

Deccan Education Society's

FERGUSSON COLLEGE (AUTONOMOUS), PUNE-4

Department Of Computer Science

A

Project Report

On

**VIRTUAL CLASS ROOM
MANAGEMENT SYSTEM**

By

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[2020-2021]

Virtual Class Contents

- Introduction
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INTRODUCTION

- Virtual classroom allows instructors to deliver web-based training to geographically dispensed students, employees .
- Virtual classroom can be used to hold live classroom lesson.
- Each subject includes a synchronous chat room for students
- Besides being user friendly, good virtual classroom have built in collaboration tools that engage the students in active learning. For example, the virtual classroom has subject wise videos ,and students who are not comfortable in asking question infront of teachers they can easily ask their questions.
- The Staff and the Student have to register in the webs ite to use this website. The staff logs in and posts his lecture.
- The student logs in and views all the classes.
- If he has any doubt/query, he can post it and the staff give answers of those queries.
- The student can give examination to their Institute , check their results in this site.

Task.1

1.1 Detailed Problem Definition

- This application will give the flexibility to those students as well who do not have time to attend there a college due to their busy schedule of job and some of the people is not able to join college due to their financial issues, so its best web application to get education in virtual platform, as we have seen so many other site who are providing online course but mostly they are providing course which may not in sequence and moreover not authorized from a particular college or university ,here we develop this application for a particular college where the person can get admission as a proper student and can get the certificate too which will be authorize same as college .
- Facility for online examination can be added in future Students can apply for special courses and online payment facilities Are also available for them. Group Discussion module will add for Students, so that Student can Discuss their doubts.Top scorer of that exam will be display of that web site they will be rewarded. Solution of this examination also be available, along with explanation.

1.2. Feasibility Study

- The next step in analysis is to verify the feasibility of the proposed system.
- “All projects are feasible given unlimited resources and infinite time“. But in reality both resources and time are scarce. Project should confirm to time bound and should be optimal in their consumption of resources. These places a constant are approval of any project.
- Feasibility has applied to Virtual Class pertains to the following areas:

1.2.1 Technical feasibility

- To determine whether the proposed system is technically feasible, we should take into consideration the technical issues involved behind the system.
- Virtual class system uses the web technologies, which is rampantly employed these days worldwide. The world without the web is incomprehensible to day. That goes to proposed system is technically feasible.

1.2.2 Operational feasibility

To determine the operational feasibility of the system we should take into consideration the awareness level of the users. This system is operationally feasible since the users are familiar with the technology and hence there is no need to gear up the personnel to use the system. Also the system is very friendly and to use.

1.2.3 Economical feasibility

- To decide whether a project is economically feasible, we have to consider various factors as:
 1. Cost benefit analysis
 2. Long -term returns
 3. Maintenance costs
- The proposed Virtual Class System is computer based. It requires average computing capabilities and access to internet, which are very basic requirements and can be afforded by any organization hence it doesn't incur additional economic overheads, which renders the system economically feasible

Task.2

2.GATHERING DATA REQUIREMENTS AND FUNCTIONAL REQUIMENTS

- We use java, jsp and Servlets as Programming language for writing the code for the project.
- HTML,CSS and JavaScript for creating the web pages.
- PlpgSQL server is used for creating the local and global database(server). Eclipse IDE for writing the programs.
- Operating System will be used Red hat linux.
- Communication Interface :

The communication function required by this product is WEB connection .

- Languages which are used:

HTML: Html is a language which is used to create web pages with html marking up a page to indicate its format,telling the web browser where you want a new line to begin or how you

- want text or images aligned and more possible.

- **JAVA SCRIPT:** Java Script originally supported by Netscape navigator is the most popular web scripting language today. It runs using web browser.
- **PlpgSql:** The jdbc api only define interface for objects used for performing various database related tasks like opening and closing connection, executing SQL commands, and retrieving the result.
- **JAVA SERVER PAGES(JSP):** It enables you to mix regular, static HTML with dynamically generated content. you simply write the regular HTML in normal manner, using familiar web page building tools.

Task.3

3. Normalization of Database or Flowchart

3.1. Designing the Normalized Database

1.STUDENT

Field	Type	Null	Key	Default	Extra
user	varchar(25)	YES	UNI	NULL	
pass	varchar(25)	YES		NULL	
name	varchar(25)	YES		NULL	
ph_no	varchar(25)	YES		NULL	
year	varchar(2)	YES		NULL	
branch	varchar(4)	YES		NULL	

2.FACULTY

Field	Type	Null	Key	Default	Extra
user	varchar(25)	YES		NULL	
pass	varchar(25)	YES		NULL	
name	varchar(25)	YES		NULL	
ph_no	varchar(10)	YES		NULL	
subject	varchar(25)	YES		NULL	
branch	varchar(4)	YES		NULL	

3.STUDENTSIGNUP

Field	Type	Null	Key	Default	Extra
user	varchar(25)	YES	UNI	NULL	
pass	varchar(25)	YES		NULL	
name	varchar(25)	YES		NULL	
ph_no	varchar(25)	YES		NULL	
year	varchar(2)	YES		NULL	
branch	varchar(4)	YES		NULL	

4.FACULTYSIGNUP

Field	Type	Null	Key	Default	Extra
user	varchar(25)	YES		NULL	
pass	varchar(25)	YES		NULL	
name	varchar(25)	YES		NULL	
ph_no	varchar(10)	YES		NULL	
subject	varchar(25)	YES		NULL	
branch	varchar(4)	YES		NULL	

5.ADMIN

Field	Type	Null	Key	Default	Extra
pass	varchar(5)	YES		NULL	

6.PPT

Field	Type	Null	Key	Default	Extra
subject	varchar(10)	YES		NULL	
ppt	varchar(50)	YES		NULL	

7.VIDEO

Field	Type	Null	Key	Default	Extra
subject	varchar(10)	YES		NULL	
video	varchar(70)	YES		NULL	

8.QUESTION

Field	Type	Null	Key	Default	Extra
que	varchar(200)	YES		NULL	
askedby	varchar(25)	YES		NULL	
subject	varchar(10)	YES		NULL	
qid	int(11)	YES	UNI	NULL	

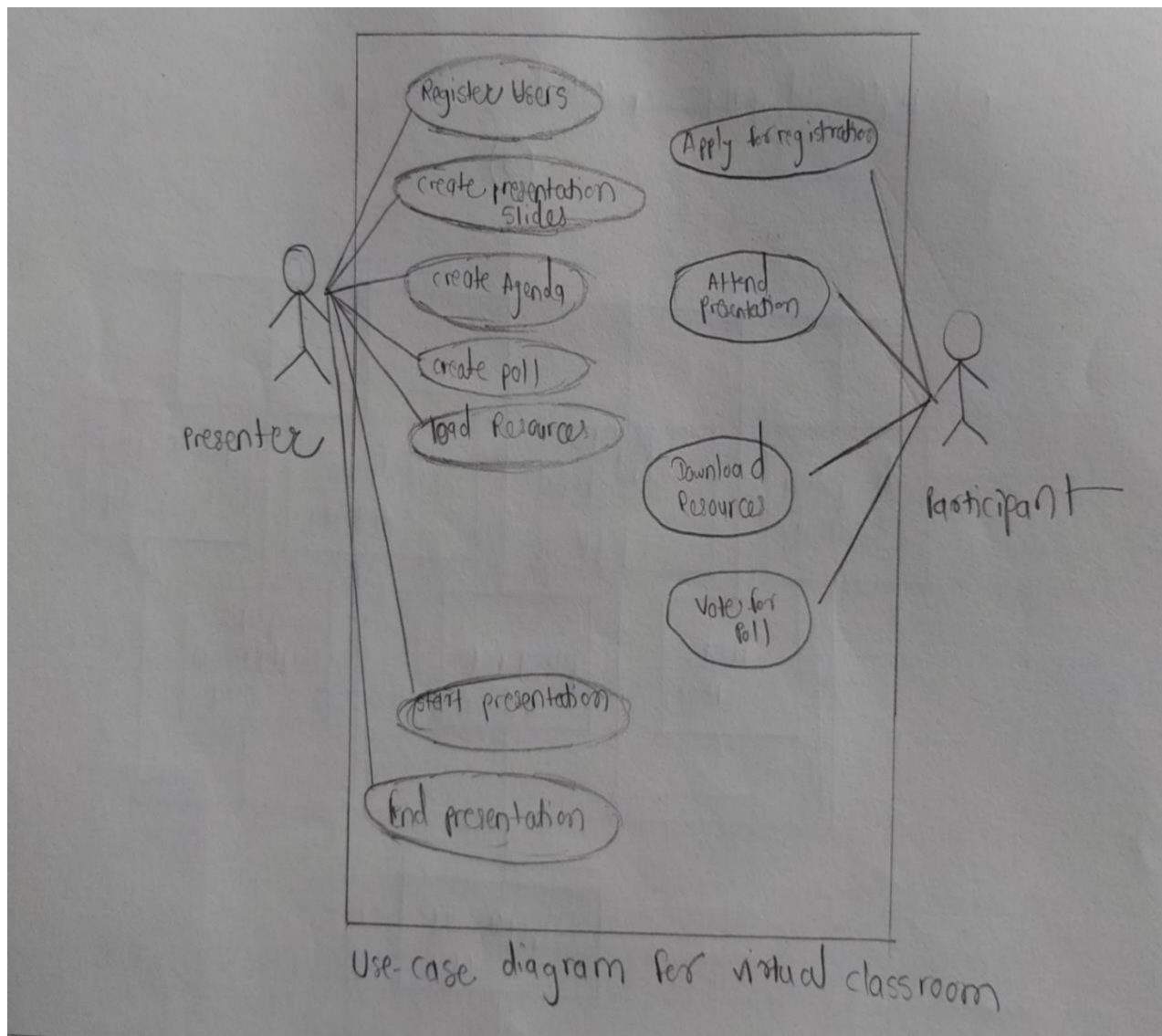
9.ANSWER

Field	Type	Null	Key	Default
qid	int(11)	YES	UNI	NULL
answer	varchar(200)	YES		NULL
answerby	varchar(25)	YES		NULL
answerby	varchar(25)	YES		NULL

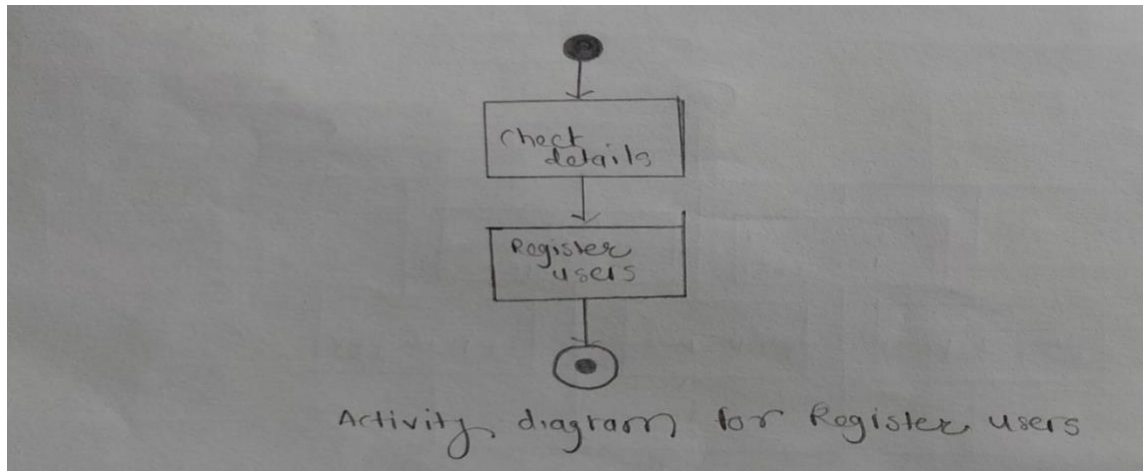
Task.4

4. UML Diagrams

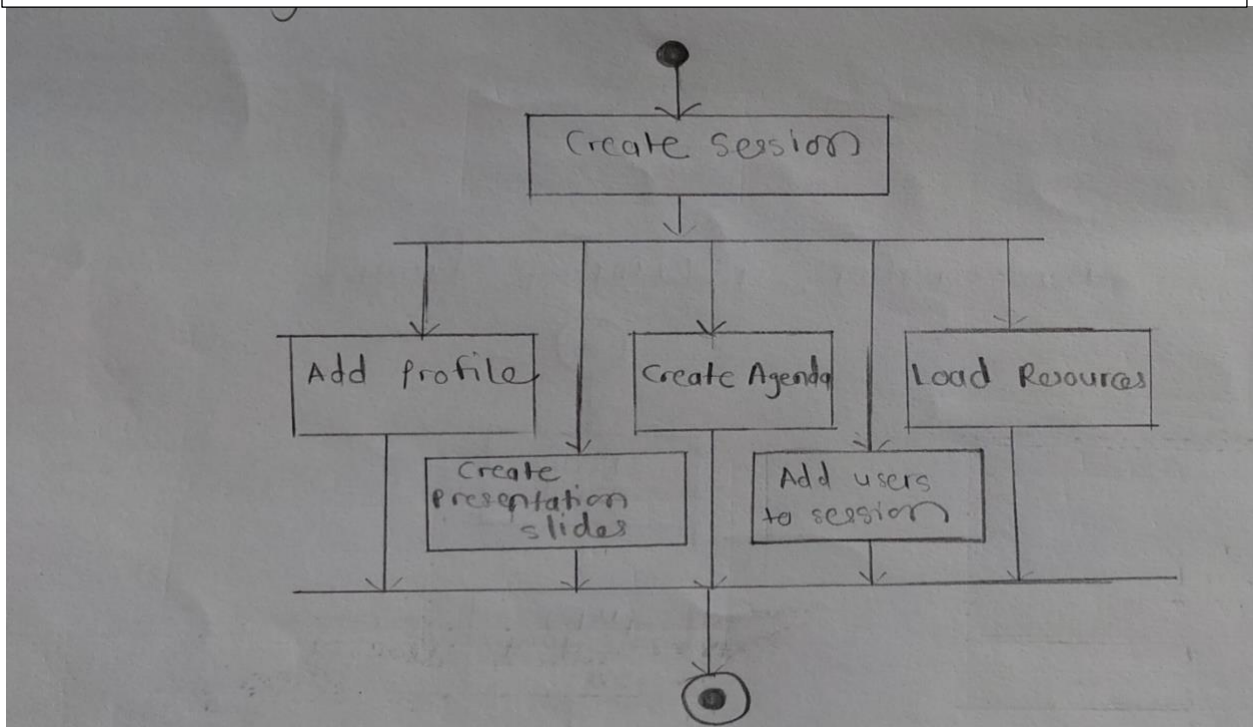
4.1 Use-Case diagram for virtual classroom



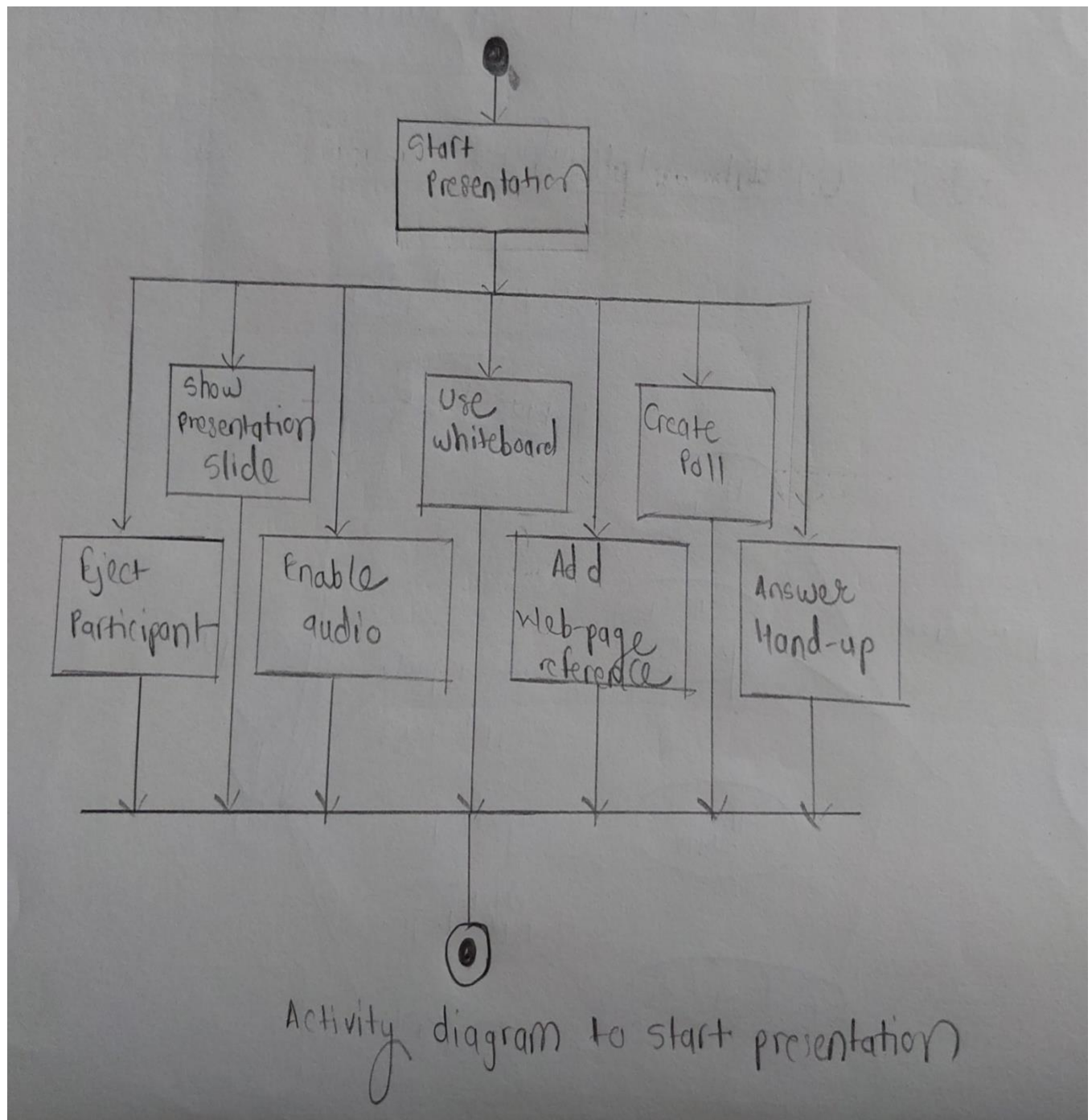
4.2 Activity diagram for Register Users



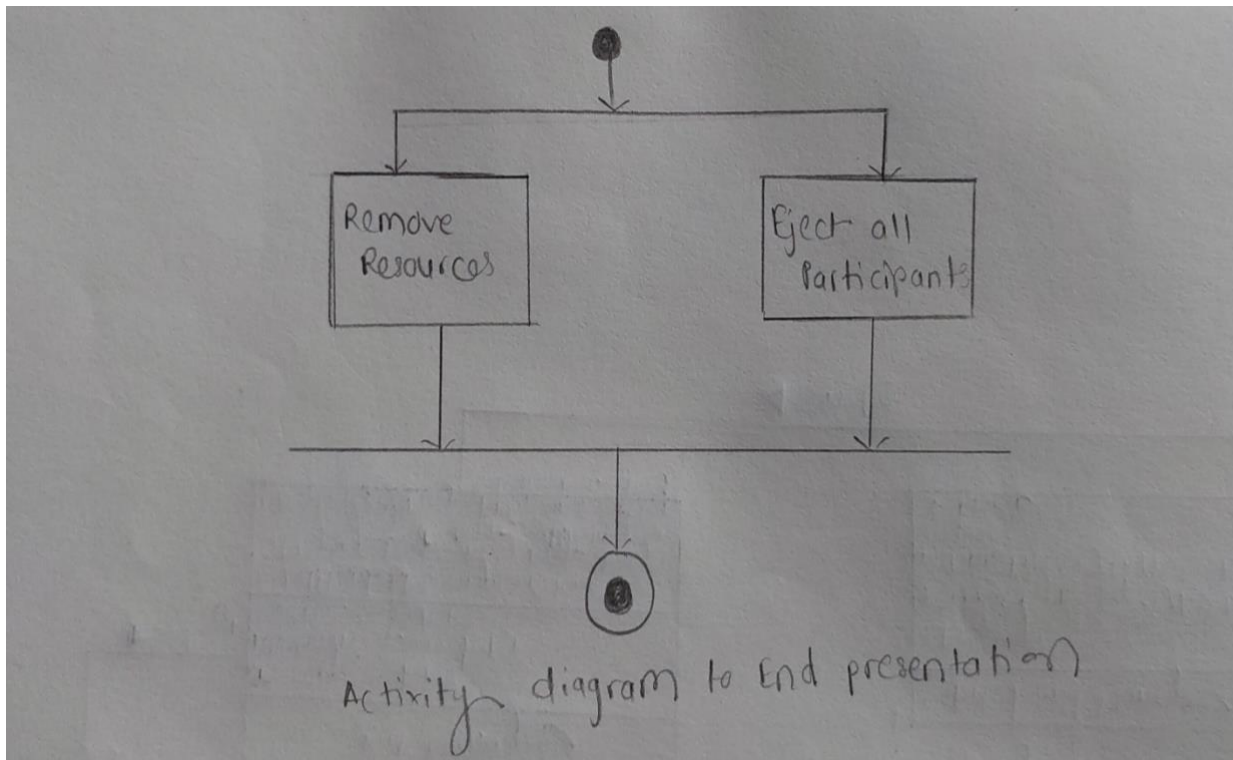
4.3 Activity diagram to create new presentation



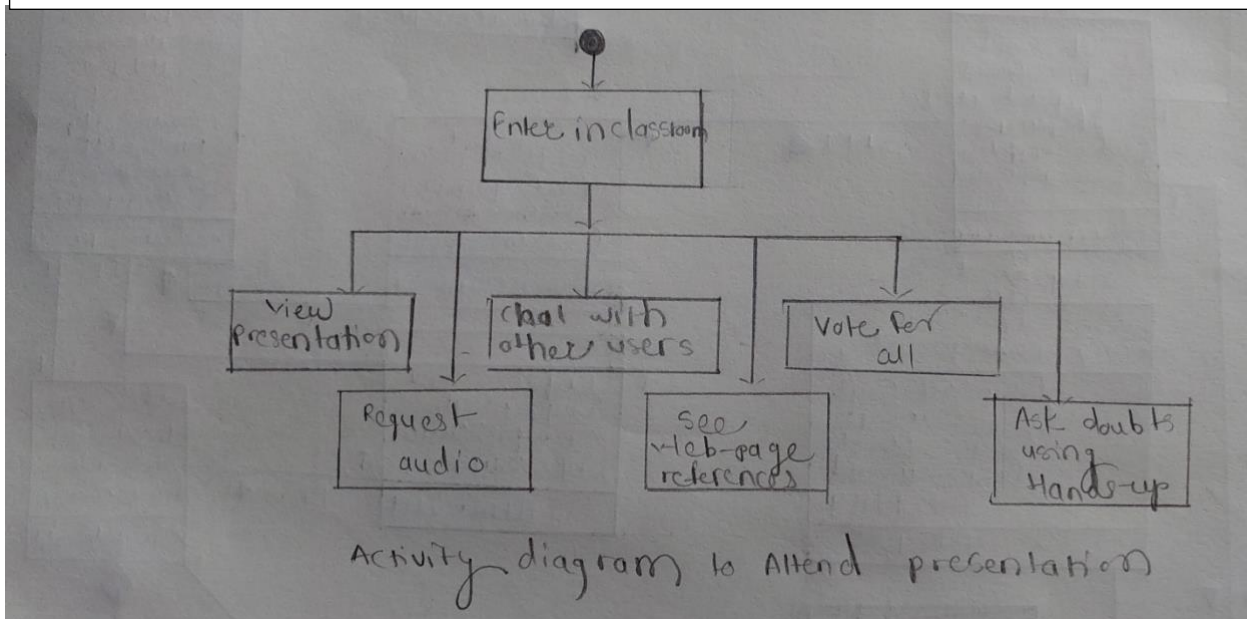
4.4 Activity diagram for “Start Presentation” use-case



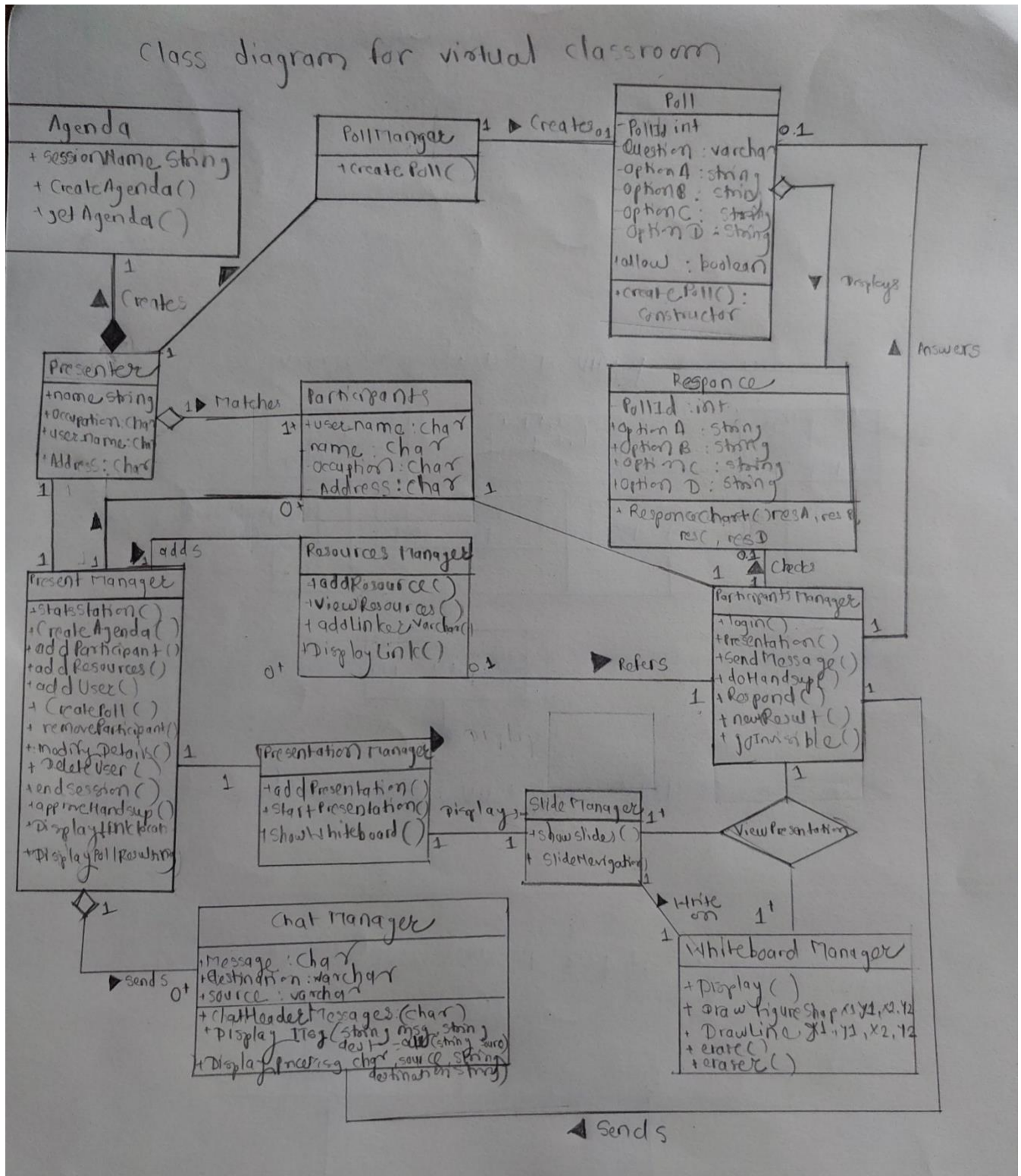
4.5 Activity diagram for “End Presentation” use-case



4.6 Activity diagram for Attend Presentation” usecase



Class diagram for Virtual Classroom



Task.5

5.Input\Output Screens

□ Student login Faculty login

Admin login

Click here to return the page.

Sign Up	
Name :	<input type="text" value="Abide"/>
User name :	<input type="text" value="Abd"/>
Password :	<input type="password"/>
Confirm Password :	<input type="password"/>
Phone No :	<input type="text" value="1234567890"/>
Branch :	<input type="text" value="IT"/>
Year :	<input type="text" value="1E"/>
<input type="button" value="Register"/>	

Message from website

! Password Not found

LOG IN	
login_type :	<input type="text" value="Student"/>
login :	<input type="text" value="abc"/>
Password :	<input type="password"/>
<input type="button" value="Enter"/>	
forgot your username or password find it <u>here</u> !	
Not member yet ? Click <u>here</u> to register	

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Profile	
Logged in as <input type="text" value="abc"/>	Name : <input type="text" value="abcd"/> Branch : <input type="text" value="IT"/> Year : <input type="text" value="1C"/> Contact-no. : <input type="text" value="1234567890"/>

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Task.6

6.Test Case Design

Test case No	Test case Discription	Steps	Expected Result
1	Check the field available	View the login page	The login page should be contain following text fields 1. Username 2. Password
2	Check the buttons	View the buttons in the login page	The login page should contain login in button
3	Check for empty validation	Click sign-in without entering any fields in both buttons.	Validation should be shown as "username and password not valid"
4	Enter Username	Click sign-in without entering username.	Validation should be shown as "Invalid Username".
5	Enter Password	Click sign-in without entering Password.	Validation should be shown as "Password Not Equal".
6	Enter Phone No	Click sign-in with having a word in Phone No	Validation should shown "Invalid phone no"
7	Invalid Username	Enter valid password and invalid username	Validation shows "Lost your username? Find it here! "

8	Invalid Password	Enter valid username and invalid password	Validation shows “Lost your password?” Find it here! ”
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