

# Role of Integrated Virtual E-Learning System for Distance Learning Students

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**Abstract:** *This paper entitled Role of Integrated Virtual E-Learning System for Distance Learning Students is mainly for all educational colleges such as engineering colleges and others where there is connection between faculty and student. In colleges, sometimes there may be loose connection between faculty and students. Some students cannot attend the class due to some reason such as missing lectures due to illness or some personal reason, doing part time job along with study, disable person. Those students who cannot attend the class or miss some lecture or any lab activity they can download the lecture file or they can download the video so that they can better understand the concept. If any important notice teacher wants to give to the student teacher can upload it on notice board so that student can get the alerts immediately on her notice board. In effect, we maintain an updated database all student information, all Lecture information, all assignment information such as view previous assignment, all lab manuals and maintain the database of each student with his attendance and which class he belongs with his personal information. We are attempting to improve our existing system that runs generally by pen and paper now a day. It is designed for those students who are not able to attend the class due to some reason like his disability. For that, it will help them to view lecture, view assignment at any time. we try to offer a no. of facilities with the use of cloud computing Environment so that teacher can easily know the student who are present or absent & online experiment can perform easily those who are absent in the class in this cloud computing play an important role.*

**Keywords:** Virtual System, Study Material, File Upload, Video Upload, Interactive Education., cloud computing environment

## I. INTRODUCTION

Today a number of websites exist in world wide web online database which having very excellent study materials and information and they are very useful for any student related to study, for example those students who want to do MS from USA, [www.usnews.com](http://www.usnews.com) is a very good website for them. These websites provide college information and related thing upon subscription taken. Now suppose I have some question which is very confusing in selecting colleges then what will I do.? I will go to other website to get information. In that time this subscription doesn't work. This type of problem is due to lack of interactive response and face to face communication.

In this project, we have designed on virtual class system software which will serve all information about students and lecture files and video lecture. Some of students are unable to study due to financial problem. They choose distance learning education. For that, they regularly view Lectures, view video lecture, view lab manual, get important notice on notice board, assignment view and upload online. When we talk about regular students that this project will help them in checking his attendance, viewing lecture, viewing notices about their curriculum. we have provided the facility for student if Students have doubt then there is green and red symbol on user screen after login and if admin online then they can send her query from feedback option. So that admin can get her query immediately and solve it as early as possible. This virtual classroom system is available anytime without any restriction that means we can access 24 hours a day. We can share files, videos and many more.

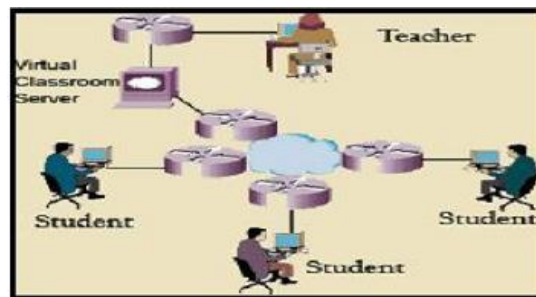
## II. DIFFICULTY IN EXISTING SYSTEM

1. **Less User Friendly:** The existing system is not user friendly because the retrieval of is very slow and data is not maintained efficiently. User in term administrator and student.
2. **Not Useful for E Learning and disable Student:** Those students who want to continue their study while doing job or having some disability, so they can't get benefit because they have to attend the class regularly.
3. **More time require:** Every work is done manually so time required more.

## III. PROPOSED SYSTEM

1. **More User Friendly:** The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Graphical user interface (GUI) is provided in the proposed system, which provides user to deal with the system very easily to handle so that they can perform the task very easily.
2. **Very useful for e learning and disable student:** those students who are very poor in economic or those who cannot attend the class due to some reason like doing job or due to his disability and they want to continue their education then this system is very useful for them. Those students who work in daytime can continue their study side by side using this system and continue their education through internet from anywhere. There is no need to present physically that's why name of the paper is Virtual E-Learning System and there is no restriction.

## IV. SYSTEM ARCHITECTURE FOR VIRTUAL SYSTEM



Above system shows the system architecture of Virtual E-Learning System where the admin act as a teacher who can update the information regarding the subjects and notification for student. And another side student who can access those data for learning and education purpose. No of student get different user name and password so that they can access this virtual lab at a time at different places. And admin can observe each activity of student.

## IV. IMPLEMENTATION OF THE PROJECT WITH SOME SNAPSHOTS.

**Administrator Page:**

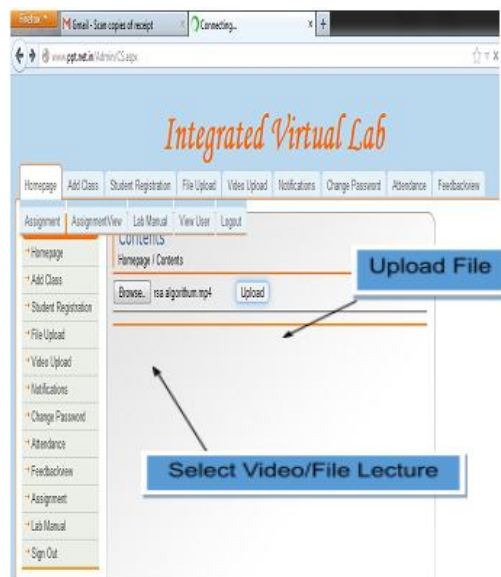


Admin enter user name and password to change the database of virtual system. We provide the security to the admin also. So that our database is more secure.

Student registration by Administrator:



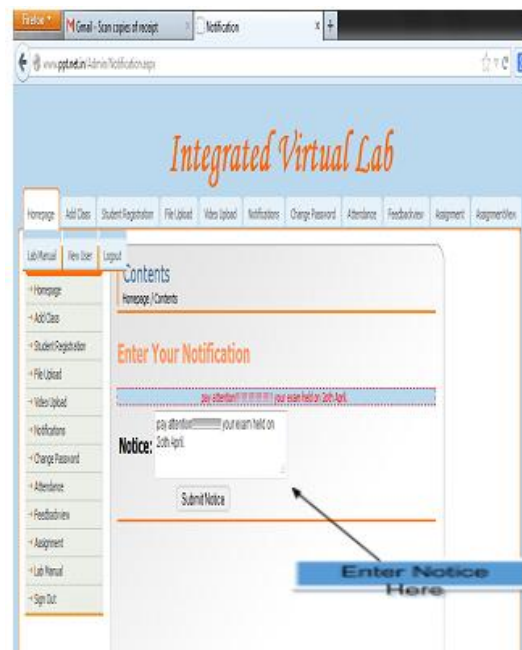
Select and Upload video/File by Administrator:



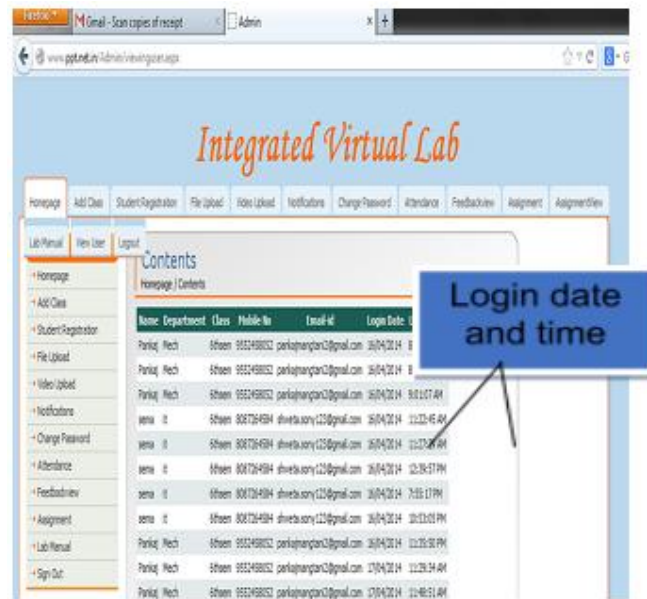
Video Uploaded Successfully:



Enter notification by Administrator:

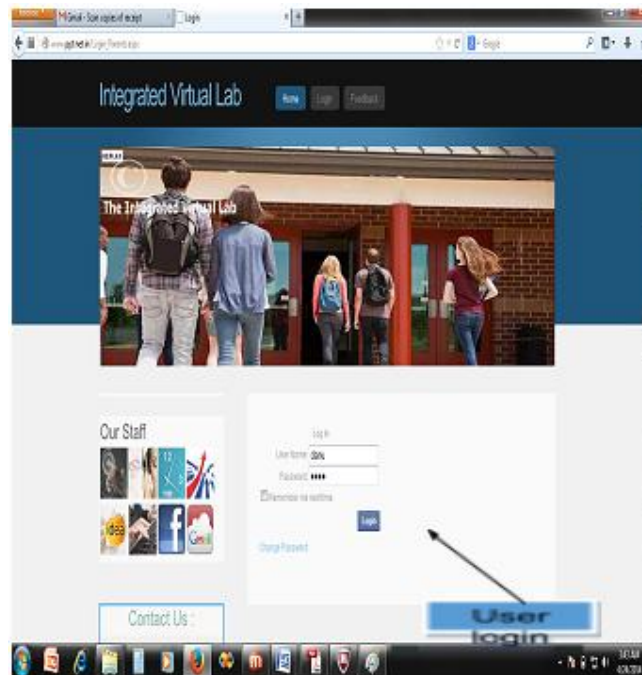


View user login details with date and time:



Name	Department	Class	Mobile No	Email Id	Login Date
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 11:07:44
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 11:07:44
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 11:07:44
senia	IT	6thsem	9087264594	shreya.sony123@gmail.com	26/04/2024 12:22:45:44
senia	IT	6thsem	9087264594	shreya.sony123@gmail.com	26/04/2024 12:22:45:44
senia	IT	6thsem	9087264594	shreya.sony123@gmail.com	26/04/2024 12:26:37 PM
senia	IT	6thsem	9087264594	shreya.sony123@gmail.com	26/04/2024 12:26:37 PM
senia	IT	6thsem	9087264594	shreya.sony123@gmail.com	26/04/2024 12:26:37 PM
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 12:26:37 PM
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 12:26:37 PM
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 12:26:37 PM
Pankaj	Mech	6thsem	9552458832	pankajhangpan3@gmail.com	26/04/2024 12:26:37 PM

User login: User login with different username and password



Student Menu:

- Admin Offline: if red symbol on user screen.
- Admin Online: if green symbol on user screen.



Important notice for student:



Above Snapshots shows that how admin can login who have the authority to change the database. and then how admin can add student information to his database and add student for particular class and give their attendance also and also give their personal information to admin. And admin can upload no of files and video lecture for particular subject so that those students who cannot understand the concept in one time they can download the video and understand the concept very clear by watching video more times.

## VI. ADVANTAGES OF PROPOSED SYSTEM

This project can be highly beneficial for students who want to continue their study from e-learning programmed, who continue their education while doing job or those students who cannot attend the class due to some reason and data is secured.

## VII. APPLICATION

This Project will be used for Our Institute.



### **VIII. FUTURE ENHANCEMENTS**

It is not possible to develop a system that fulfills all the Requirements of the user. User requirements keep changing as the technology is changed. Some of the future enhancements that can be done to this system are:

- As the technology emerges, it is possible to upgrade the system to achieve high performance.
- More modules can be added.

### **IX. RESULT AND ANALYSIS**

The virtual lab was used during lectures to demonstrate some of the concepts taught. They were also encouraged to download and use the virtual lab at home to complete their assignment or to study for their exams. After the course, all the students were asked to complete an anonymous questionnaire, responding to questions on a five-point scale (1—strongly disagree, 2—disagree, 3—neutral, 4—agree, 5—strongly agree). The GUIs were found to be user friendly and easy to navigate with a rating of 4.6/5. But in new result we found to be user friendly and easy to navigate with a rating of 4.7/5. The results are summarized in Table I and Table II for comparative analysis. And it is also represented by graph which shows the improvement in old result to new result.

### **X. CONCLUSION**

Virtual environment has been presented an innovative idea for developing and enhancing lab practice and access for distance learners, and providing the knowledge to the students. This project can be highly beneficial for students who want to continue their study from e-learning programmes. Virtual e-learning system provides the basic knowledge to the student who doesn't have any idea about the experiment or any topic. They can view the video lecture so that they can better understand the concept. And collect the notes regarding particular subject.

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