**VirtuaLab**

**ABSTRACT**

The practical experience is very essential component in education. The thesis explains the construction of “VIRTUALAB” BELIEVE THAT web site. The main objective of this project is to provide a means of assistance for student for accessing the lab activities conducted in various colleges. The objective is to develop a user – friendly educational site where any student can accesses the Lab and gain value added services from the colleges and staff.

**INTRODUCTION**

Physical distances and the lack of resources make us unable to perform experiments, especially when they involve sophisticated technique. Also, good teachers are always a scarce resource. Web-based courses address the issue of teaching to some extent.

Where the distance is reduced to get the skill we go the “VIRTUALAB” Believe That. This provides the interface for various colleges to get connected with students to enhance their skill.

**Existing System:**

* In the present way there is no such media through which student can access Lab Activities in various colleges.

**Proposed System:**

“VIRTUALAB” allows various colleges to get registered, and colleges are then allowed to add those departments of Lab activates. Student can than access all the Lab Activities of college those are registered.

**MODULES**

* **ADMINISTRATOR**

The web Site is managed by the administrator, with the various activities like adding various college details, maintaining the faculties and their details of documentation, overviewing the student details and managing the various activities.

* **COLLEGE**

College has to get registered by the admin rights, once the college is registered it can then add its all Department through which those department are allowed to participate in the VirtuaLab.

* **STAFF**

The Staff has to register to the college, and then choose the department to which they are allotted. Once after the registration, they can upload the Lab activities of each lab. They can also give some description on the lab activities so that the student can understand in the easy way.

* **STUDENT**

The student has to register himself to the belonging college with valid details. Once the registration is successful he can then access the Lab Activities of any colleges and get the knowledge and requirement in a convenient way.

**FRONT END : CSS, HTMl.**

**MIDDLEWARE : PHP**

**BACK END : MySql**

**SERVER : WAMP SERVER**

**SYSTEM REQUIREMENTS**

* **SOFTWARE REQUIREMENTS**
  + **Operating System : Windows XP – SP2 / 7 / 8.1 above**
  + **SOFTWARE : Dreamweaver**
  + **BROWSERS : INTERNET EXPLORE, GOOGLE CHROME**
* **HARDWARE REQUIREMENTS**
  + **Processor : Dual core (2.0) GHz or Core to Duo or above**
  + **RAM : 1 GB and Above**
  + **HDD : 120GB and Above**

**DATA FLOW DIAGRAM**

**Level Zero DFD:**

**DATABASE**

Login

**ADMIN**

**College**

**Student**

**Staff**

**ADMIN DFD**

College Details

Staff Details

Student Details

**College DFD**

College Validation

course

True

Staff

**STAFF DFD**

Staff Validation

Subject

Add File

F

Description

F

Query

F

**STUDENT DFD**

Student

Validation

Select College

Select Department

Select Subject

Select LAB

Post Query

**ADVANTAGES**

* Time saving
* No Scarce of eminent teachers.
* Deep knowledge on subject
* Clearances of all subjects.

**CONCLUSION**

By implementing this project will be successfully able to provide equal Opportunity for the entire student to learn the Lab activities in any corner of the world.

**FUTURE SCOPE**

Some of them are listed down:

1. **“VIRTUALAB” Believe That**, will be made more effective and realistic by providing students a live video streaming of Lab Practical’s.

2. A module from where entities can communicate.

3. And faster process for subjective flash news, regular events, satff notifications.

**REFERENCES**

1. [www.vwingsgroup.com](http://www.vwingsgroup.com)
2. IEEE SRS Format.
3. Database Management Systems, by Navathe