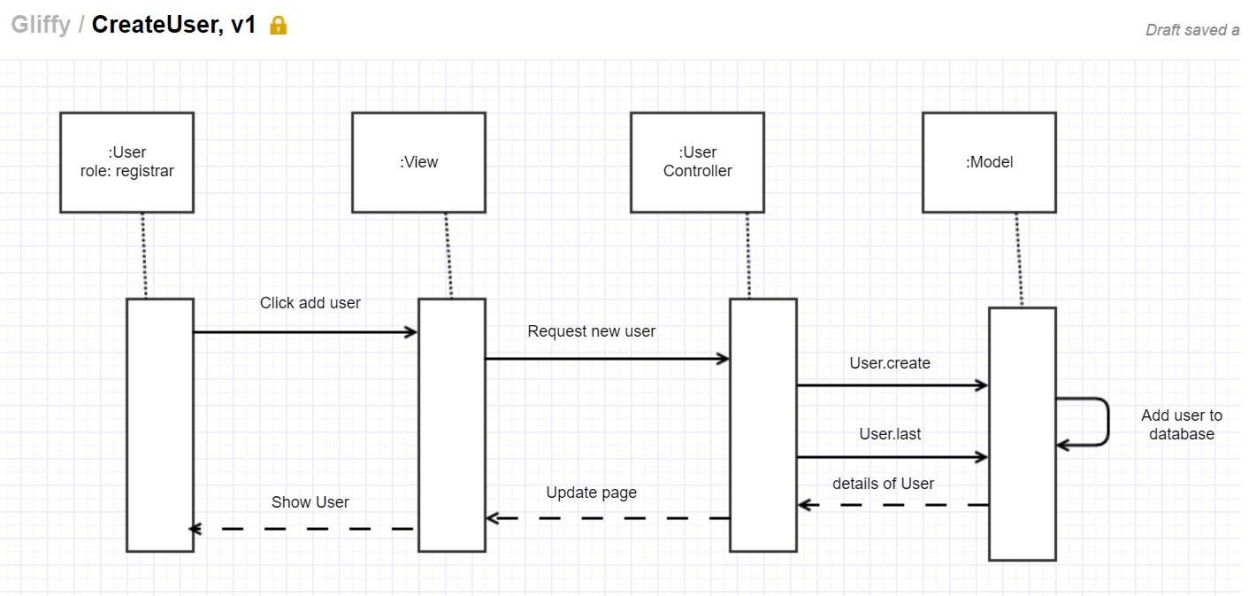
## Alternate Flow for Create Question (Question Processing Error)



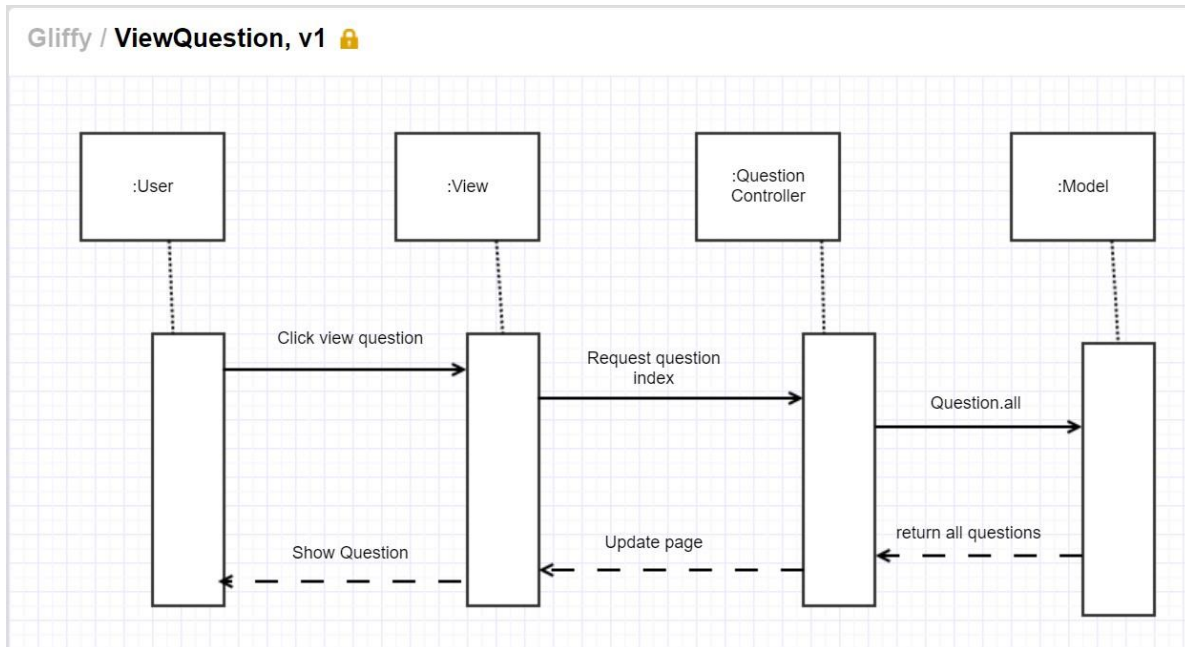
## Answer a Question



## Create a User



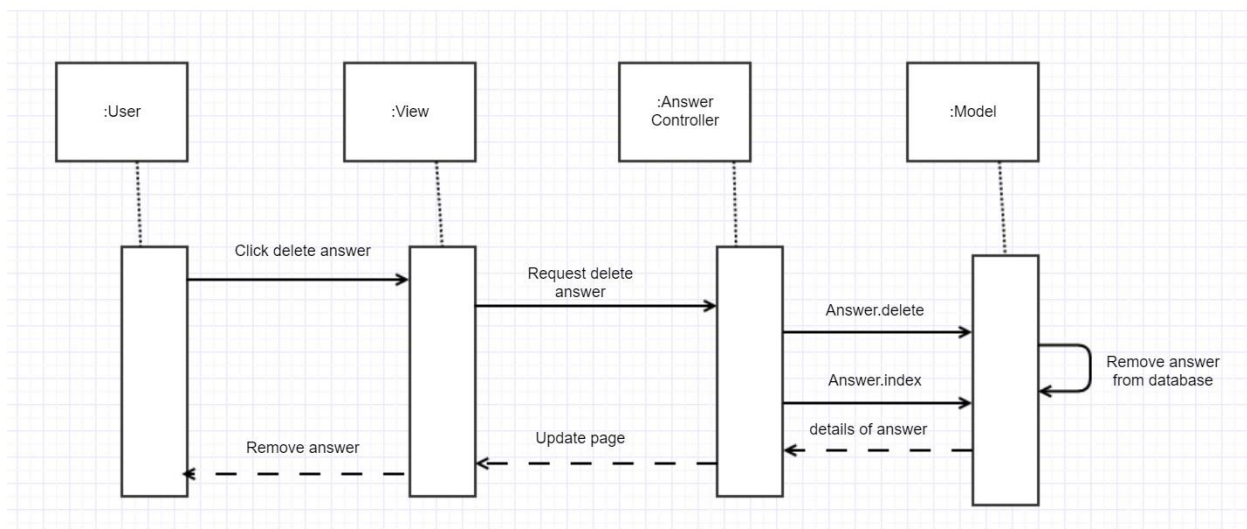
## View a Question



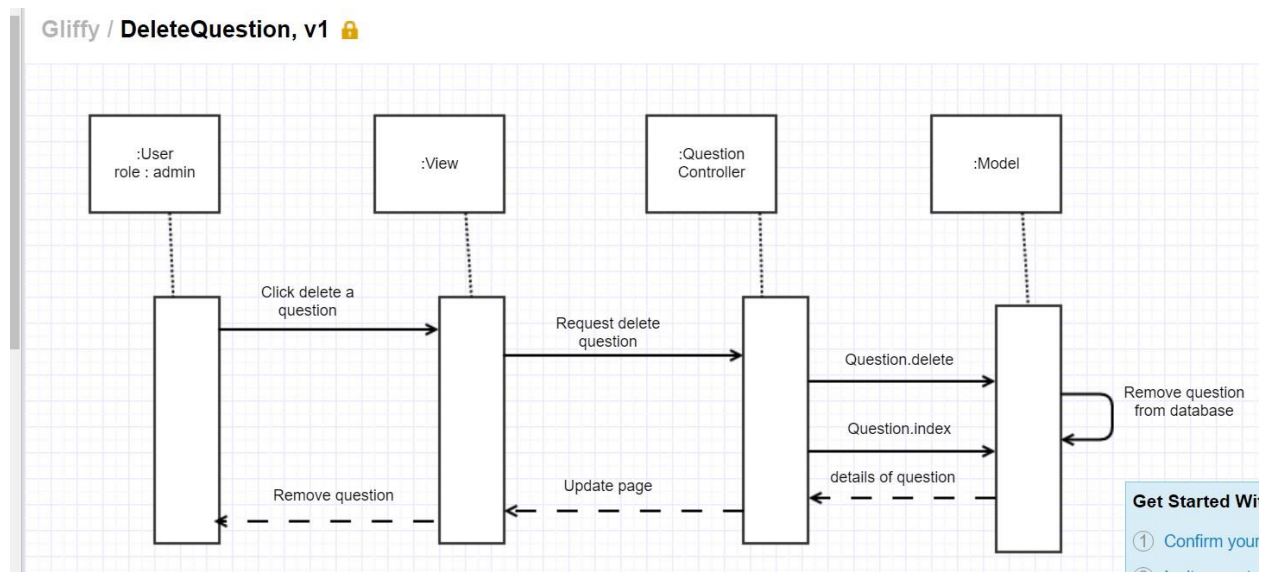
## Delete Answer

Gliffy / DeleteAnswer, v1

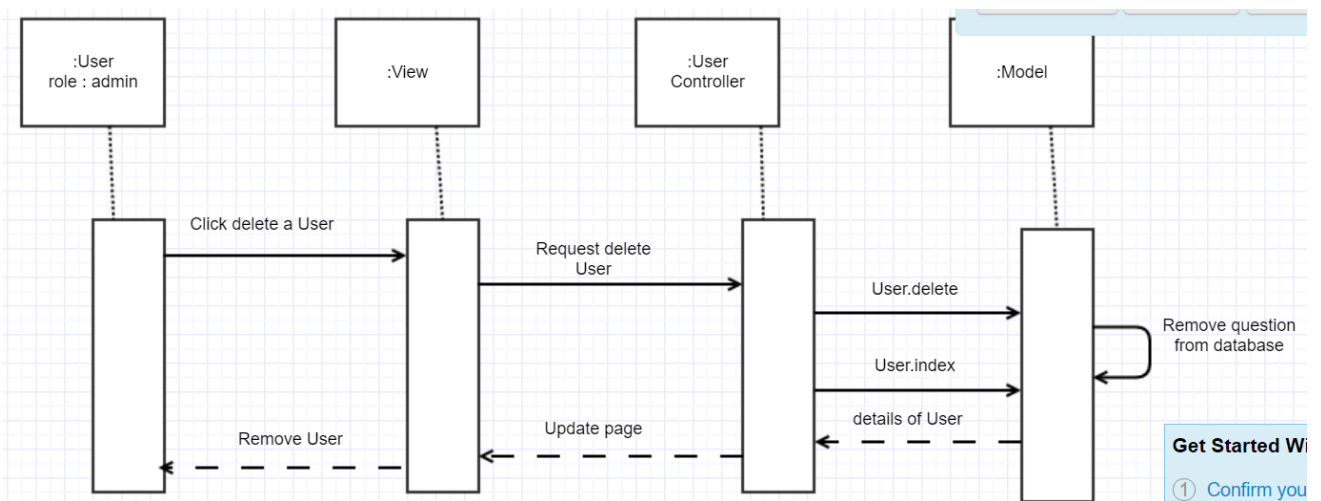
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## Delete Question

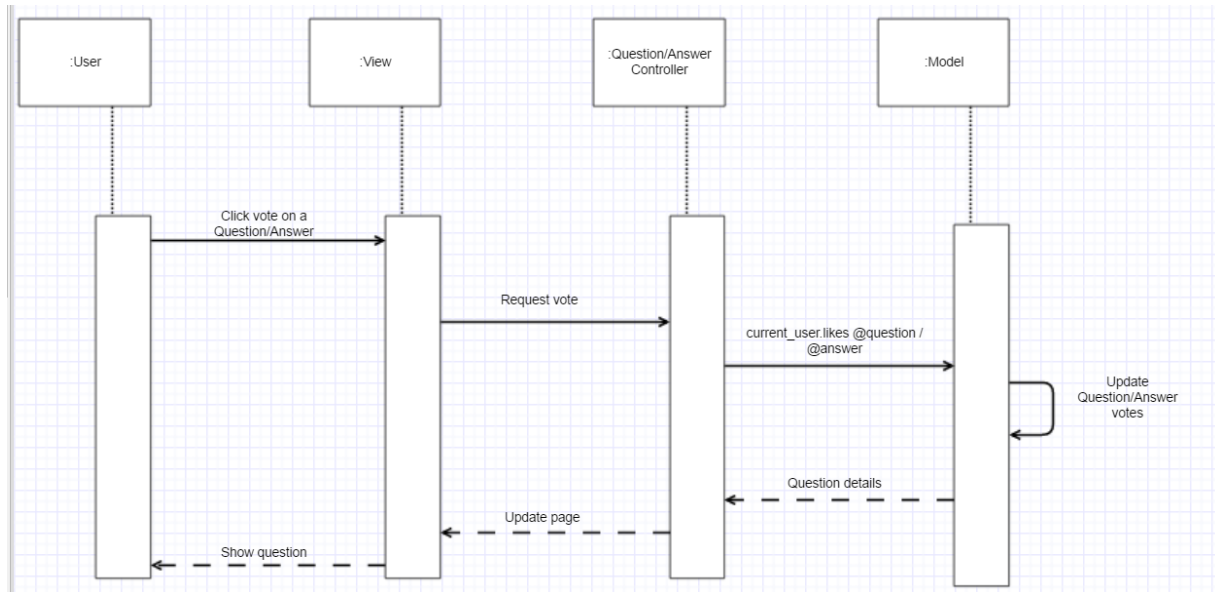


## Delete User



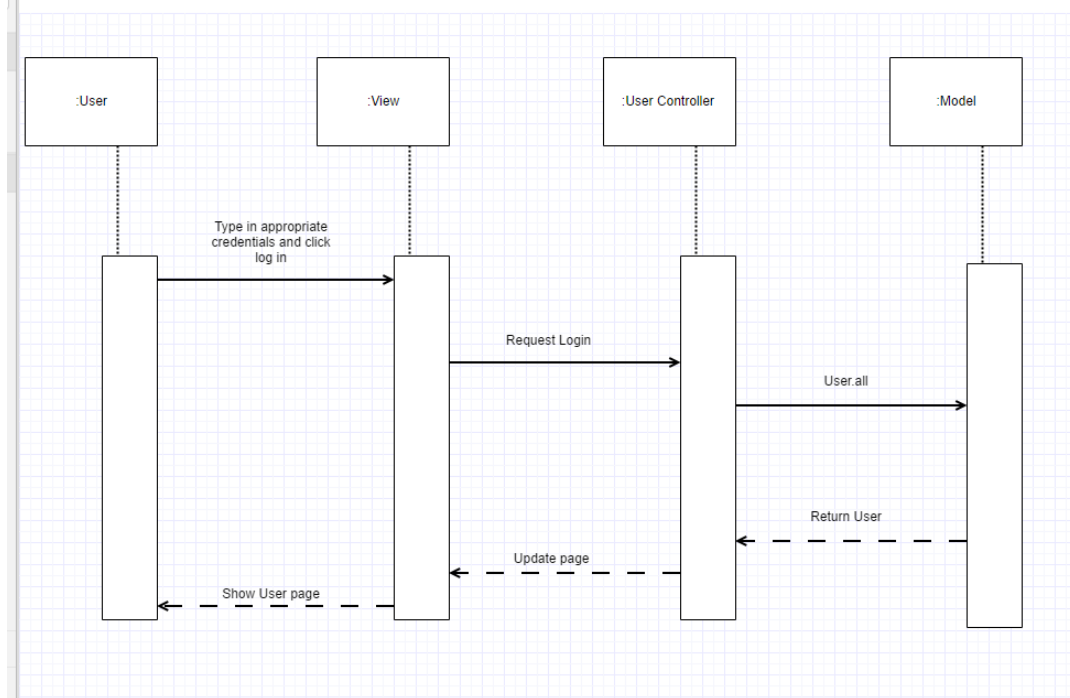


## Vote Question/Answer



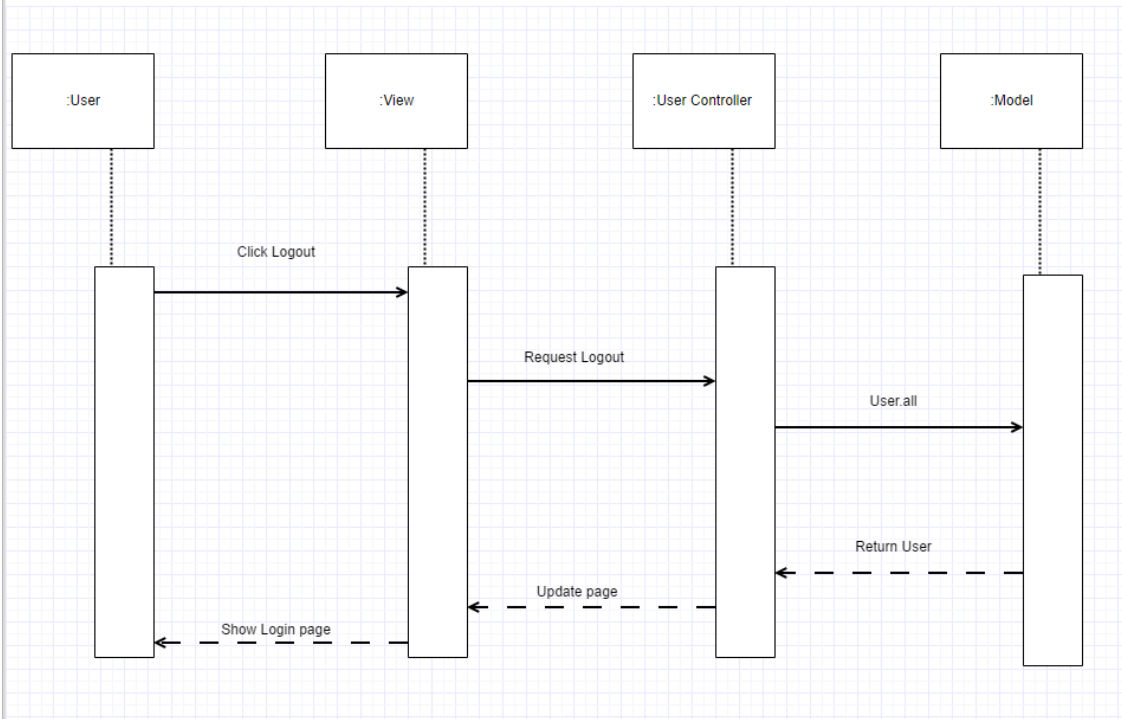
## Login

Gliffy / Login, v1 🔒

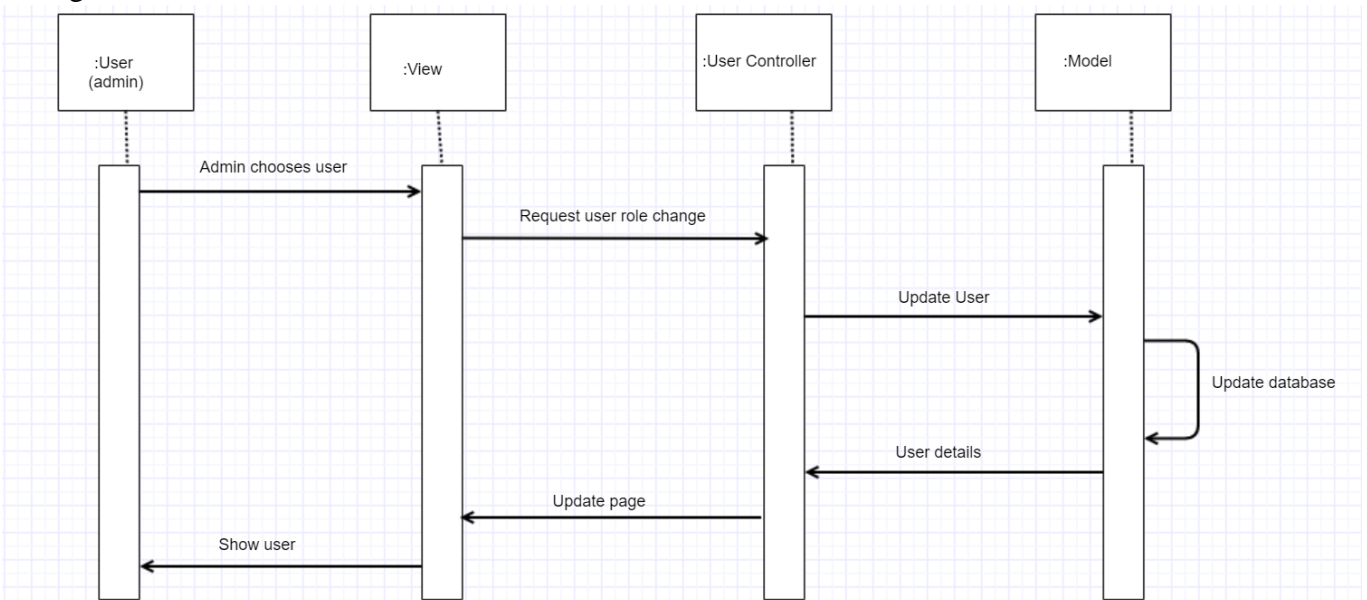


## Logout

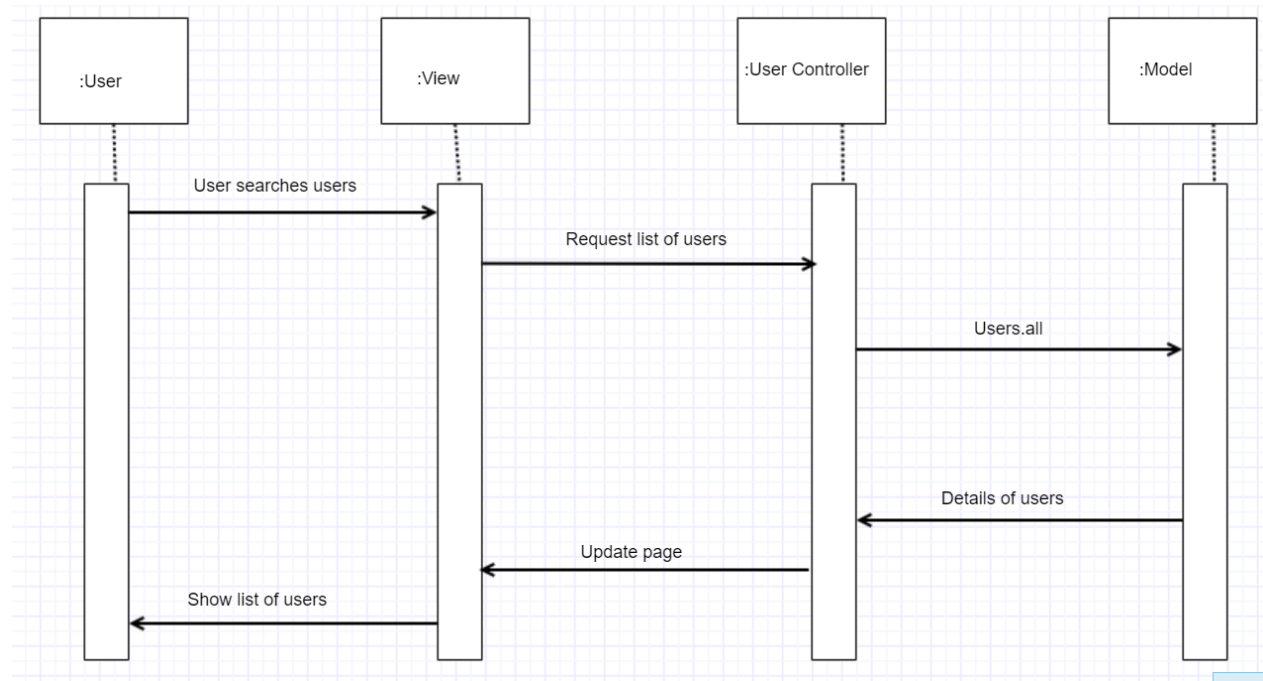
Gliffy / Logout, v1 



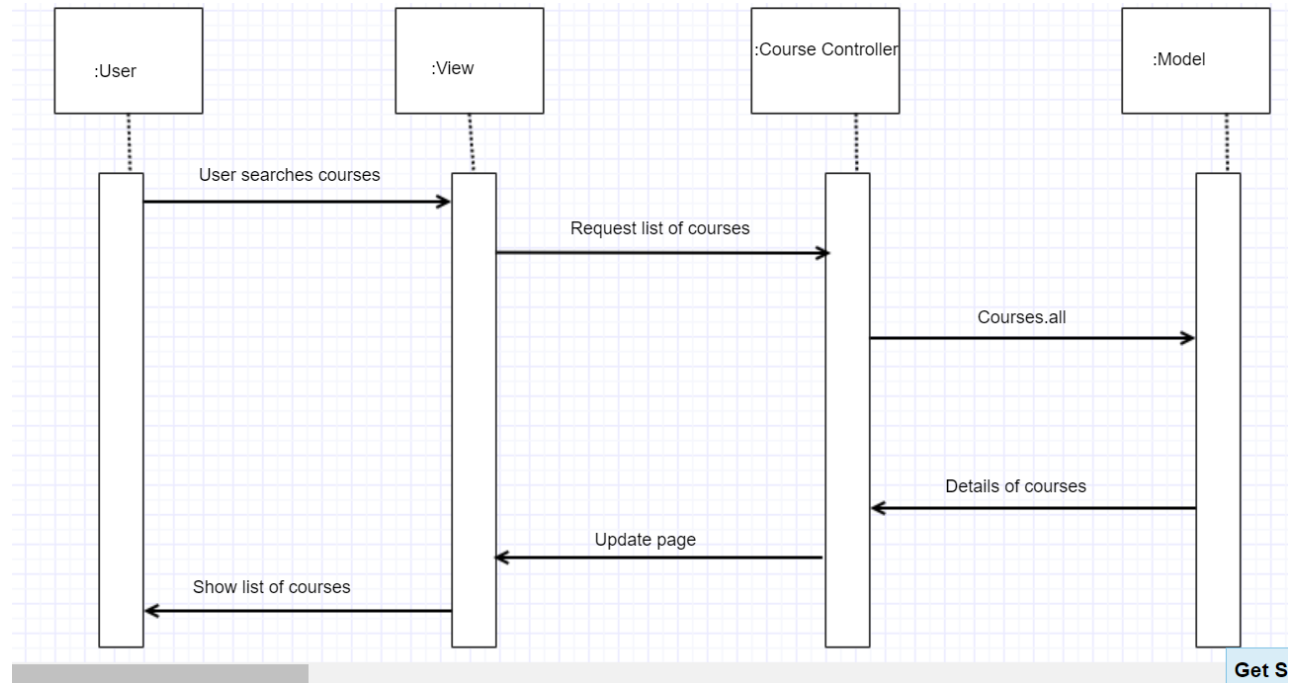
## Change User Role



## Search Users



## Search Courses



## Mark Question

