

# **SOFTWARE ENGINEERING**

## **SOFTWARE DESIGN SPECIFICATION**

### **DISCUSSION PORTAL WEB APPLICATION**

**BY:-**

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#### **TABLE OF CONTENT**

1. Introduction.....	.....
1.1. Purpose of this document.....	.....
1.2. Scope of the development project.....	.....
1.3. Definitions, acronyms, and abbreviations.....	.....
1.4. References.....	.....
1.5 Technologies to be used.....	.....
1.6. Overview of document.....	.....
2. Conceptual Architecture/Architecture Diagram.....	.....
2.1. Structure and relationships.....	.....
2.2. User interface issues.....	.....
3. Logical Architecture(Class Diagram,Sequence Diagram, State Diagram)	

3.1. Logical Architecture Description.....
3.2. Admin: Manages all logins, logouts
3.3. Faculty: Manage all the operations of the faculties.
3.4. User: Manage all the operations of the users.
3.5. Registration: Manage all the operations of the registrations.
3.6. Post: Manage all the operations of the posts.
3.7. Forum: Manage all the operations of the forums.
4. Execution Architecture.....
4.1. Reuse and relationships to other products.....
5. Design decisions and tradeoffs.....
6. Code Snippets.....
6.1. Logical Architecture Description.....
6.2. Admin: Manages all logins, logouts
6.3. Faculty: Manage all the operations of the faculties.
6.4. User: Manage all the operations of the users.
6.5. Registration: Manage all the operations of the registrations.
6.6. Post: Manage all the operations of the posts.
6.7. Forum: Manage all the operations of the forums.
7. ScreenShots for some GUI/forms created.....

## The Software Design Specification

### 1. Introduction

**DISCUSSION PORTAL(DP)** is a discussion forum that gives information about various programming languages, general knowledge related questions, and course related questions of students by faculty.

This Document contains class models, sequence diagrams, collaboration models, object behaviour models, and other supporting requirement information.

#### 1.1 Purpose of this document

To create a fully functional and user interactive online web portal for student query

discussion which will help in minimizing the gap between the student and their

instructor. Whenever a question is asked by the end-user to get information, it is received by the instructor. Any user can post doubts and can reply for the other user

doubts. There is a centralized database in which all the information is managed. The administrator has the rights to update the database, delete the information. This is useful for a small school or a department or for that matter any group who is interested in organizing it effectively.

## **1.2 Scope of the development project**

This software system will be an online portal for IIT ALLAHABAD, or any university wishing to create a discussion forum for its students. More specifically to design and develop

a simple and intuitive system which shall cater the needs of the students to clear their doubts when not present in class or doubts arising during studying .

The system shall provide features to the user of an educational institute to ask questions,

search for a previously asked questions, reply to the questions asked by different users, upvote/downvote the questions and answers. Further we can add more functionalities to make it better and update according to future needs.

### **In Scope:**

- a. Ask questions by students, Replies by faculty and already existing questions can be searched.
- b. Admin has all access to delete the inappropriate queries posted by users, which are reported by users.

### **Out of Scope:**

- a. Any online conduction of test, assignments etc.
- b. Personal chats among users

## **1.3 Definitions, Acronyms and Abbreviation**

Admin – Administrator.

HTML - HyperText Markup Language

PHP - Hypertext Preprocessor

CSS - Cascading Style Sheets

MySQL - Database Management System

## **1.4 References**

1. IEEE SDS Format.

## **1.5 Technologies to be used**

1. Application Architecture - HTML
2. Database Application - MySQL
3. Web Deployment Server - PHP
4. Development tool - Rational System Developer
5. Designing Language - CSS

## **1.6 Overview of Document**

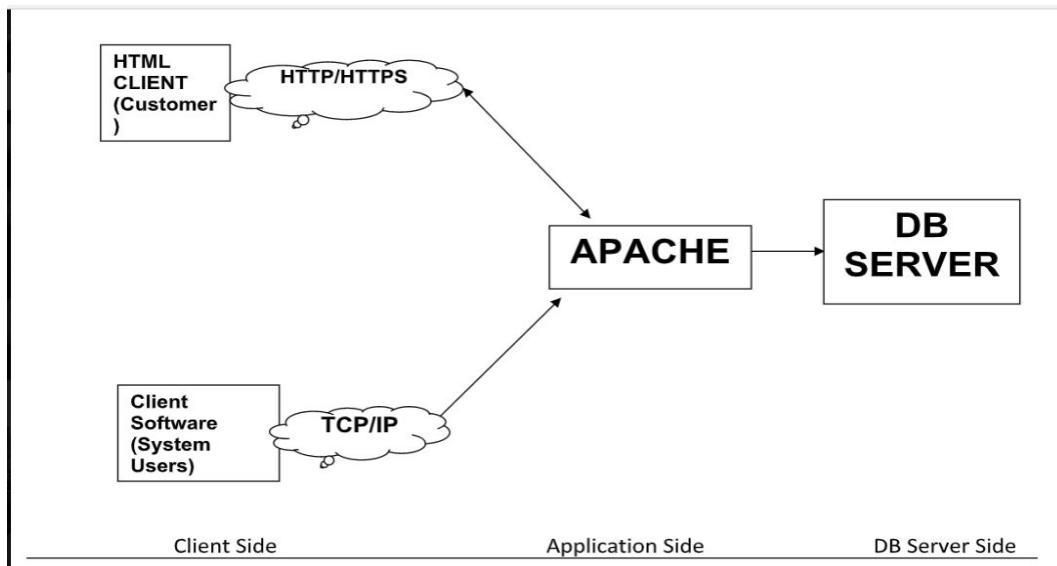
Student Query Discussion Portal is the technology which increases the interaction of student and instructor which greatly extends classroom learning. It helps in more democratic exchange due to participation of more students in the discussion who are unable to voice their opinion in the class. This SDS is divided into seven sections with various sub-sections. The sections of the Software Design Document are:

1. Introduction: describes about the document, purpose, scope of development project definitions and abbreviations used in the document.
2. Conceptual Architecture/Architecture Diagram: describes the overview of components, modules, structure and relationships and user interface issues.
3. Logical Architecture: describes Logical Architecture Description and Components.
4. Execution Architecture: defines the runtime environment, processes, deployment view.
5. Design Decisions and Trade-offs: describes the decisions taken along with the reason as to why they were chosen over other alternatives.
6. Code Snippets: contains some code snippets as name indicates.
7. Appendices: describes subsidiary matter if any.

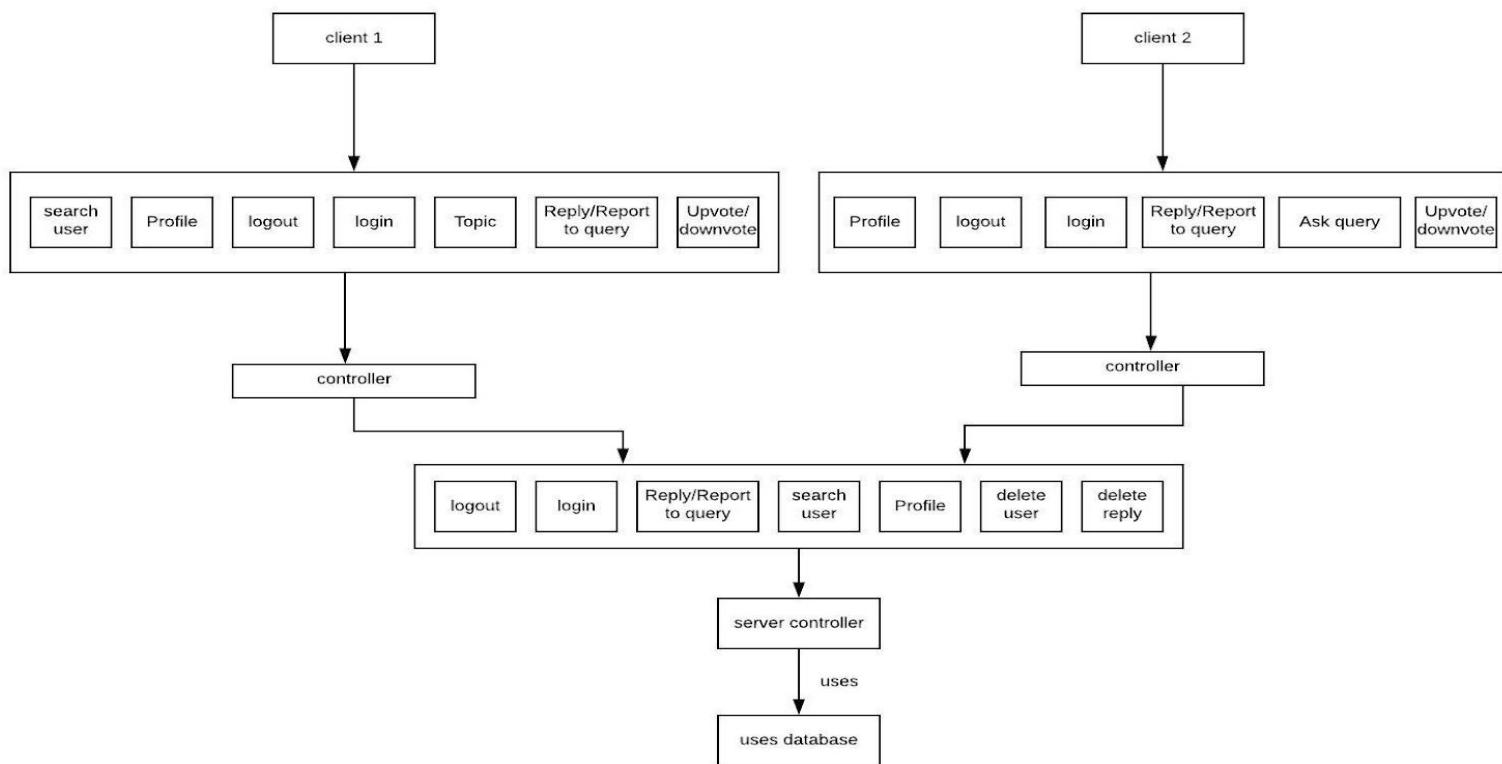
## **2. Conceptual Architecture/Architecture Diagram**

It uses three tier architecture dig where client side application side and DB server are three different components that improve security in the system.

### Architecture 1:

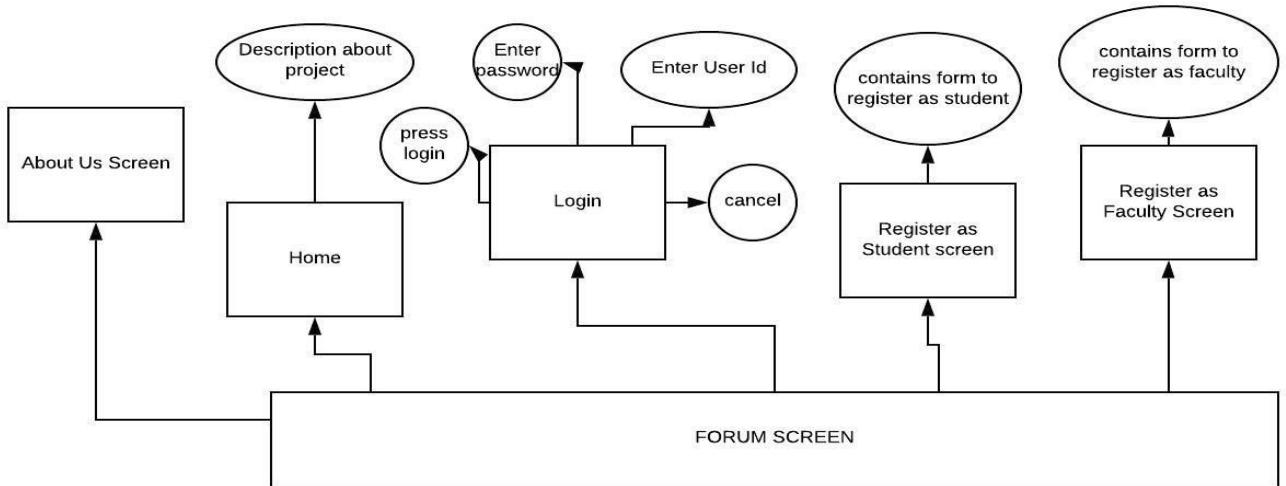


### Architecture 2:

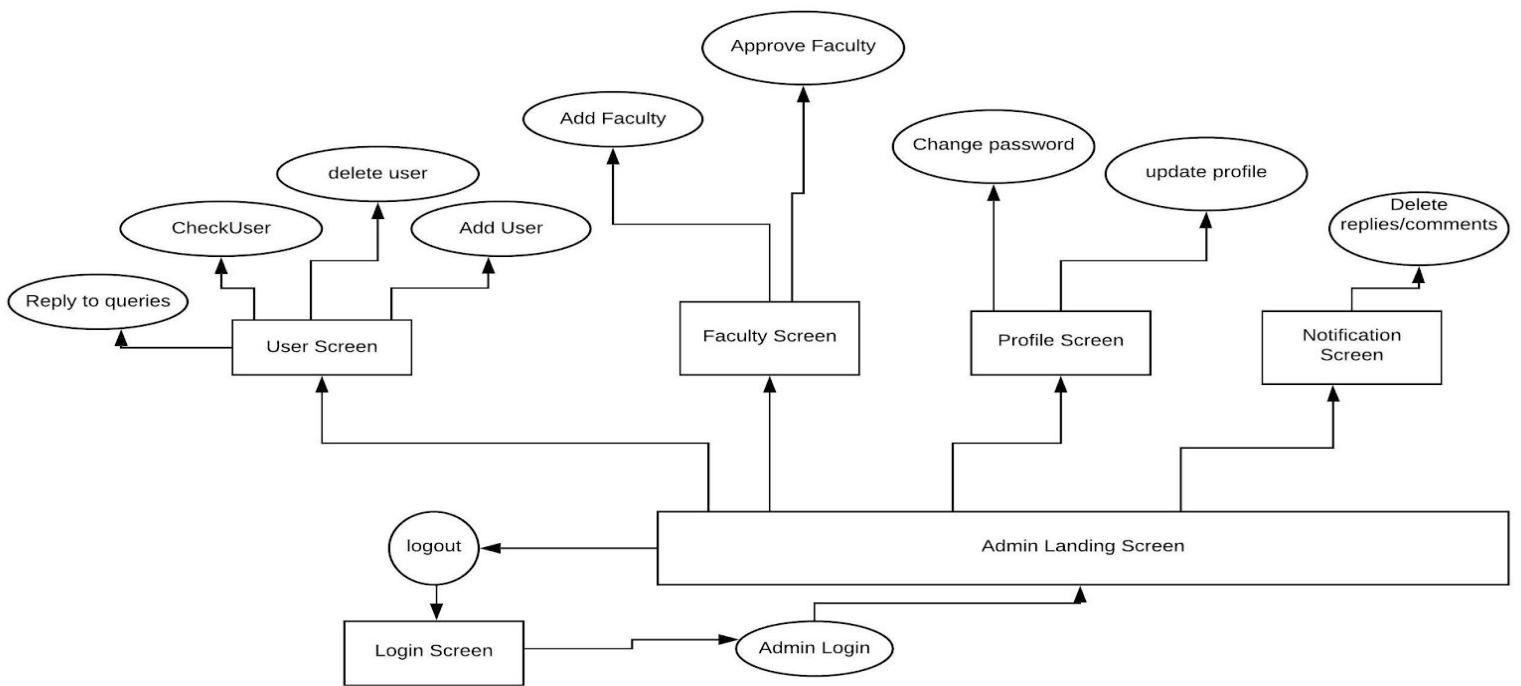


## 2.1 Structure and relationships

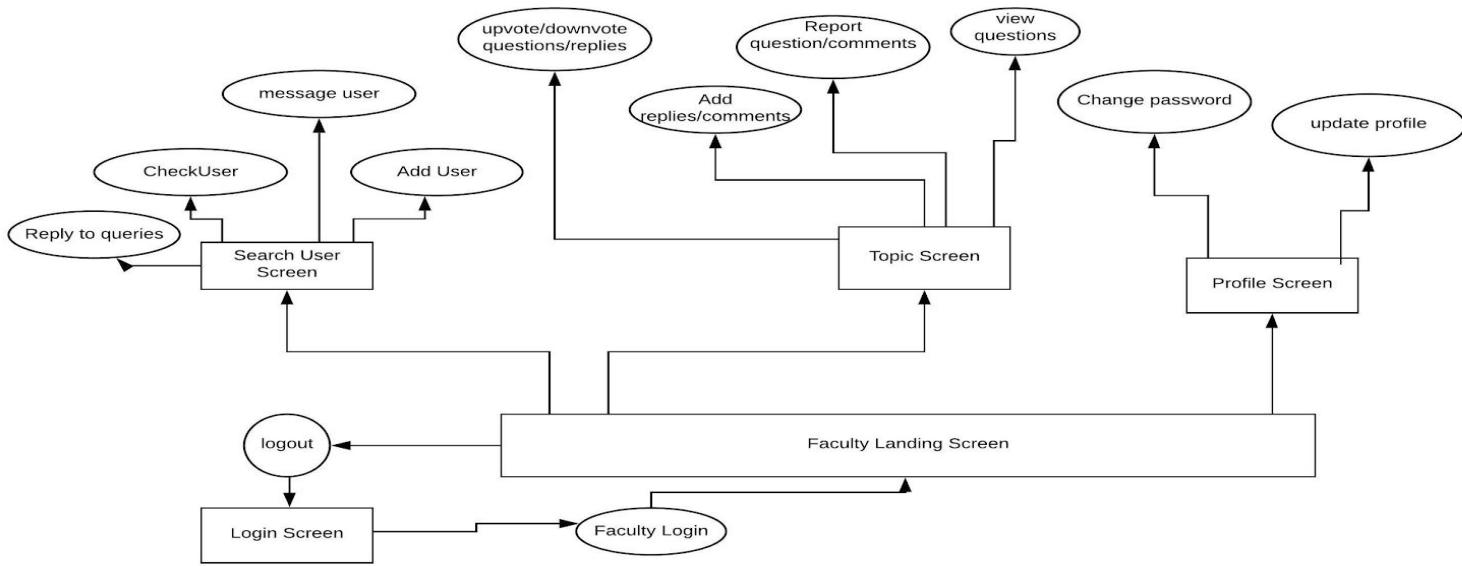
## Forum Screen(Front page)



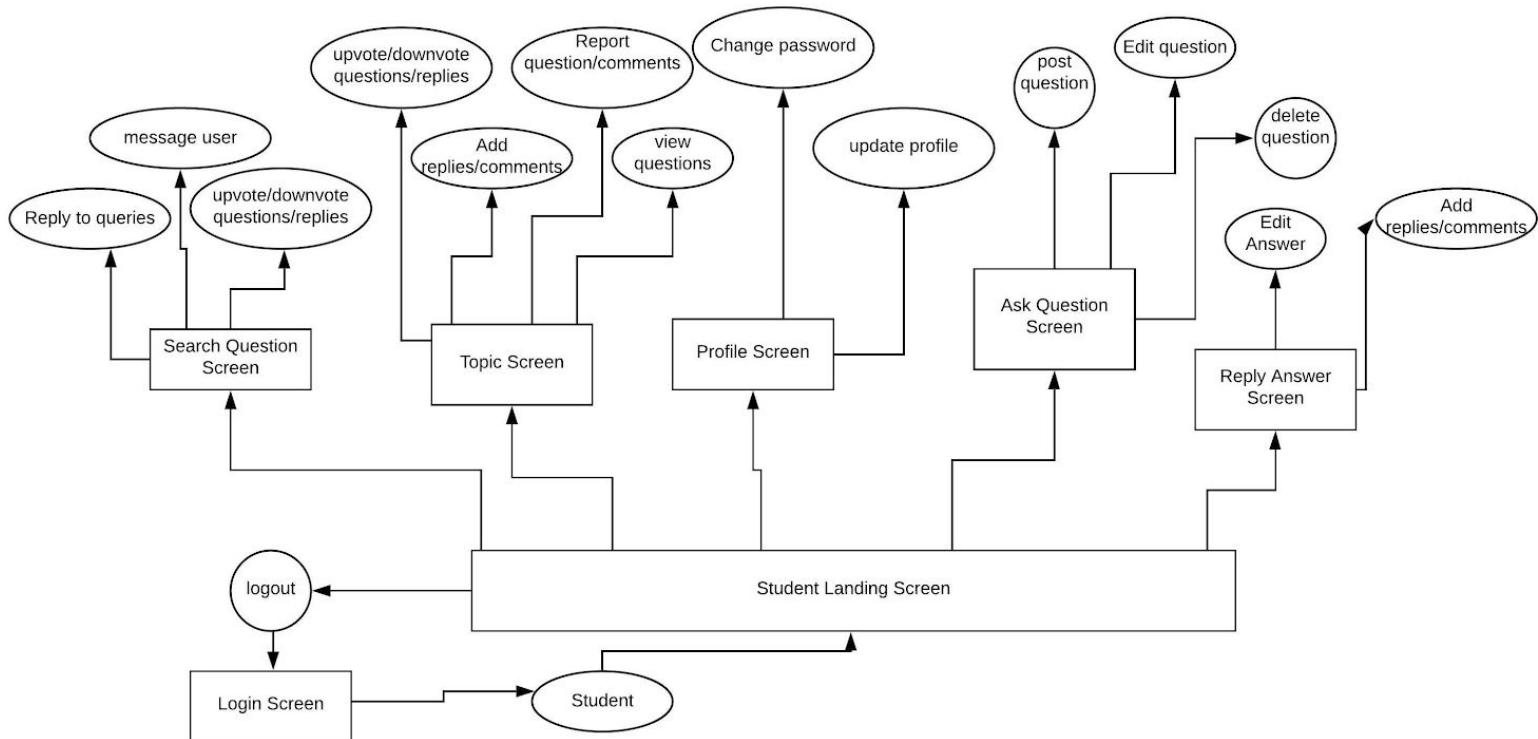
## Admin's Side



## Faculty's Side



## Student's Side



**NOTE:**

*The boxes represent individual screens.*

*The circles represent actions that do not have screens.*

*The arrows represent navigation between screens.*

## 2.2 User interface issues

This section will address User Interface issues as they apply to the following hypothetical users of the Query Discussion Portal.

- User A is a 20-year-old female, a student of IIIT Allahabad, 11nd year, who is fairly comfortable with technology. She is proficient with using most common computer applications.

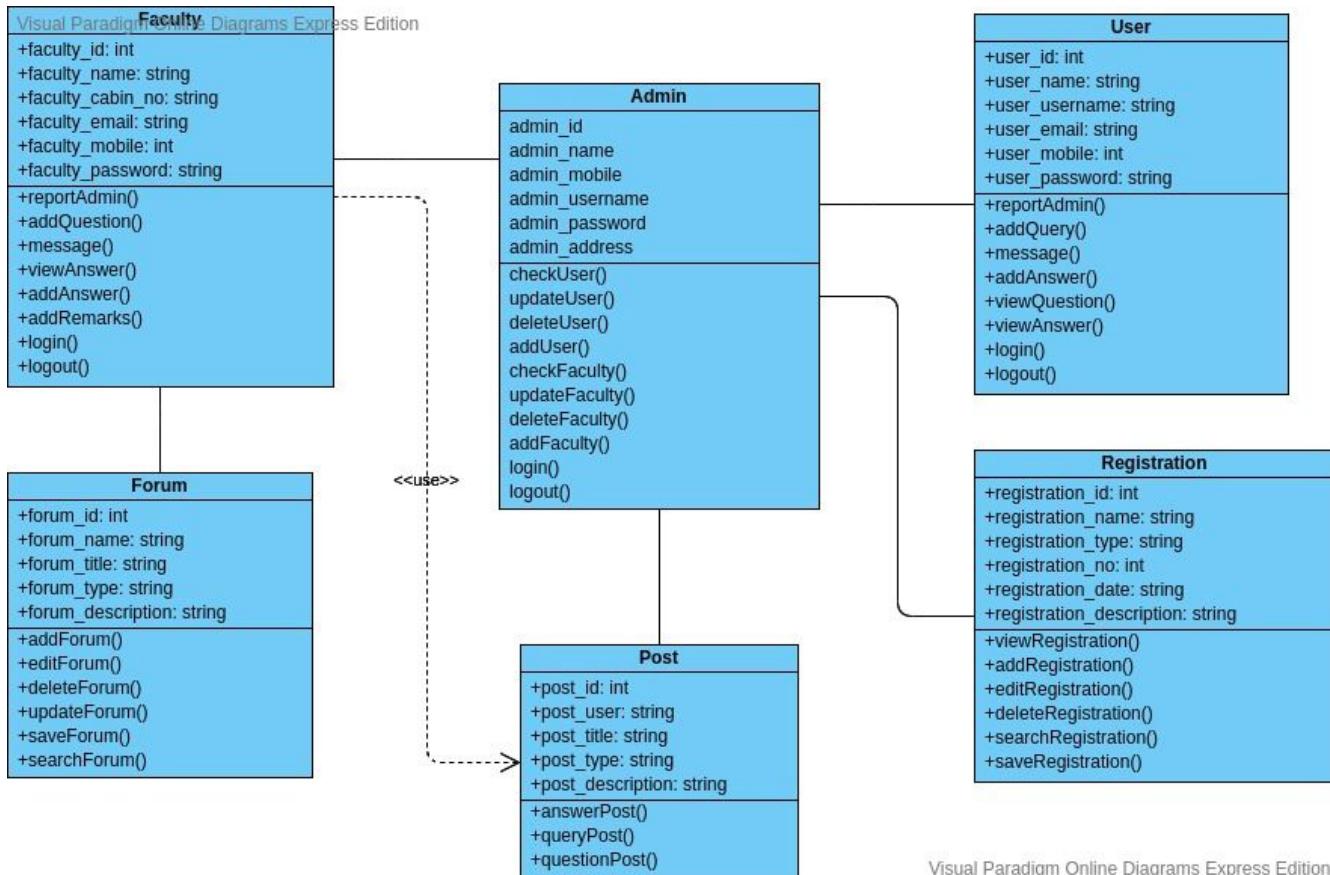
Since User A is familiar with web applications, like QDP will use common user interface conventions. For example, links between screens will use ordinary, easy to understand descriptions such as “Login”, “Home”, ‘ASk queries” etc. To maintain consistency, any other links will also appear in the bottom half of the screen.

- User B is a 19-year-old male, a student of IIIT Allahabad, 1st year, He is although comfortable using web applications, he has never used any portal like, QDP. He may or may not acknowledge if this android application is really helpful.

Since User B is not fond of such a technology oriented(asking questions via forums), it is imperative that he be given clear on-screen directions. Consequently, the user interface has been tried to be such that grabs the attention of the user. It has been taken care that user should not consider this application as a burden/difficult to use. On-clicks task implementation has been done .

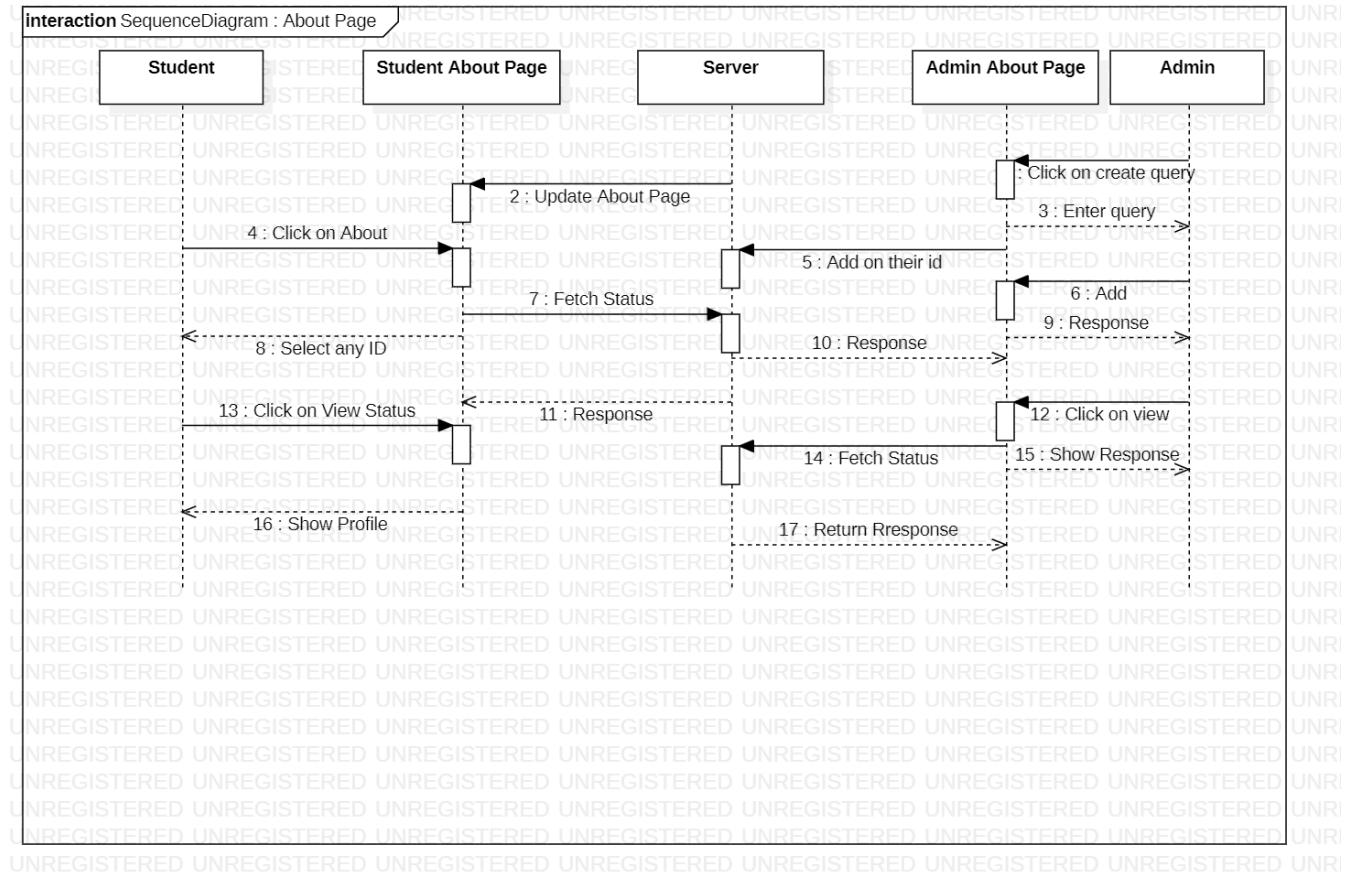
### 3. Logical Architecture (Class Diagram, Sequence Diagram, State Diagram)

#### Class Diagram.

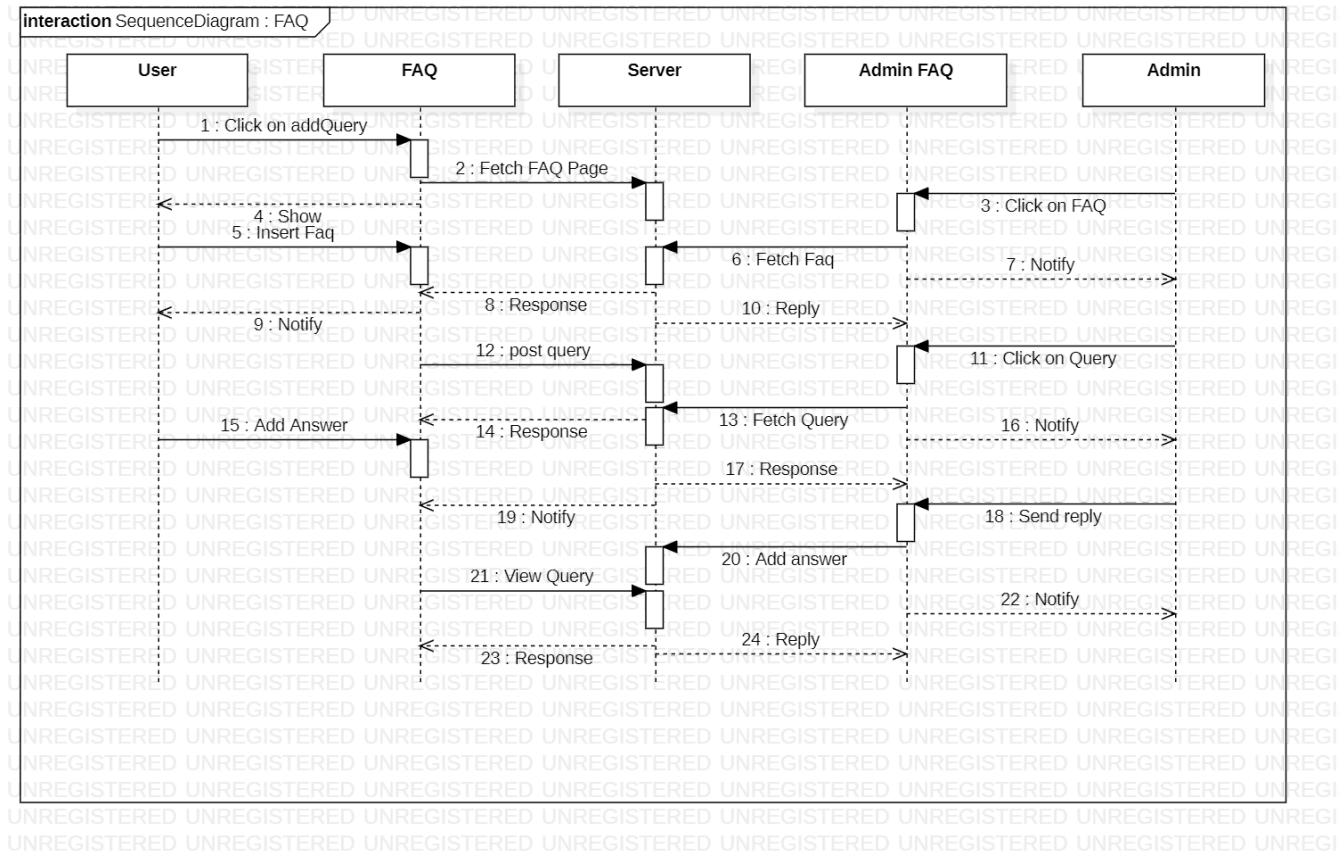


## Sequence Diagrams:

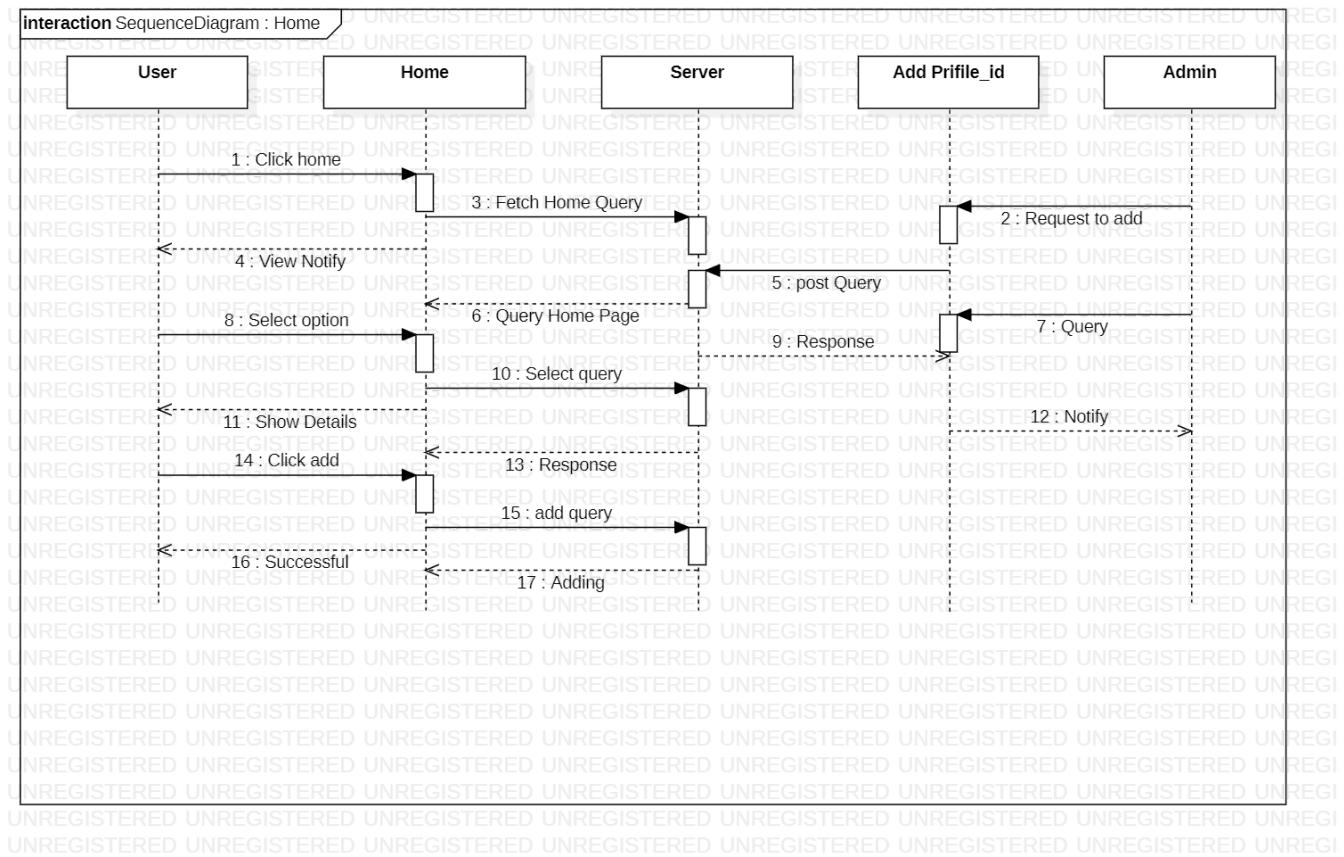
### Sequence Diagram : About Page



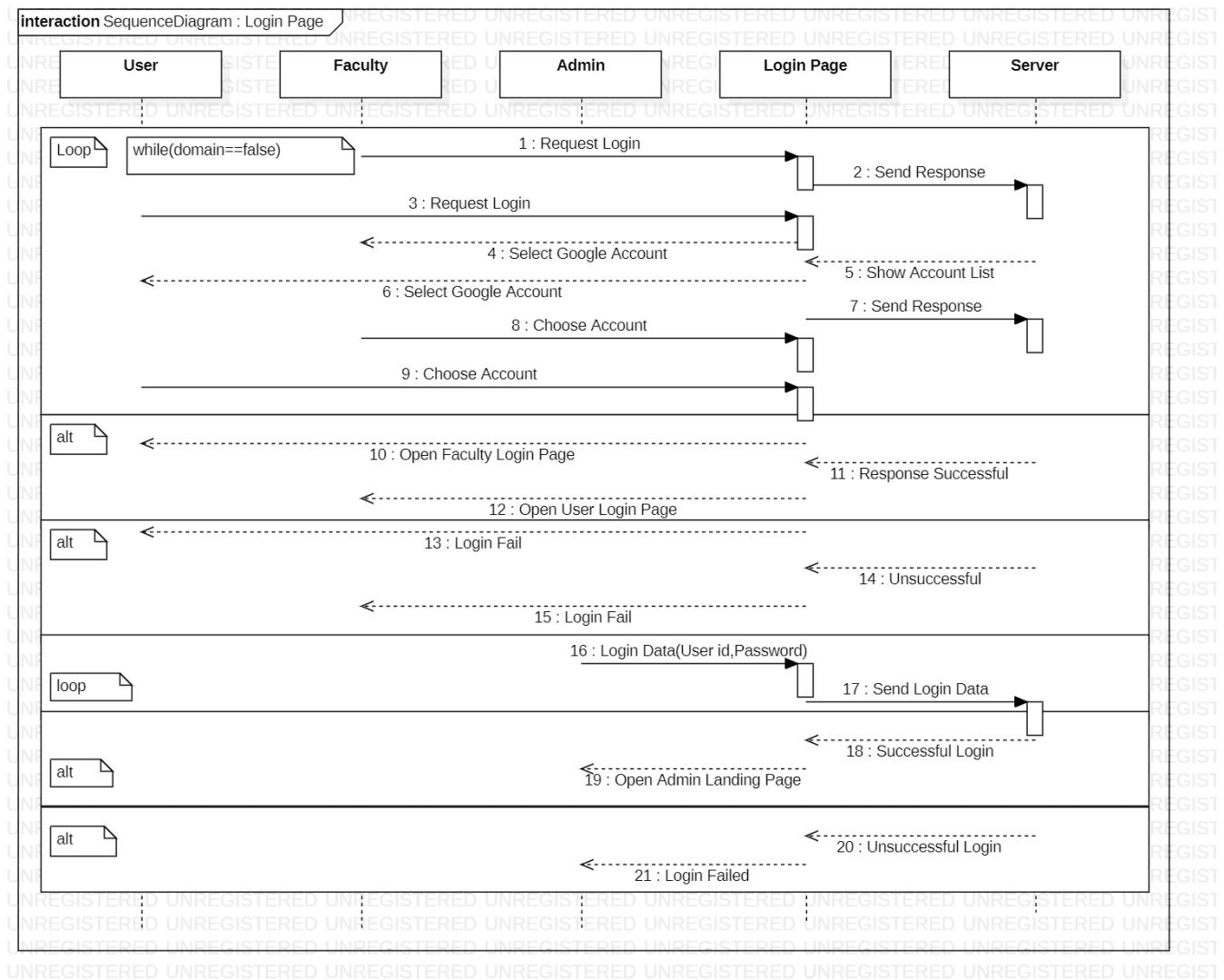
## Sequence Diagram : FAQ



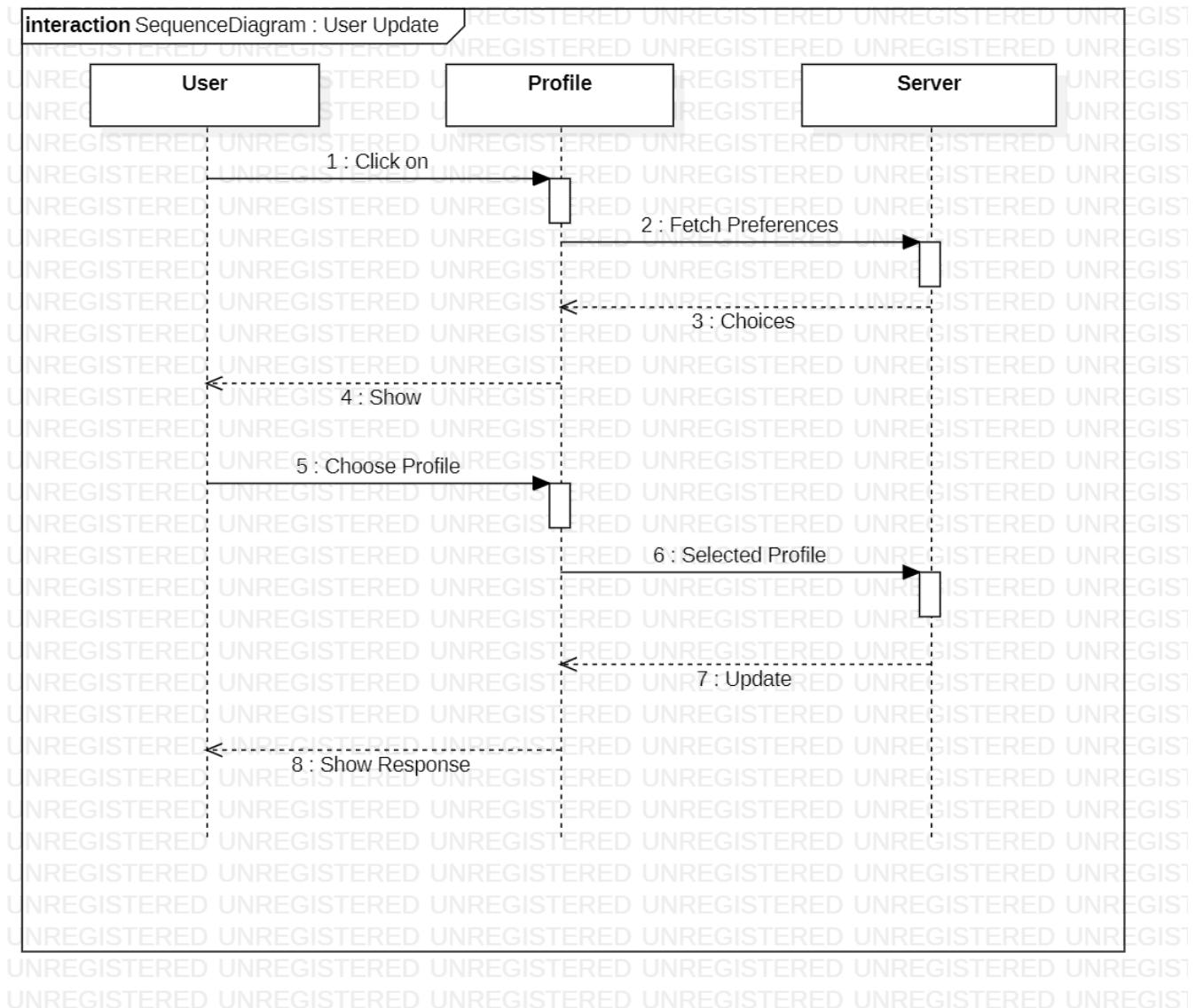
## Sequence Diagram : Home



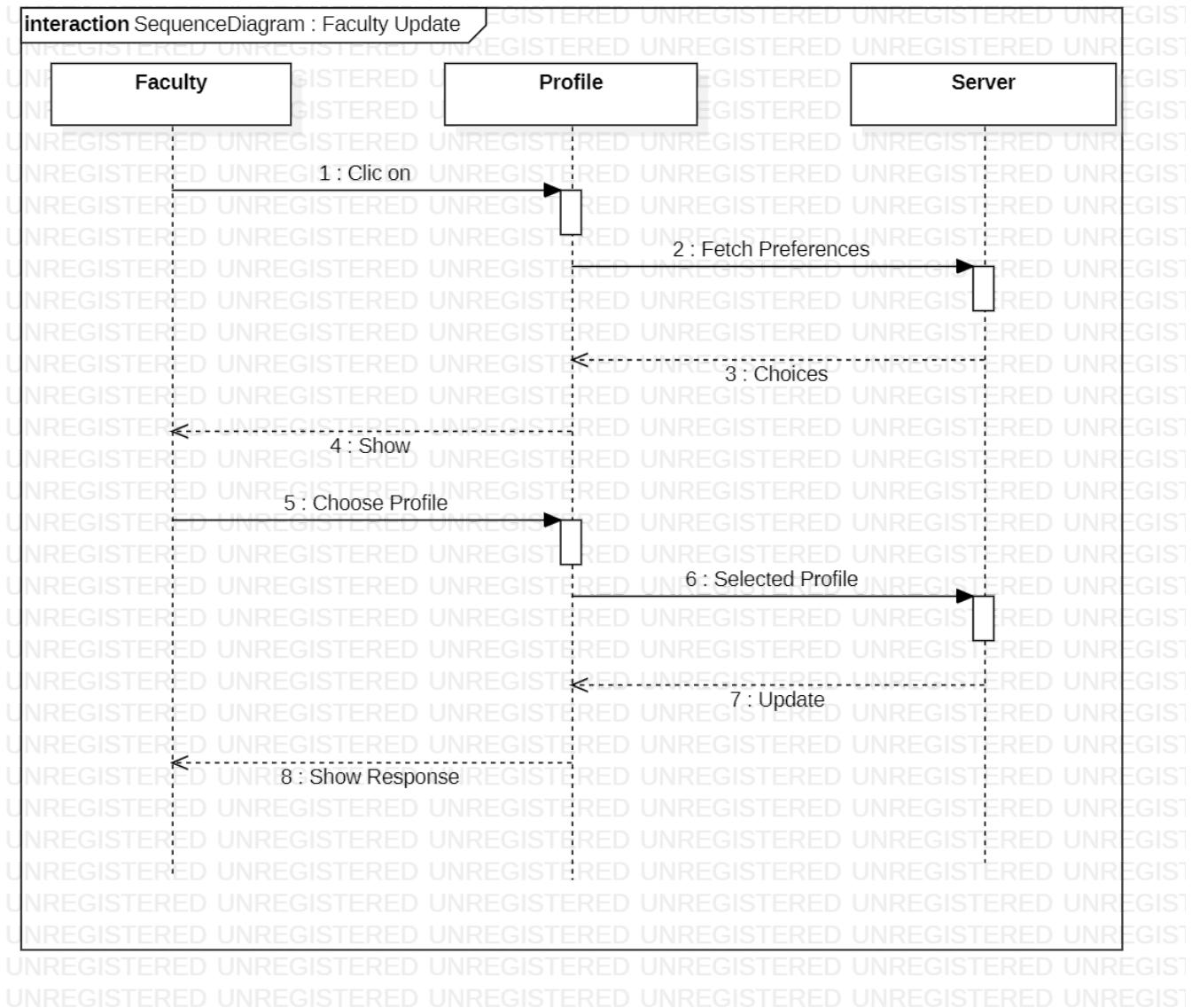
## Sequence Diagram : Login Page



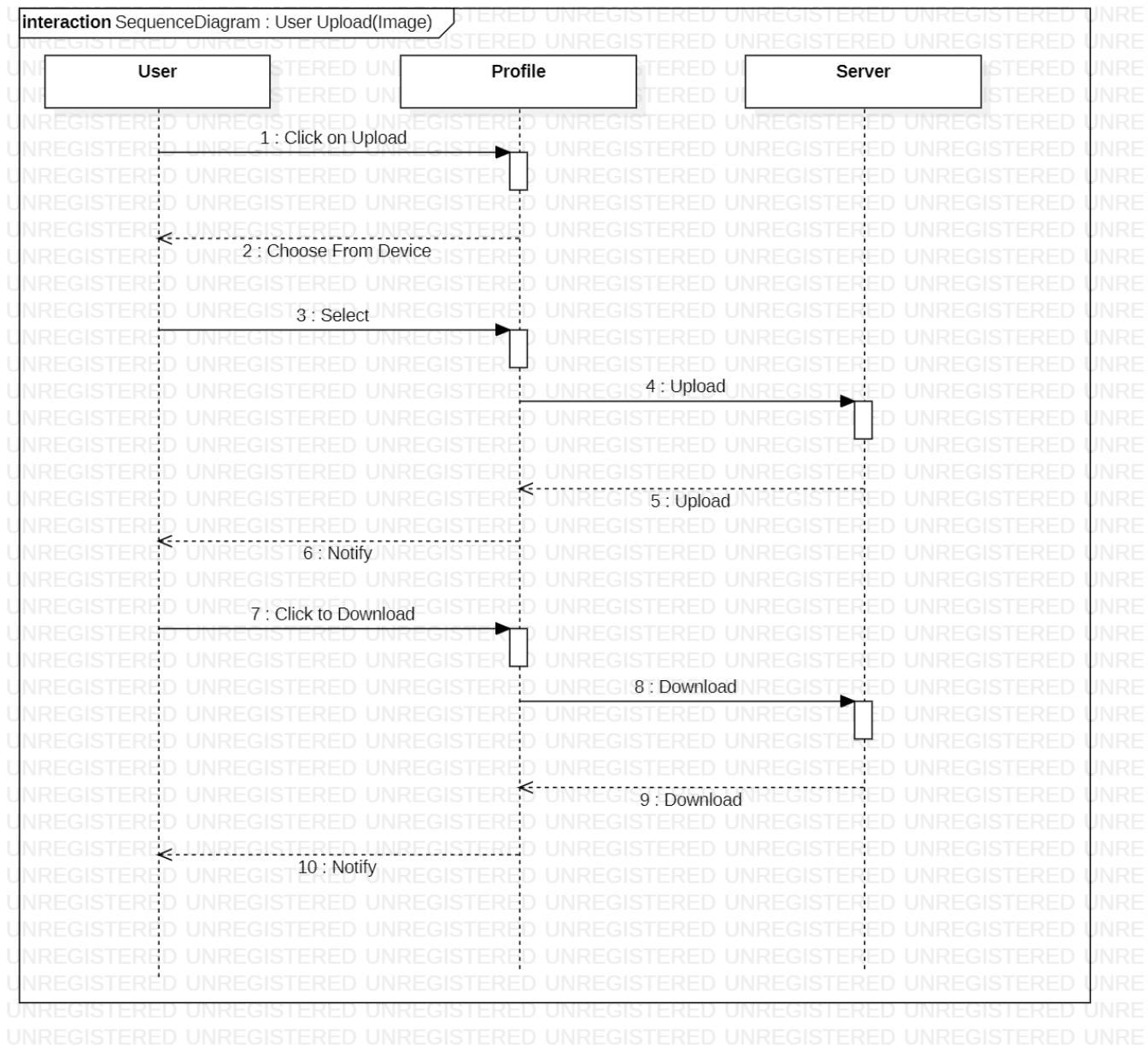
## Sequence Diagram : User Update



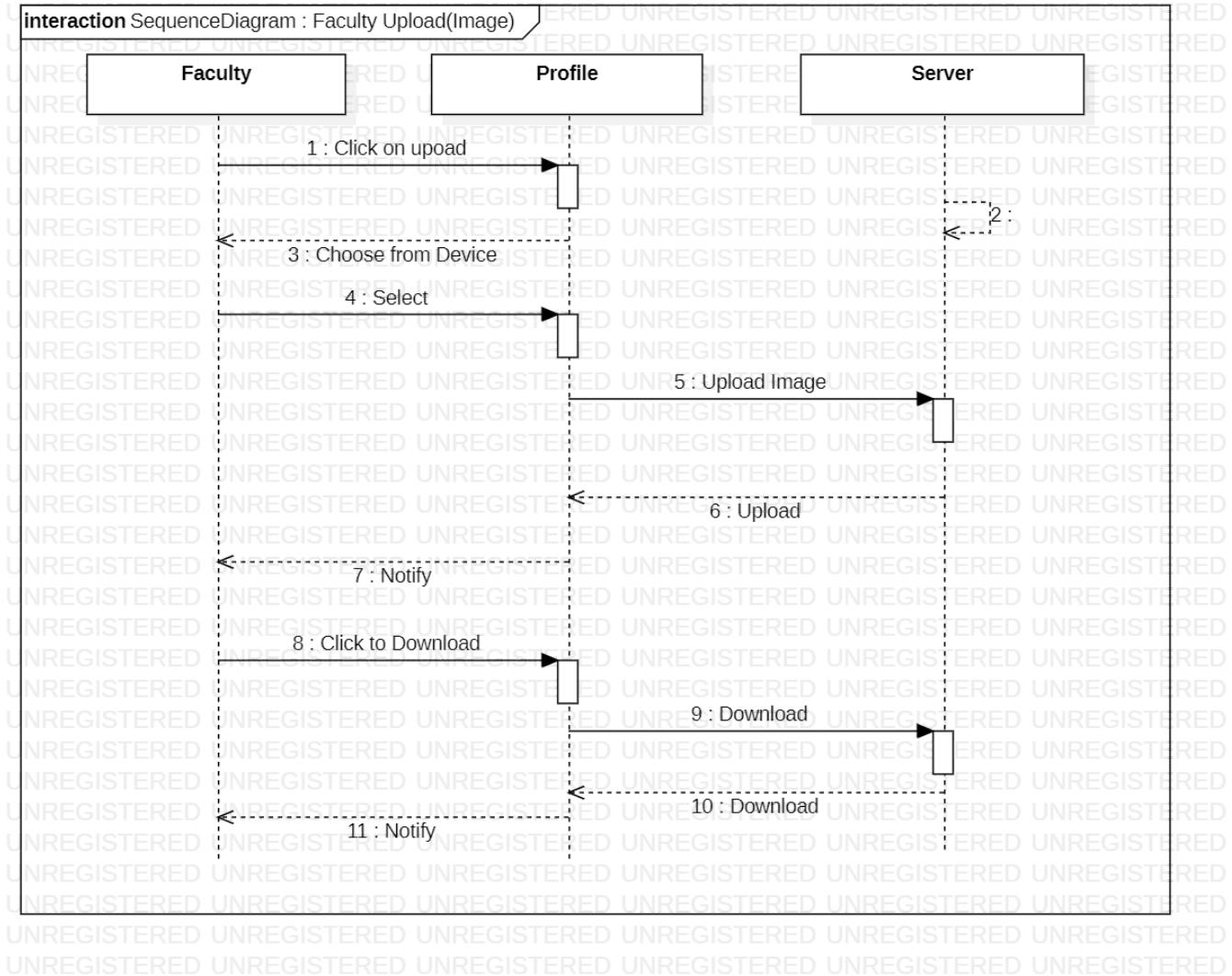
## Sequence Diagram : Faculty Update



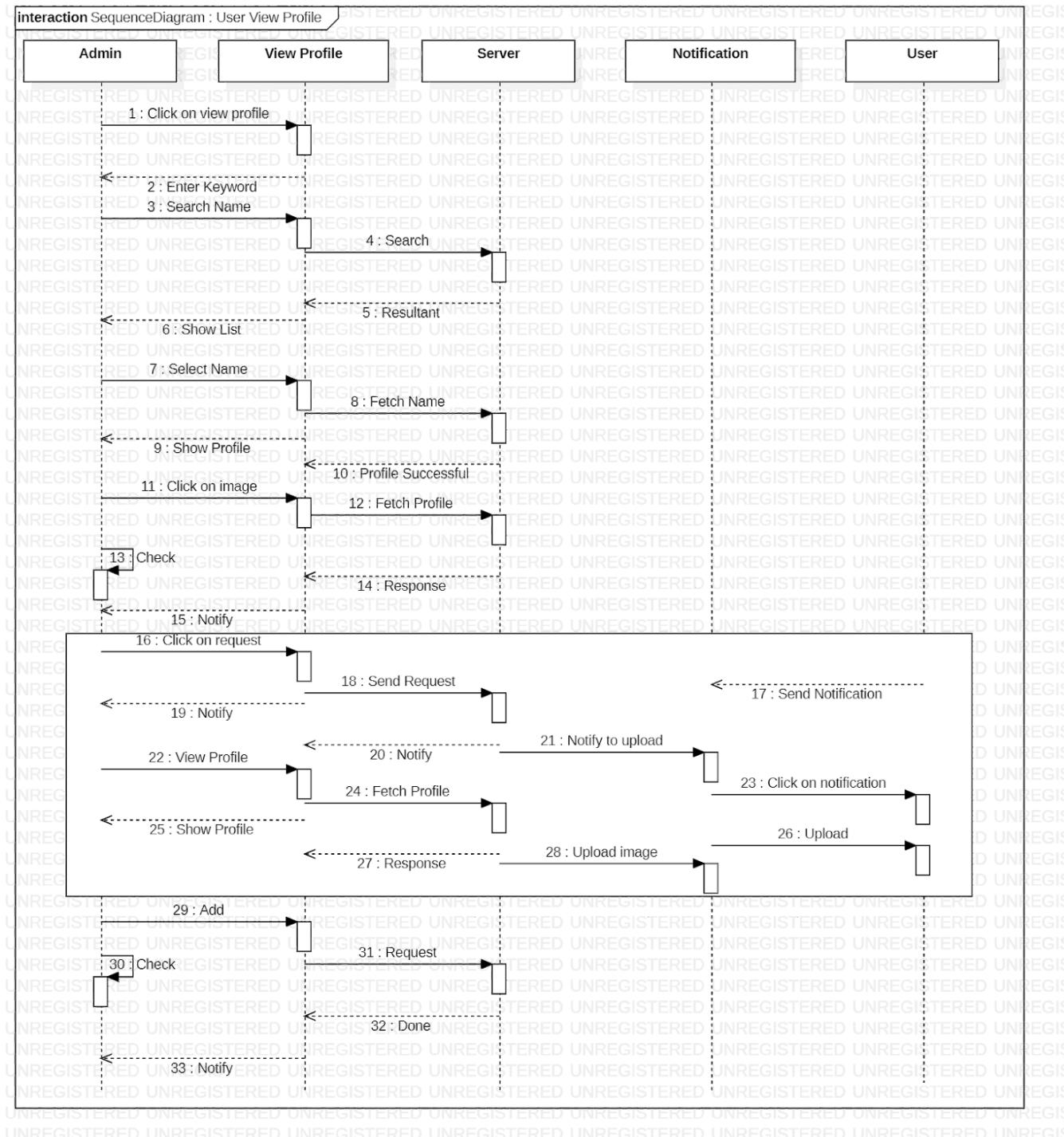
## Sequence Diagram : User Upload(Image)



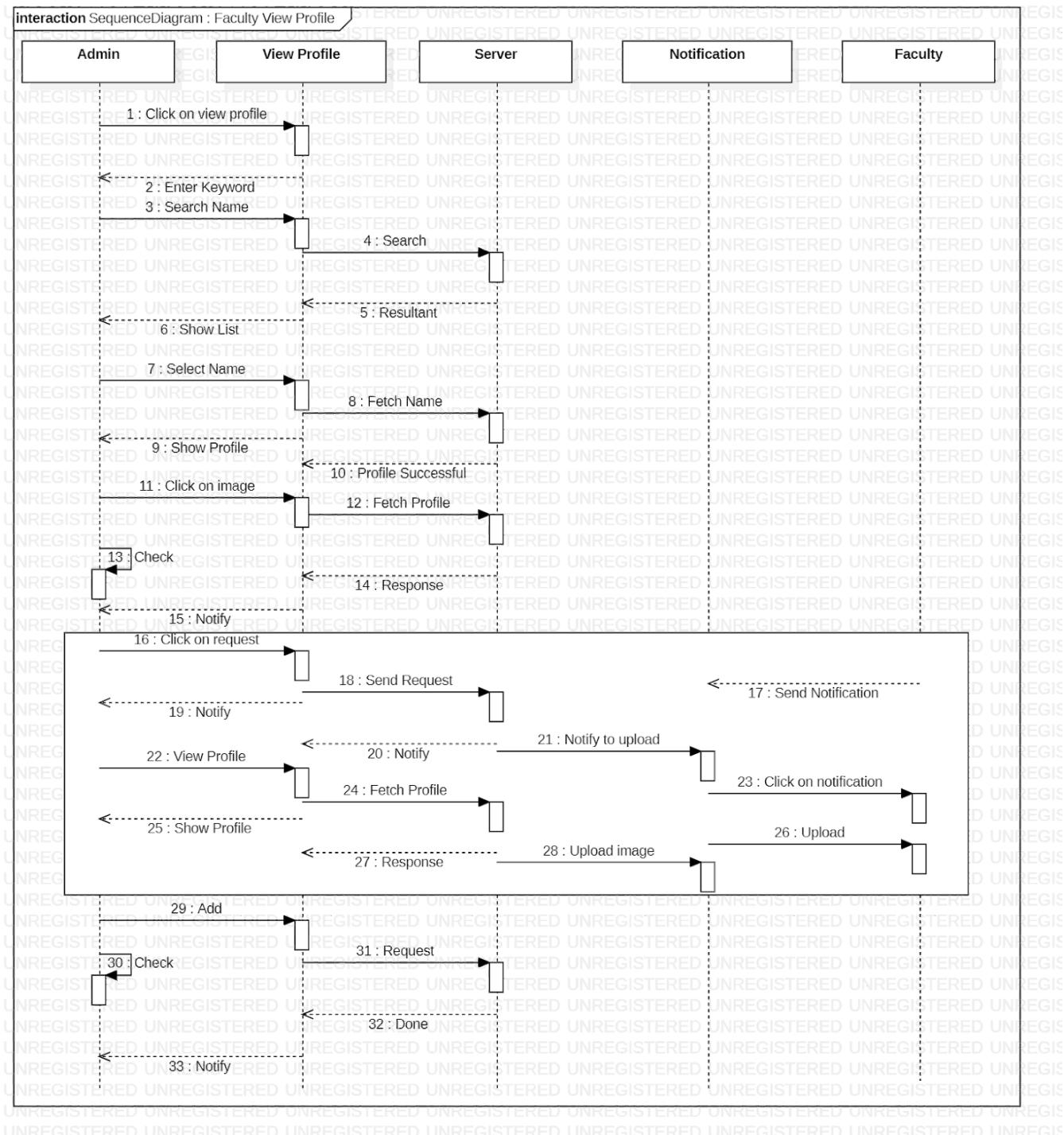
## Sequence Diagram: Faculty Upload(Image)



## Sequence Diagram : User View Profile

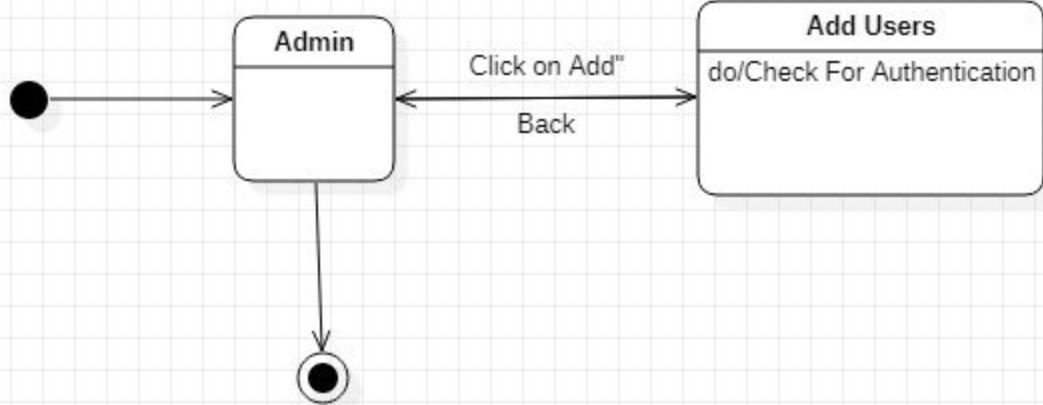


## **Sequence Diagram : Faculty View Profile**

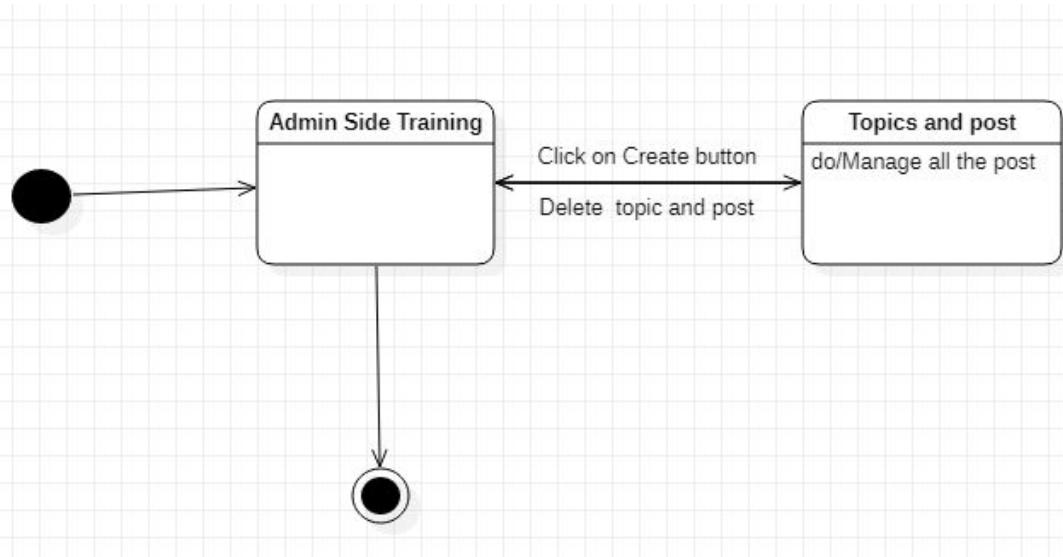


## **State Diagrams:**

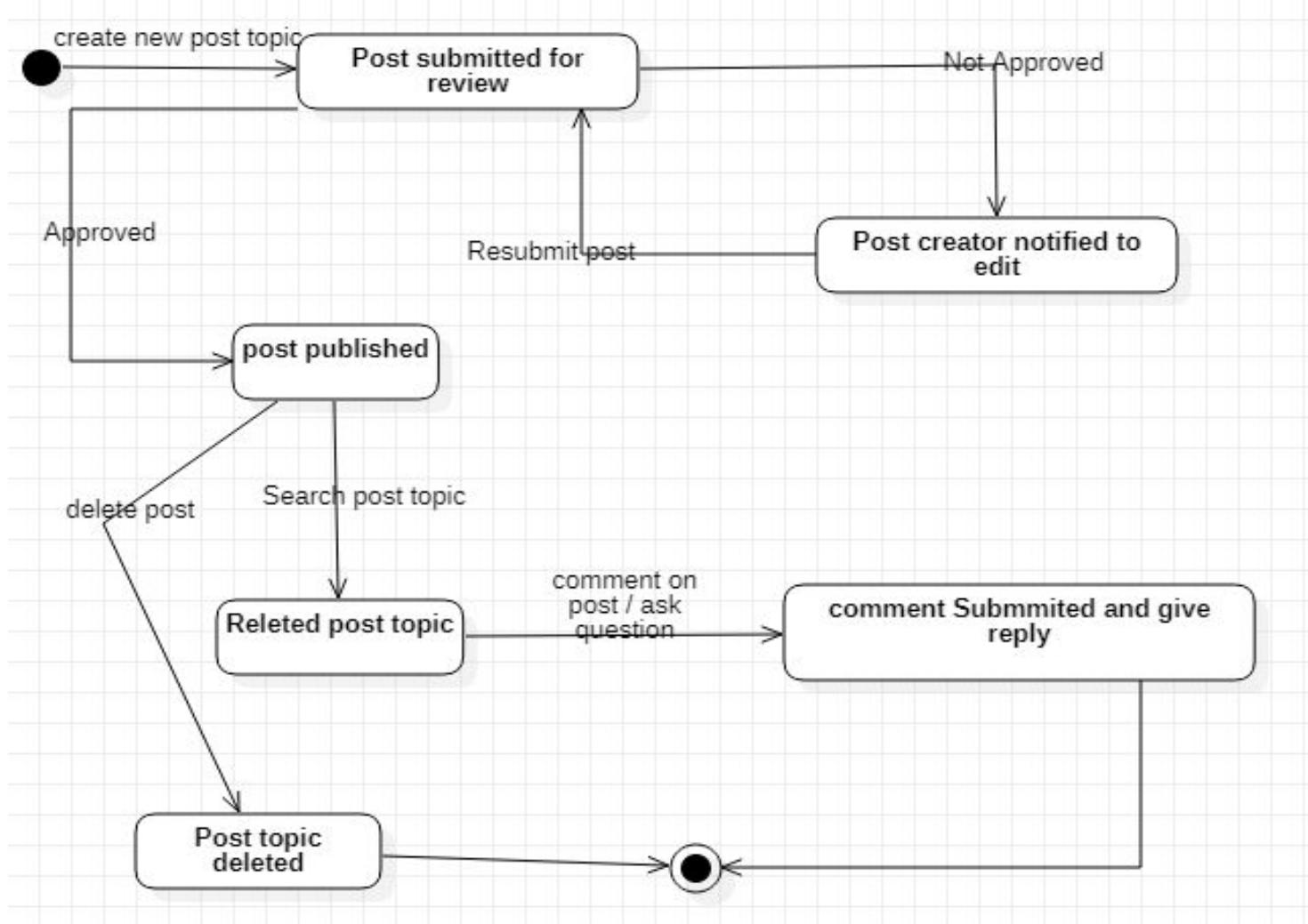
### **State Diagram:Admin About page**



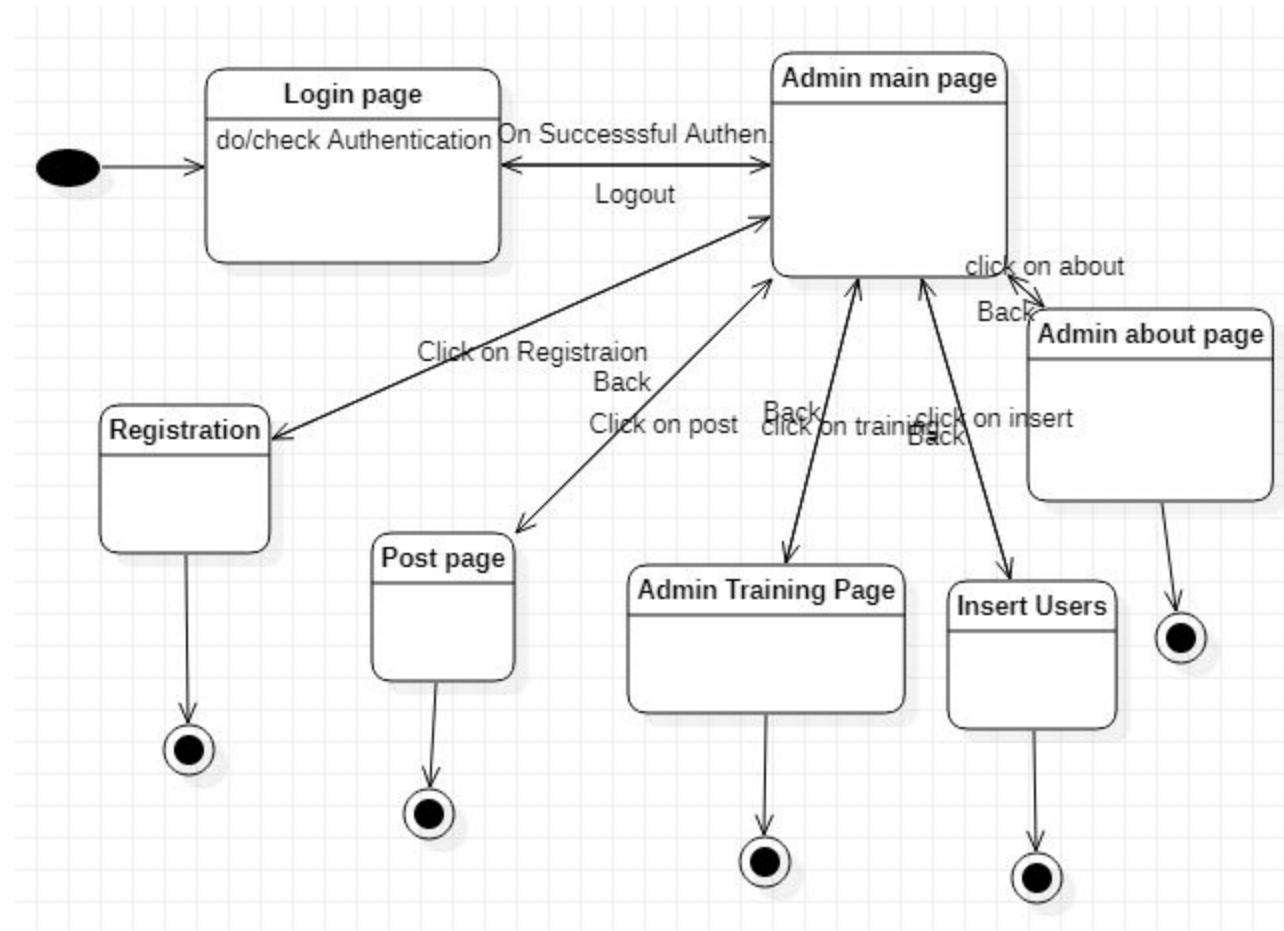
### **State Diagram:Admin Side Training**



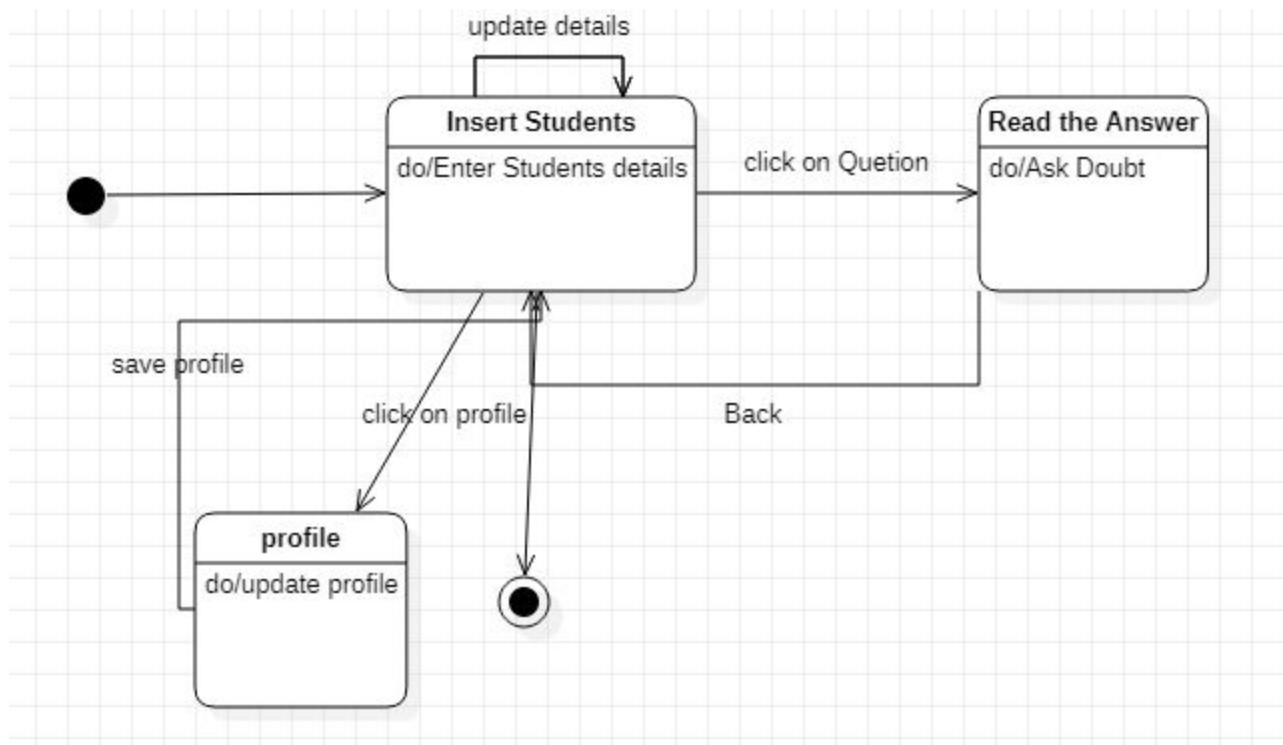
## State Diagram: Post



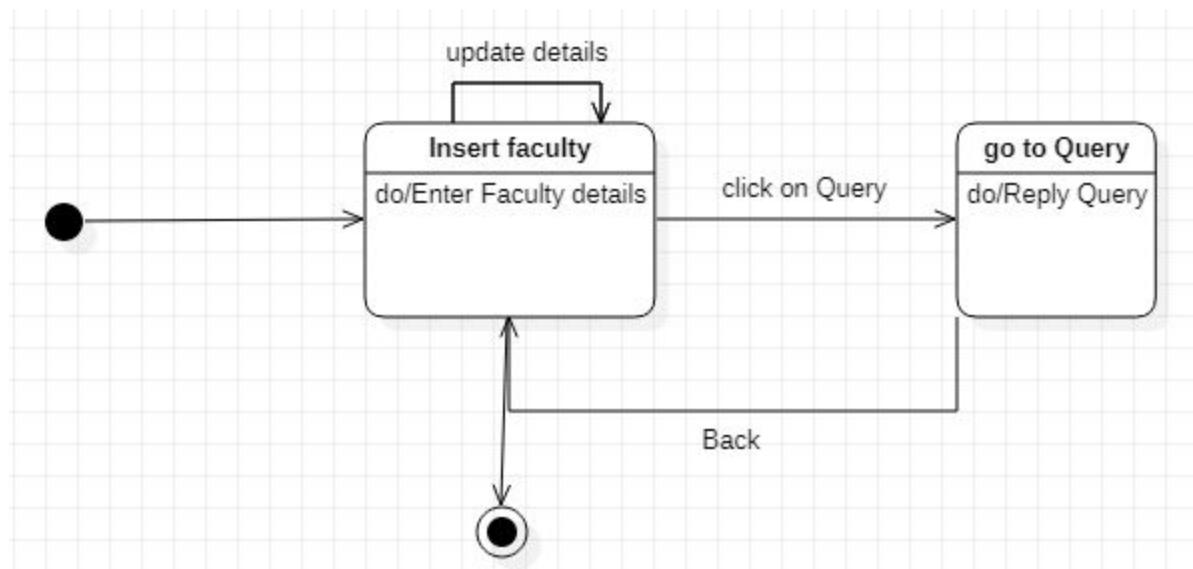
## State Diagram: Admin main login page



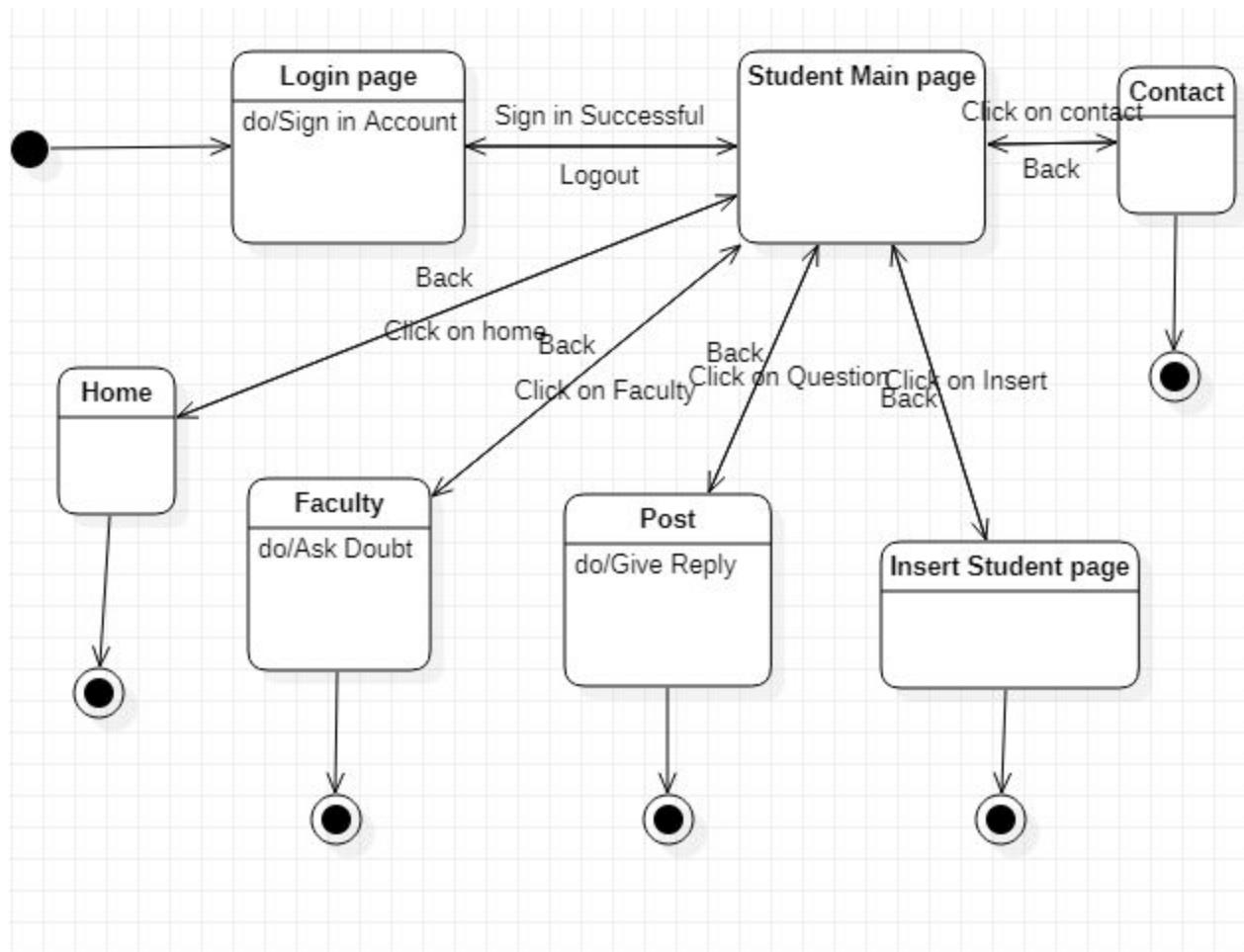
## State Diagram:Insert Student



## State Diagram : Faculty



## State Diagram: Student Main Page



## **3.1 Logical Architecture Description**

### **3.1.1 Sequence Diagram explanation:**

#### **Sequence Diagram:**

Sequence Diagrams are interaction diagrams that detail how operations are carried out.

They capture the interaction between objects in the context of a collaboration.

Sequence Diagrams are time focus and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent .

#### **Purpose of sequence diagram:**

- a.)Model high-level interaction between active objects in a system
- b.)Model the interaction between object instances within a collaboration that realizes a use case
- c.)Model the interaction between objects within a collaboration that realizes an operation
- d.)Either model generic interactions (showing all possible paths through the interaction) or specific instances of a interaction (showing just one path through the interaction)

#### **Object Dimension:**

a.)The horizontal axis shows the elements that are involved in the interaction

b.)Conventionally, the objects involved in the operation are listed from left to right according to when they take part in the message sequence.

However, the elements on the horizontal axis may appear in any order

#### **Time Dimension:**

The vertical axis represents time proceedings (or progressing) down the page.

Note that: Time in a sequence diagram is all about ordering, not duration.

The vertical space in an interaction diagram is not relevant for the duration of the interaction.

### **Sequence diagram at a glance:**

Sequence Diagrams show elements as they interact over time and they are organized according to object (horizontally) and time (vertically):

Arrow line signifies there is a send message taken place. Response is being shown by dotted arrows.

#### **3.1.2.1 AboutPage:**

Admin(Administrator) is responsible for maintaining the website and monitors all the activities happening on the website. On clicking the Add button, it lands up the user to the Add Data page, which takes input from the students and faculty and creates some buttons like Create\_topic, delete\_topic, delete question/answer . On clicking Back, it returns to the parent page.

#### **3.1.2.2 FAQ:**

Student posts question on this page, which later can be viewed by all other students and can be answered by the Admin. On being answered by Admin, the student also get notification for the same. admin add topics ,post and manage all the posts, if posts are not approved then also delete the post.

#### **3.1.2.3 Home:**

Admin post any changes or any doubt topic , which later is visible on the Home Page of the students. It also allows students to answer after being their profile. Allows users to enter credentials, which are being checked for authentication in the back-end. After being authenticated successfully, it lands up on the Admin main page. It has various buttons like post, Registration, admin about page, admin training page, and About to land up on their respective pages, and click on Back to return to the Admin main page. On clicking on Logout, it returns to the parent page.

#### **3.1.2.4 User Login Page:**

It allows students to login with their college enrollmentID(college email id) and Admin to login with the username and password that are being registered in the database already. It loops being on same page until the correct information is not given. Allows users to choose google account, which is being checked for authentication in the back-end. Students update your profile, go to Search topic,search\_question/answer,view\_question/answer,ask\_questions,. Users On clicking Logout, it returns to the parent page.

### **3.1.2.5 Faculty Login Page:**

It allows students to login with their college enrollmentID(college email id) and Admin to login with the username and password that are being registered in the database already. Allows users to choose google account, which is being checked for authentication in the back-end. On being authenticated successfully, it lands up the user on the Faculty main page. Faculties can give replies to the student Query.

### **3.1.2.6 Faculty Update Profile:**

Faculty can update their profile by either editing or adding to it.

### **3.1.2.7 User Update Profile:**

User can update their profile by either editing or adding to it.

### **3.1.2.8 User Upload Image :**

Users can upload image by choosing the appropriate file from their pc,which then can be viewed by Admin also.

### **3.1.2.9 View profile of others:**

User can view profile.He/She can add query or can view the query of others.He/She can also view answer of others or can add their reply to it.

### **3.1.2.10 View Profile:**

Admin can search for the name of the student, by the data being searched on the database and shown in response. Then the Admin can also

### **3.1.2 State Diagram Explanation:**

A state diagram used to describe the behavior of a system considering all the possible states of an object when an event occurs. This behavior is represented and analyzed in a series of events that occur in one or more possible states. Each diagram represents objects and tracks the various states of these objects throughout the system.

Initial state is being shown by starting with a black dot. Final State is being shown by the black dot surrounded by an empty circle.

**3.1.2.1 Admin About page:** On clicking the Add button, it lands up the user to the Add Data page, which takes input from the students and faculty and creates some buttons like Create\_topic, delete\_topic, delete question/answer . On clicking Back, it returns to the parent page.

**3.1.2.2 Admin Side Training:** On Admin Training page admin add topics ,post and manage all the posts,if posts are not approved then also delete the post.

**3.1.2.3 Admin main page:** Allows users to enter credentials, which are being checked for authentication in the back-end. After being authenticated successfully, it lands up on the Admin main page. It has various buttons like post, Registration, admin about page, admin training page, and About to land up on their respective pages, and click on Back to return to the Admin main page. On clicking on Logout, it returns to the parent page.

**3.1.2.4 Student Login:** Allows users to choose google account, which is being checked for authentication in the back-end. Students update your profile, go to Search topic, search\_question/answer, view\_question/answer, ask\_questions, . Users On clicking Logout, it returns to the parent page.

**3.1.2.5 Faculty Login:** Allows users to choose google account, which is being checked for authentication in the back-end. On being authenticated successfully, it lands up the user on the Faculty main page. Faculties can give replies to the student Query.

**3.1.2.6 Student main page:** After being authenticated successfully, it lands up on the Student main page. Now there are three button Contact Faculty, Post, Home page . After click on post they ask their Question , post Comments on Faculties replies.

**3.1.2.7 Post:** On clicking the post button, it lands on the post page, which requires input data from users(faculty/students). In post page clicking on Question and answer button corresponding, it lands up in the question/answer page, here we can put question on corresponding topics, and on answer button type answer for it(question).

## **Class Descriptions:-**

### **3.2 Class name: Admin**

**Description:** Manages all logins, logouts, reports and other details of authentication

#### **3.2.1 Method1: checkUser()**

**Input:** user\_id, user\_password

**Output:** Launch the activity

**Method Description:** It will check if the user details are valid or not and then it will allow access to the details of given username.

### **3.2.2 Method2: deleteUser()**

**Input:** user\_password

**Output:** Launch the activity

**Method Description:** It will deactivate the account and will delete all the information of the user permanently.

### **3.2.3 Method3: updateUser()**

**Input:** user\_id, user\_name, user\_mobile, user\_email, user\_username, user\_password, user\_address

**Output:** Launch the activity

**Method Description:** It will update the account details that have been edited by the user in the database.

### **3.2.4 Method4: addUser()**

**Input:** user\_id, user\_name, user\_mobile, user\_email, user\_username, user\_password, user\_address (all details of user)

**Output:** Launch the activity, Create Account

**Method Description:** This will add a new user to the database.

### **3.2.5 Method5: checkFaculty()**

**Input:** faculty\_id, faculty\_password

**Output:** Launch the activity

**Method Description:** It will check if the faculty details are valid or not and then it will allow access to the details.

### **3.2.6 Method6: deleteFaculty()**

**Input:** faculty\_password

**Output:** Launch the activity

**Method Description:** It will deactivate the account and will delete all the information of the faculty permanently.

### **3.2.7 Method7: updateFaculty()**

**Input:** faculty\_id, faculty\_name, faculty\_cabin\_no, faculty\_email, faculty\_mobile, faculty\_password

**Output:** Launch the activity

**Method Description:** It will update the account details that have been edited by the faculty in the database.

### **3.2.8 Method8: addFaculty()**

**Input:** faculty\_id, faculty\_name, faculty\_cabin\_no, faculty\_email, faculty\_mobile, faculty\_password (all details of faculty)

**Output:** Launch the activity, Create Account

**Method Description:** This will add a new faculty to the database.

### **3.2.9 Method9: logout()**

**Input:** admin\_id

**Output:** Logging out

**Method Description:** This will logout admin from the application.

### **3.2.10 Method10: login()**

**Input:** admin\_id,admin\_password

**Output:** Logging in

**Method Description:** This will login admin from the application.

## **3.3 Class name: Faculty**

**Description:** Manage all the operations of the faculties.

### **3.3.1 Method1: reportAdmin**

**Input:** report, id

**Output:** Report is sent to admin

**Method Description:** This will help communicating with the admin.

### **3.3.2 Method2: addQuestion**

**Input:** question, id

**Output:** Question is posted.

**Method Description:** This will put the question in the forum.

### **3.3.3 Method3: message**

**Input:** message, sender\_id, receiver\_id

**Output:** Message is sent.

**Method Description:** Help communicating with the individual.

### **3.3.4 Method4: viewAnswer**

**Input:** id

**Output:** Answer can now be seen

**Method Description:** This will show the answer.

### **3.3.5 Method5 :addAnswer**

**Input:** answer, id

**Output:** Answer is posted.

**Method Description:** This will put the answer in the forum.

### **3.3.6 Method6: addRemarks**

**Input:** remarks, sender\_id, getters\_id

**Output:** Remarks are given to post, query or answer.

**Method Description:** This will give remarks to a post, query or answer.

### **3.3.7 Method7: logout()**

**Input:** faculty\_id

**Output:** Logging out

**Method Description:** This will logout faculty from the application.

### **3.3.8 Method8: login()**

**Input:** faculty\_id, faculty\_password

**Output:** Logging in

**Method Description:** This will login faculty from the application.

### **3.4 Class name: Users**

**Description:** Manage all the operations of the users.

#### **3.4.1 Method1: reportAdmin**

**Input:** report, id

**Output:** Report is sent to admin

**Method Description:** This will help communicating with the admin.

#### **3.4.2 Method2: addQuery**

**Input:** query, id

**Output:** Query is posted.

**Method Description:** This will put the query in the forum.

#### **3.4.3 Method3: message**

**Input:** message, sender\_id, receiver\_id

**Output:** Message is sent.

**Method Description:** Help communicating with the individual.

#### **3.4.4 Method4: viewAnswer**

**Input:** id

**Output:** Answer can now be seen

**Method Description:** This will show the answer.

#### **3.3.5 Method5 :addAnswer**

**Input:** answer, id

**Output:** Answer is posted.

**Method Description:** This will put the answer in the forum.

#### **3.4.6 Method6: viewQuestion**

**Input:** id

**Output:** Question

**Method Description:** This will make users view the question.

#### **3.4.7 Method7: logout()**

**Input:** user\_id

**Output:** Logging out

**Method Description:** This will logout users from the application.

### **3.4.8 Method8: login()**

**Input:** user\_id, user\_password

**Output:** Logging in

**Method Description:** This will login users from the application.

## **3.5 Class name: Registration**

**Description:** Manage all the operations of the registrations.

### **3.5.1 Method1: viewRegistration()**

**Input:** registration\_id

**Output:** Launch the activity

**Method Description:** This will make it view the registration.

### **3.5.2 Method2: addRegistration()**

**Input:** registration\_id, registration\_user\_id, registration\_name, registration\_type, registration\_number, registration\_date, registration\_description

**Output:** Launch the activity

**Method Description:** This will add the registration.

### **3.5.3 Method3: editRegistration()**

**Input:** registration\_id, registration\_user\_id, registration\_name, registration\_type, registration\_number, registration\_date, registration\_description

**Output:** Launch the activity

**Method Description:** This will edit the registration.

### **3.5.4 Method4: deleteRegistration()**

**Input:** registration\_id

**Output:** Launch the activity

**Method Description:** This will delete the registration.

### **3.5.5 Method5: searchRegistration()**

**Input:** registration\_id

**Output:** Launch the activity

**Method Description:** This will search the registration.

### **3.5.6 Method6: saveRegistration()**

**Input:** registration\_id, registration\_user\_id, registration\_name, registration\_type, registration\_number, registration\_date, registration\_description

**Output:** Launch the activity

**Method Description:** This will save the registration.

## **3.6 Class name: Post**

**Description:** Manage all the operations of the posts.

### **3.6.1 Method1: answerPost()**

**Input:** post\_id, post\_user\_id, post\_description

**Output:** Launch the activity

**Method Description:** Post is answered by someone.

### **3.6.2 Method2: queryPost()**

**Input:** post\_user\_id, post\_title, post\_type, post\_description

**Output:** Launch the activity

**Method Description:** A query has been posted.

### **3.6.3 Method3: questionPost()**

**Input:** post\_user\_id, post\_title, post\_type, post\_description

**Output:** Launch the activity

**Method Description:** A question is posted.

## **3.7 Class name: Forum**

**Description:** Manage all the operations of the forum.

### **3.7.1 Method1: addForum()**

**Input:** forum\_id, forum\_name, forum\_type, forum\_description

**Output:** Launch the activity

**Method Description:** This will add the forum.

### **3.7.2 Method2: editRegistration()**

**Input:** forum\_id, forum\_name, forum\_type, forum\_description

**Output:** Launch the activity

**Method Description:** This will edit the forum.

### **3.7.3 Method3: deleteForum()**

**Input:** forum\_id

**Output:** Launch the activity

**Method Description:** This will delete the forum.

### **3.7.4 Method4: updateForum()**

**Input:** forum\_id, forum\_name, forum\_type, forum\_description

**Output:** Launch the activity

**Method Description:** This will update the forum.

### **3.7.5 Method5: searchForum()**

**Input:** forum\_id

**Output:** Launch the activity

**Method Description:** This will search the forum.

### **3.7.6 Method6: saveForum()**

**Input:** forum\_id, forum\_name, forum\_type, forum\_description

**Output:** Launch the activity

**Method Description:** This will save the forum.

## 4.0 Execution Architecture

Runtime environment required is any device supporting PHP, mysql, Html and features to connect mysql to php files.

### 4.1 Reuse and relationships to other products

NIL

## 5. Design decisions and tradeoffs

The design decision to use three screens separately for admin ,faculty and student is to provide encapsulation. It may have been possible to get all the information on one screen. However, using more than one screen will keep the data of admin separate from the data being accessed by students.

A possible tradeoff when considering links is to use buttons instead of items in the menu. This design decision - to use buttons for navigating between screens - is to enhance visibility. Screen readers handle links slightly differently than they do buttons. All links and buttons are tab-able, but pressing the Space key or Enter triggers a button, whereas pressing the Enter key only triggers a link.

Text links in the menu bar located at the bottom of the PDA's screen can be hard to see. The tradeoff for buttons with descriptive labels rather than text links in the menu bar will be that navigation from screen to screen will be easier. Descriptive labels will let the user know where he is navigating. Buttons are larger than the text links located in the menu bar of the PDA. Therefore, it is easier for the user to locate the mechanisms needed to navigate from screen to screen

## **6. Some Code Snippets**

Below are the some code snippets which we have written:

**Classes:-**

**6.1 Class name: Admin**

**6.1.1 Method1: checkUser()**

```

<?php
    if(!isset($_SESSION["fn"]))
        header("location:../index.php");
?>

<span style="float:right">
welcome<a href="aedit.php"><?php echo
$_SESSION["fn"];?></a>, [ <a href="logout.php">log-out</a> ]
</span>

```

### **6.1.2 Method2: deleteUser()**

```

//require("checkUser.php");
?>
<?php
$uid = $_GET['id'];
$qry = "DELETE FROM user WHERE user_id='".$uid."'";
$result = ExecuteQuery($qry);
if($result)
{header ("location:student_account.php");}
else
{echo "Not Done";}

```

?>

<?php require("footer.php")?>

### **6.1.3 Method3: updateUser()**

```

<?php
$sql = "UPDATE user SET username = '".$_POST['un']."", fullname =
".$_POST['fn']."",password='".$_POST['pwd']."' ,e_mail='".$_POST['e_mail']."' ,gender = '".$_POST['gender']."' ,
dob = '".$_POST['dob']."' ,uimg = '".$_POST['ima']."' ,address = '".$_POST['add']."' ,state =
".$_POST['sta']."' ,country = '".$_POST['cou']."' WHERE user_id =$_SESSION[uid]";
//echo $sql;
$result=ExecuteNonQuery($sql);
if($result == 1)
{header("location:apupdate.php");}
else
{header("location:aedit.php");}
?>
<?php require("footer.php")?>

```

### **6.1.4 Method5: checkFaculty()**

```

<?php session_start();
require("header.php");
require("checkUser.php");
echo "<body style='background: url(..res/images/im6.jpg);'>";?>
<script type="text/javascript">

```

```

document.getElementById("amanage").className="active";
</script>
<?php
    $sql="SELECT user_id, username, fullname, dob, e_mail from user where user.user_type =
'faculty' and user.user_acc_active = 0";
    $rows=ExecuteQuery($sql);
    echo "<table border='9'>";
    echo "<strong><tr><th>User
ID</th><th>Username</th><th>Fullname</th><th>DOB</th><th>Email</th><th>Approve</th></tr> </strong>";
    while($name_row=mysql_fetch_array($rows))
    {echo "<tr>";
    echo
"<td>$name_row[user_id]</td><td>$name_row[username]</td><td>$name_row[fullname]</td><td>$name_row[
dob]</td><td>$name_row[e_mail]</td><td><a href='a_fac.php?id=".$name_row[0]."'><img
src='..res/images/tick.png' class='imagedel'/'></a></td>";
    }
    echo "</table>";
?>
<?php require("footer.php")?>

```

## 6.1.5 Method5: logout()

```

<?php require("header.php");
echo "<body style='background: url(..res/images/im6.jpg);'>";?>
<?php
session_start();
session_destroy();
?>
<h1>log out</h1>
<p>You have logged out. <a href=".index.php">Click here</a> to login again.
</p>
<?php require("footer.php");?>

```

## 6.2 Class name: Faculty

### 6.2.1 Method 1: login()

```

<?php
if (isset($_GET["act"]))
if ($_GET["act"] == "invalid")
echo "Invalid User Id / password";
elseif ($_GET["act"] == "not_fac")
    echo "Faculty not approved yet";

?>

```

### 6.2.2 Method 2: add Question()

```

<script type="text/javascript">
function check(f)
{
if(f.head.value=="")
{
document.getElementById("a").innerHTML="Please,Enter the heading";
//alert("Please,Enter The Heading");
f.head.focus();
return false;

}
else if(f.ta.value=="")
{
document.getElementById("b").innerHTML="Please,Enter The Question";
//alert("Please,Enter The Question")}
f.ta.focus();
return false;
}
else
return true;
}

```

### **6.2.3 Method 3: add Answer()**

```

<script type="text/javascript">
function check(f)
{
if(f.ata.value=="")
{
document.getElementById("spuid").innerHTML = "Please, Enter Answer.";
f.ata.focus();
return false;
}
else
return true;
}
</script>

```

### **6.2.4 Method 4 : message()**

```

<script type="text/javascript">
function check(f)

```

```
{
if(f.tt.value=="")
{
document.getElementById("a").innerHTML="Please,Enter the message";
//alert("Please,Enter The Question");
f.tt.focus();
}
```

## 6.2.5 Method 5 : logout()

```
<?php require("header.php");
echo "<body style='background: url(..res/images/im6.jpg);'>";?>
<?php
session_start();
session_destroy();
?>
<h1>log out</h1>
<p>
    You have logged out. <a href="../index.php">Click here</a> to login again.
</p>
<?php require("footer.php");?>
```

## 6.3 Class name: Forum

### 6.3.1 Method 1 : addForum()

```
<?php session_start();
require("header.php");

if ($_SESSION["fn"] == null){
    header("location:unreg.php");
    exit();
}

require("checkUser.php");
echo "<body style='background: url(res/images/im6.jpg);'>";
?>

<script type="text/javascript">
    document.getElementById("aforum").className="active";
</script>

<?php
$topic = ExecuteQuery ("SELECT * FROM topic");
```

```

while ($r1 = mysql_fetch_array($topic))
{echo "<div class='heading'>$r1[topic_name]</div>";
 $topic = ExecuteQuery ("SELECT * FROM subtopic WHERE topic_id=$r1[topic_id]");
while ($r2 = mysql_fetch_array ($topic) )
{echo "<div class='box'>";
 echo "<div class='sub-heading'>
<a href='questions.php?id=$r2[subtopic_id]''> $r2[subtopic_name]</a>
</div>";
 echo "<p>$r2[subtopic_description]</p>";
 echo "</div>";
}
}
?>
```

<?php require("footer.php"); ?>

## 6.3 Class nameRegistration

### 6.3.1 Method 1 : addRegistration()

```

<?php require("header.php");
echo "<body style='background: url(res/images/im6.jpg);'>"; ?>
<script type="text/javascript">
    function check(form1)
    {
        if(
            form1.u_name.value == "" ||
            form1.f_name.value == "" ||
            form1.pwd.value == "" ||
            form1.e_mail.value == ""||
            form1.gender.value == ""|||
            form1.dob.value == ""|||
            form1.add.value == ""|||
            form1.sta.value == "" ||
            form1.cou.value == "" )
        {

            if (form1.u_name.value == "")
            {
                document.getElementById("a").innerHTML = "Please, Enter user name.";
                //alert("Please, Enter The Username");
                form1.u_name.focus();
            }
        }
    }
}</script>
```

```
    }
else
{
    document.getElementById("a").innerHTML = "";
//alert("Please, Enter The Username");
form1.u_name.focus();

}
if (form1.f_name.value == "")
{
    document.getElementById("b").innerHTML = "Please, Enter full name.";
//alert ("Please,Please Enter The Fullname");
form1.f_name.focus();
}
else
{
    document.getElementById("b").innerHTML = "";
//alert ("Please,Please Enter The Fullname");
form1.f_name.focus();
}
if (form1.pwd.value == "")
{
    document.getElementById("c").innerHTML = "Please, Enter password.";
//alert ("Please,Please Enter The Password");
form1.pwd.focus();
}
else
{
    document.getElementById("c").innerHTML = "";
//alert ("Please,Please Enter The Password");
form1.pwd.focus();

}

if (form1.e_mail.value == "")
{
    document.getElementById("d").innerHTML = "Please, Enter e-mail
address.";
//alert ("Please,Please Enter The E-mail Address");
form1.e_mail.focus();
}
else
{
```

```
        document.getElementById("d").innerHTML = "";
        //alert ("Please,Please Enter The E-mail Address");
        form1.e_mail.focus();
    }

    if (form1.dob.value == "")
    {
        document.getElementById("e").innerHTML = "Please, Enter date of
birth.";
        //
        alert ("Please,Please Enter The Date Of Birth");
        form1.dob.focus();

    }
    else
    {
        document.getElementById("e").innerHTML = "";
        alert ("Please,Please Enter The Date Of Birth");
        form1.dob.focus();

    }
    if (form1.add.value == "")
    {
        document.getElementById("f").innerHTML = "Please, Enter address.";
        //alert ("Please,Please Enter The Address");
        form1.add.focus();

    }
    else
    {
        document.getElementById("f").innerHTML = "";
        //alert ("Please,Please Enter The Address");
        form1.add.focus();
    }
    if (form1.sta.value == "")
    {
        document.getElementById("g").innerHTML = "Please, Enter state.";
        //alert ("Please,Please Enter The State");
        form1.sta.focus();

    }
    else
    {
        document.getElementById("g").innerHTML = "";
```

```

        form1.sta.focus();

    }
    if (form1.cou.value == "")
    {
        document.getElementById("h").innerHTML = "Please, Enter country.";
        form1.cou.focus();

    }
    else
    {
        document.getElementById("h").innerHTML = "";
        form1.cou.focus();
    }
    return false;
}
else
return true;
}
</script>

```

```

<h1>Register Student</h1>
<form action="registerH.php" method="post" onsubmit="return check(form1)"
enctype="multipart/form-data" name = "form1">
<table>
<tr><td>Username</td><td>:</td><td><input type="text" name="u_name" ><span id='a' style="color: red;"></span></td></tr>
<tr><td>Fullname</td><td>:</td><td><input type="text" name="f_name"><span id='b' style="color: red;"></span></td></tr>
<tr><td>Password</td><td>:</td><td><input type="password" name="pwd"><span id='c' style="color: red;"></span></td></tr>
<tr><td>E_Mail</td><td>:</td><td><input type="email"
pattern="[a-zA-Z0-9.-]{1,}@[a-zA-Z.-]{2,}[.]{1}[a-zA-Z]{2,}" name="e_mail"><span id='d' style="color: red;"></span></td></tr>
<tr><td>Gender</td><td>:</td><td><input type="radio" name="gender" value="1"
checked="checked">male <input type="radio" name="gender" value="2">female<span id='spuid'
style="color: red;"></span></td></tr>
<tr><td>Date Of Birth</td><td>:</td><td><input type="text" name="dob" ><span id='e' style="color: red;"></span></td></tr>
<tr><td>Image</td><td>:</td><td><input type="file" name="ima"></td></tr>

```

```

<tr><td>Address</td><td></td><td><textarea rows="3" cols="15" name="add"></textarea><span id='f' style="color: red;"></span></td></tr>
<tr><td>State</td><td></td><td><input type="text" name="sta"><span id='g' style="color: red;"></span></td></tr>
<tr><td>Country</td><td></td><td><input type="text" name="cou"><span id='h' style="color: red;"></span></td></tr>

<tr><td><input type="submit" value="Submit"></td><td></td><td><input type="reset" value="Reset"></td></tr></table></form>

<?php require("footer.php"); ?>

```

## Java Script : Script.js

/\* begin Page \*/

```

var artEventHelper = {
    'bind': function(obj, evt, fn) {
        if (obj.addEventListener)
            obj.addEventListener(evt, fn, false);
        else if (obj.attachEvent)
            obj.attachEvent('on' + evt, fn);
        else
            obj['on' + evt] = fn;
    }
};

var userAgent = navigator.userAgent.toLowerCase();
var browser = {
    version: (userAgent.match(/.+(?:rv|it|ra|ie)[V: ]([\d.]+)\/|[])[1],
    safari: /webkit/.test(userAgent) && !/chrome/.test(userAgent),
    chrome: /chrome/.test(userAgent),
    opera: /opera/.test(userAgent),
    msie: /msie/.test(userAgent) && !/opera/.test(userAgent),
    mozilla: /mozilla/.test(userAgent) && !/(compatible|webkit)/.test(userAgent)
};

var artLoadEvent = (function() {

```

```

var list = [];

var done = false;
var ready = function() {
    if (done) return;
    done = true;
    for (var i = 0; i < list.length; i++)
        list[i]();
};

if (document.addEventListener && !browser.opera)
    document.addEventListener('DOMContentLoaded', ready, false);

if (browser.msie && window == top) {
    (function() {
        try {
            document.documentElement.doScroll('left');
        } catch (e) {
            setTimeout(arguments.callee, 10);
            return;
        }
        ready();
    })();
}

if (browser.opera) {
    document.addEventListener('DOMContentLoaded', function() {
        for (var i = 0; i < document.styleSheets.length; i++) {
            if (document.styleSheets[i].disabled) {
                setTimeout(arguments.callee, 10);
                return;
            }
        }
        ready();
    }, false);
}

if (browser.safari) {
    var numStyles;
    (function() {
        if (document.readyState != 'loaded' && document.readyState != 'complete') {

```

```

        setTimeout(arguments.callee, 10);
        return;
    }
    if ('undefined' == typeof numStyles) {
        numStyles = document.getElementsByTagName('style').length;
        var links = document.getElementsByTagName('link');
        for (var i = 0; i < links.length; i++) {
            numStyles += (links[i].getAttribute('rel') == 'stylesheet') ? 1 : 0;
        }
        if (document.styleSheets.length != numStyles) {
            setTimeout(arguments.callee, 0);
            return;
        }
    }
    ready();
})();
}

artEventHelper.bind(window, 'load', ready);

return ({
    add: function(f) {
        list.push(f);
    }
})
})();

(function() {
    // fix ie blinking
    var m = document.uniqueID && document.compatMode && !window.XMLHttpRequest &&
document.execCommand;
    try { if (!!m) { m('BackgroundImageCache', false, true); } }
    catch (oh) { };
})();

function xGetElementsByClassName(clsName, parentEle, tagName) {
    var elements = null;
    var found = [];
    var s = String.fromCharCode(92);
    var re = new RegExp('(?:^|' + s + 's+)\\' + clsName + '(?:\\$|' + s + 's+)');
    if (!parentEle) parentEle = document;
    if (!tagName) tagName = '*';
    elements = parentEle.getElementsByTagName(tagName);
}

```

```

if (elements) {
    for (var i = 0; i < elements.length; ++i) {
        if (elements[i].className.search(re) != -1) {
            found[found.length] = elements[i];
        }
    }
}
return found;
}

var styleUrlCached = null;
function GetStyleUrl() {
    if (null == styleUrlCached) {
        var ns;
        styleUrlCached = "";
        ns = document.getElementsByTagName('link');
        for (var i = 0; i < ns.length; i++) {
            var l = ns[i];
            if (l.href && /style\\.css(\\?.*)?$/\\.test(l.href)) {
                return styleUrlCached = l.href.replace(/style\\.css(\\?.*)?$/, " ");
            }
        }
    }

    ns = document.getElementsByTagName('style');
    for (var i = 0; i < ns.length; i++) {
        var matches = new
RegExp('import\\s+("[^"]+\\V)style\\\\.css"').exec(ns[i].innerHTML);
        if (null != matches && matches.length > 0)
            return styleUrlCached = matches[1];
    }
}
return styleUrlCached;
}

function fixPNG(element) {
    if (/MSIE (5\\.5|6).+Win/.test(navigator.userAgent)) {
        var src;
        if (element.tagName == 'IMG') {
            if (/\\.png$/.test(element.src)) {
                src = element.src;
                element.src = GetStyleUrl() + 'images/spacer.gif';
            }
        }
    }
}

```

```

        else {
            src = element.currentStyle.backgroundImage.match(/url\("(.*\.png)"\)/i);
            if (src) {
                src = src[1];
                element.runtimeStyle.backgroundImage = 'none';
            }
        }
        if (src) element.runtimeStyle.filter =
"progid:DXImageTransform.Microsoft.AlphaImageLoader(src='" + src + "')";
    }
}

function artHasClass(el, cls) {
    return (el && el.className && (' ' + el.className + ' ').indexOf(' ' + cls + ' ') != -1);
}/* end Page */

/* begin Menu */
function Insert_Separators() {
    var menus = xGetElementsByClassName("art-menu", document);
    for (var i = 0; i < menus.length; i++) {
        var menu = menus[i];
        var childNodes = menu.childNodes;
        var listItems = [];
        for (var j = 0; j < childNodes.length; j++) {
            var el = childNodes[j];
            if (String(el.tagName).toLowerCase() == "li") listItems.push(el);
        }
        for (var j = 0; j < listItems.length - 1; j++) {
            var span = document.createElement('span');
            span.className = 'art-menu-separator';
            var li = document.createElement('li');
            li.appendChild(span);
            listItems[j].parentNode.insertBefore(li, listItems[j].nextSibling);
        }
    }
}
artLoadEvent.add(Insert_Separators);

function Menu_IE6Setup() {
    var isIE6 = navigator.userAgent.toLowerCase().indexOf("msie") != -1
    && navigator.userAgent.toLowerCase().indexOf("msie 7") == -1;
    if (!isIE6) return;
    var aTmp2, i, j, oLI, aUL, aA;
}

```

```

var aTmp = xGetElementsByClassName("art-menu", document, "ul");
for (i = 0; i < aTmp.length; i++) {
    aTmp2 = aTmp[i].getElementsByTagName("li");
    for (j = 0; j < aTmp2.length; j++) {
        oLI = aTmp2[j];
        aUL = oLI.getElementsByTagName("ul");
        if (aUL && aUL.length) {
            oLI.UL = aUL[0];
            aA = oLI.getElementsByTagName("a");
            if (aA && aA.length)
                oLI.A = aA[0];
            oLI.onmouseenter = function() {
                this.className += " art-menuhover";
                this.UL.className += " art-menuhoverUL";
                if (this.A) this.A.className += " art-menuhoverA";
            };
            oLI.onmouseleave = function() {
                this.className = this.className.replace(/art-menuhover/, "");
                this.UL.className =
this.UL.className.replace(/art-menuhoverUL/, "");
                if (this.A) this.A.className =
this.A.className.replace(/art-menuhoverA/, "");
            };
        };
    }
}
}

artLoadEvent.add(Menu_IE6Setup);
/* end Menu */

/* begin Button */
function artButtonsSetupJsHover(className) {
    var tags = ["input", "a", "button"];
    for (var j = 0; j < tags.length; j++){
        var buttons = xGetElementsByClassName(className, document, tags[j]);
        for (var i = 0; i < buttons.length; i++) {
            var button = buttons[i];
            if (!button.tagName || !button.parentNode) return;
            if (!artHasClass(button.parentNode, 'art-button-wrapper')) {
                if (!artHasClass(button, 'art-button')) button.className += ' art-button';
                var wrapper = document.createElement('span');
                wrapper.className = "art-button-wrapper";
                if (artHasClass(button, 'active')) wrapper.className += ' active';
            }
        }
    }
}

```

```

        var spanL = document.createElement('span');
        spanL.className = "l";
        spanL.innerHTML = " ";
        wrapper.appendChild(spanL);
        var spanR = document.createElement('span');
        spanR.className = "r";
        spanR.innerHTML = " ";
        wrapper.appendChild(spanR);
        button.parentNode.insertBefore(wrapper, button);
        wrapper.appendChild(button);
    }
    artEventHelper.bind(button, 'mouseover', function(e) {
        e = e || window.event;
        wrapper = (e.target || e.srcElement).parentNode;
        wrapper.className += " hover";
    });
    artEventHelper.bind(button, 'mouseout', function(e) {
        e = e || window.event;
        button = e.target || e.srcElement;
        wrapper = button.parentNode;
        wrapper.className = wrapper.className.replace(/hover/, "");
        if (!artHasClass(button, 'active')) wrapper.className =
            wrapper.className.replace(/active/, "");
    });
    artEventHelper.bind(button, 'mousedown', function(e) {
        e = e || window.event;
        button = e.target || e.srcElement;
        wrapper = button.parentNode;
        if (!artHasClass(button, 'active')) wrapper.className += " active";
    });
    artEventHelper.bind(button, 'mouseup', function(e) {
        e = e || window.event;
        button = e.target || e.srcElement;
        wrapper = button.parentNode;
        if (!artHasClass(button, 'active')) wrapper.className =
            wrapper.className.replace(/active/, "");
    });
}
}

artLoadEvent.add(function() { artButtonsSetupJsHover("art-button"); });
/* end Button */

```

# ScreenShots for some GUI/forms created.

- FORM FOR STUDENT TO REGISTER

The screenshot shows a web browser window with three tabs: "localhost / localhost / ten" (active), "DBMS Discussion Forum", and "Untitled presentation - Google Slides". The address bar shows "localhost/Discussion-Forum-master/register.php". The page title is "Discussion Portal". A banner at the top features a woman with a backpack and the text "Discussion Portal". Below the banner is a navigation menu with links: Home, About Us, Forum, and Message. The main content area is titled "Register Student". It contains the following form fields:

Username :	<input type="text"/>
Fullname :	<input type="text"/>
Password :	<input type="password"/>
E_Mail :	<input type="text"/>
Gender :	<input checked="" type="radio"/> male <input type="radio"/> female
Date Of Birth :	<input type="text"/>
Image :	<input type="file"/> Choose file (No file chosen)
Address :	<input type="text"/>
State :	<input type="text"/>
Country :	<input type="text"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

At the bottom right, there is a "Contact Us" section with the following information:

Name :	Team Quest
Contact No :	901----97

- FORM FOR FACULTY TO REGISTER

Discussion Portal

Home    About Us    Forum    Message

## Register Teacher

Username :

Fullname :

Password :

E-Mail :

Gender :  male  female

Date Of Birth :

Image :  No file chosen

Address :

State :

Country :

Contact Us  
Name :  Team Quest :

- **Registration process:**

Welcome Vikas Patel, [ log-out ]

User Name :

Full Name :

Password :

E-Mail :

Gender :  male  female

Date Of Birth :

Image :  No file chosen

Address :

State :

Country :

Contact Us  
Name : Team Quest  
Contact No : 901----97  
E-Mail Add : iit2018119@iita.ac.in

- After Login through Registered User

The screenshot shows a web browser window with three tabs: "localhost / localhost/tec", "Online Discussion Forum", and "Untitled presentation - Google Slides". The main content area displays the "DBMS Discussion Forum" homepage. At the top, there is a banner featuring a woman with a backpack. Below the banner, a navigation menu includes "Home", "Forum", "Manage", and "Messages". A "welcome" message for "Utkarsh Gupta" with a log-out link is visible. A sidebar on the left says "My Answered". The main content area has a title "Table connectivity" and a post from "dbms" dated "2020-04-03 15:12:44". A contact information block at the bottom right lists: Name : dbms, Contact No : 901-----97, E-Mail Add : dbms@gmail.com.

- We can go to “reported post”, post may be deleted by admin

The screenshot shows a web browser window with three tabs: "localhost / localhost/tec", "Online Discussion Forum", and "Untitled presentation - Google Slides". The main content area displays the "DBMS Discussion Forum" homepage. The "Manage" tab is active, showing options like "Create a New Thread" and "Reported Posts". A "Reported Posts" table is displayed, showing one row with Thread ID 8 and Heading 16. The table also includes columns for Post Details, Date/Time, User ID, and Delete. The "Delete" column for the first row contains a red "X" icon. A contact information block at the bottom right lists: Name : dbms, Contact No : 901-----97, E-Mail Add : dbms@gmail.com.

