

**OPEN ACADEMY**  
**AN ONLINE DYNAMIC TEACHING AND LEARNING ENVIRONMENT**

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**ABSTRACT-**

Now days learning and teaching has become internet based. Knowledge or information is distributed all over, means books will be available on one site and tutorials on another where as presentations are provided by different site. Sharing information with the help of videos requires channel on YouTube or dailymotion and to share presentations for eg. Slideshare or Google a/c is necessary. Due to the scattered learning resources there is need for more efficient online teaching and learning. That is all the type of learning or teaching media (video, presentation, theory and book) must be available at same place and also one should get a platform to teach a topic with help of all possible media. And there should be a way such as a person if he/she is a learner can also be able to share his/her knowledge with a group of people. Open Academy is a platform where anyone can learn and teach online. And both learner and teachers are given fair media (video, presentation, theory and book) to learn or teach. One can find all related stuff in under a particular classroom, Condition he/she is enrolled for that classroom. Open Academy is also giving ease to a user to create his/her own classroom irrespective of learner or teacher so that all users are given fair chance to share their knowledge with others.

**Keywords:** *online classrooms, videos, theories, presentations*

**INTRODUCTION-**

Open Academy is a friendly environment in comparison to traditional way of learning which is more effortful to get any information. Open Academy Environment is user friendly. It is interactive way to learn and teach and also a better environment for education.

Open Academy is a web application. It is developed in php server scripting language. Registration to Open Academy requires a valid e-mail address and a username. Registration is followed by user profile creation. User is allowed to search the classroom according to his or her interest. Once user enrolled in a particular classroom user is given access to contents and alert by

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notifications of that classroom. And each user is allowed to create own classroom by giving few details and after that he/she can add content in the classroom for all enrolled users. Multiple types of contents can be added and accessed in classroom like Presentations, Videos, Theory content.

## **OBJECTIVES**

1. To facilitate open academy free of cost.
2. To create the effortless teaching-learning environment.
3. To establish common platform for all different types of e-education media.

## **SCOPE**

Open Academy is a web application and it can be used with an internet enabled device. Open Academy is able to provide a way to learn with help of All possible e-education media like presentations, Theory tutorials consist of images, text, diagrams, tables and special characters, video tutorials and books. Once he or she enrolled for that classroom and for teaching it also gives the same media to user to explain the subject. User is allowed to link the videos from [www.YouTube.com](http://www.YouTube.com) and [www.Dailymotion.com](http://www.Dailymotion.com) websites only, for power point presentations users can link any presentation from google documents and [www.slideshare.com](http://www.slideshare.com), for books open academy allow user to upload books and for theory tutorial a interface is provided where user can create own content or can paste the copied content.

## **TECHNOLOGY USED-**

- Front-end: HTML, JQuery, Javascript, css
- Back-end: php, MySQL
- Server: xampp (Apache Server and MySQL Server)
- Editor: Notepad++

## **MODULE DESCRIPTION**

Login Module- This module is at the glance of the system. Which is target add the security to the system. It will allow correct person correct rights.

Registration Module- This module will accept the user details, verify them and register them on system.

Add content Module- This module target to add the correct content to correct place.

Load content Module- This module will load the content and provide a view to the content of the system to the user.

## DATABASES

Name: open\_academy\_db

Tables:

<b>Login</b>			
<b>No.</b>	<b>Name</b>	<b>Datatype</b>	<b>Indexing</b>
1	id	Double	primary
2	userid	Varchar	-
3	password	Varchar	-

Table 1

<b>Profile</b>			
<b>No.</b>	<b>Name</b>	<b>Datatype</b>	<b>Indexing</b>
1	Id	double	primary
2	fname	varchar	-
3	lname	varchar	-
4	Gender	Enum	-
5	Dob	Date	-
6	Email	Varchar	-
7	Dp	Varchar	-
8	Registration_date	Date	-
9	About	Varchar	-
10	Last_login	Timestamp	-

Table 2

<b>Notification</b>			
<b>No.</b>	<b>Name</b>	<b>Datatype</b>	<b>Indexing</b>
1	id	double	primary
2	Enrollment_or _classroom_id	double	-
3	Content_id	Double	-
4	Msg	Varchar	-
5	Notification_type	Varchar	-
6	On_date	datetime	-

Table 3

<b>Content</b>			
<b>No.</b>	<b>Name</b>	<b>Datatype</b>	<b>Indexing</b>
1	id	double	primary
2	Classroom_id	Double	-
3	Name	varchar	-
4	Content_type	Varchar	-
5	Date_of_upload	Datetime	-
6	src	longblob	-
7	Level	Varchar	-
8	description	varchar	-

Table 4

<b>Enrollment</b>			
<b>No.</b>	<b>Name</b>	<b>Datatype</b>	<b>Indexing</b>
1	id	double	primary
2	Classroom_id	Double	-
3	Profile_id	Double	-
4	Date_of_join	Date	-
5	Last_visit	Datetime	-

Table 5

<b>Classroom</b>
------------------

No.	Name	Datatype	Indexing
1	id	double	primary
2	Profile_id	Double	-
3	Name	varchar	-
4	Subject	Varchar	-
5	Stream	Varchar	-
6	Status	Varchar	-
7	Dp	Varchar	-
8	About	Varchar	-
9	Date_of_creation	Date	-
10	Last_visit	Datetime	-

Table 6

<b>Waiting_registration</b>			
No.	Name	Datatype	Indexing
1	Id	double	primary
2	fname	varchar	-
3	lname	varchar	-
4	Gender	Enum	-
5	Dob	Date	-
6	Email	Varchar	-
7	userid	Varchar	-
8	confirmation_code	varchar	-
9	password	Varchar	-
10	Request_date	date	-

Table 7

## ALGORITHM

### Registration Module Algorithm

Algorithm Registration(type,userdata)

// Registration is an algorithm accepting type which specify the state of registration

//and userdatawhich is including all required data

{

    OK = true;

```

        if(type=='registration')                // checking whether user is registering for
first time.
    {
        if(is_empty(userdata.fname) or ! is_valid_name(userdata.fname))
// checking whether first name is filled and only alphabetic data is provided
        {
            show_warning("Please Enter Valid First Name")
            OK=FALSE
        }

        if(is_empty(userdata.lname) or ! is_valid_name(userdata.lname))
// checking whether last name is filled and only alphabetic data is provided
        {
            show_warning("Please Enter Valid Last Name")
            OK=FALSE
        }

        if(is_empty(userdata.gender) or ! is_valid_gender(userdata.gender))
// checking whether gender is filled and valid
        {
            show_warning("Please specify gender")
            OK=FALSE
        }

        if(is_empty(userdata.dob) or ! is_valid_date(userdata.dob))
// checking whether Date of birth is filled and valid
        {
            show_warning("Please Enter valid Date of birth")
            OK=FALSE
        }

        if(is_empty(userdata.email) or ! is_valid_email(userdata.email))
// checking whether email is filled and syntax is correct
        {
            show_warning("Please enter a valid E-mail address")
            OK=FALSE
        }

        if(is_empty(userdata.userid) or ! is_valid_userid(userdata.userid))
// checking whether userid is filled and valid

```

```

        {
            show_warning("Please enter valid username")
            OK=FALSE
        }

available
if(! is_userid_available(userdata.userid)) // checking whether userid is
available
{
    show_warning("Sorry userid is taken! Please choose different
userid")
    OK=FALSE
}

if(is_empty(userdata.password1) or ! is_valid_password(userdata.userid))
// checking whether password is filled and valid
{
    show_warning("Please enter valid Password")
    OK=FALSE
}

if(password1!=password2) // checking whether password is available
{
    show_warning("Retype Password Correctly")
    OK=FALSE
}

if(OK) // if all fields are filled and valid
{
    verify_new_user(userdata)
        //it generates verification link and mail to user's email

    show_alert("Check your e-mail to activate you a/c")
}

}

here
if(type="verification")//After user clicks on verification link user is redirected
here
{
    q=query("select * from waiting_registration where
userid="+userdata.userid+" and confirmation_code="+userdata.confirmation_code)

```

```

        //gives record id for registered user

        no_of_rows = row_num(q)
        if(no_of_rows==1)
        {
            create_new_user(q) //creates new user once validated
        }else
        {
            alert("Verification failed")
        }
    }
}

```

### **Login Module Algorithm**

Algorithm Login(userid,password) //accept userid and password to validate user

```

{
    if(!isset(SESSION)) //checking whether user is logged in or not
    {
        q=query("select * from login where userid="+userid+" and password="+password)

        no_of_rows=row_num(q);

        if(no_of_rows==1)
        {
            start_session_for(q.id) //session is started for user and login successful
        }else
        {
            show_warning("Username or password incorrect!!!")
        }
    }
}

```

### **Add Content Module Algorithm**

Algorithm Add\_Content(type,data)

```

{
    if(SESSION['id']==data['profile_id']) //owner test
    {
        if(type=="video")
        {

```



```

        link=read_link(data['link']);

        q = query("insert into content
values(",+data['classroom_id']+","+data['name']+","
        +type+","+datetime()+","+link+data['level']+","+data['description'])
    }
    if(type=="presentation")
    {
        link=read_link(data['link']);

        q = query("insert into content
values(",+data['classroom_id']+","+data['name']+","
        +type+","+datetime()+","+link+data['level']+","+data['description'])
    }
    if(type=="theory")
    {

        q = query("insert into content
values(",+data['classroom_id']+","+data['name']+","

        +type+","+datetime()+","+data['theory']+","+data['level']+","+data['description'])
    }
    if(type=="book")
    {
        file_name=move_uploaded_file(server_path,data['file']) //get the file uploaded
to server and returns the file name
        q = query("insert into content
values(",+data['classroom_id']+","+data['name']+","

        +type+","+datetime()+","+server_path+"/"+file_name+","+data['level']+","+data['descrip
tion'])
    }
    send_notification(q,data['classroom_id'])
//send notification to student of perticular classroom
    }
}

```

### Add Content Module Algorithm

Algorithm Load\_content(classroom\_id) //Display contents to user

```

{
    q=query("select id from enrollment where classroom_id="+classroom_id+" and
profile_id="+SESSION['id']")

    no_of_rows=row_num(q);

    if(no_of_rows==1)          // Enrollment check
    {
        q=query("select id from content where classroom_id="+classroom_id+" order by
content_type")
        display_list(q);
    }

    if(no_of_rows==0)
    {
        show_warning("Enroll to classroom to access the content!!!");
        show_button("Enroll");
    }
}
}

```

## LIMITATIONS

Open Academy is able to deal with only fixed types of media like presentations, videos, theory and books. Registered users only facilitate by the open academy. No person is there to play administrative roll. Availability of videos and presentation are totally dependent on external websites.

## CONCLUSION

A platform is able to provide teaching and learning both environments. As one user is able to enroll to multiple classrooms at a time and also can create own classroom. Open Academy is able to club possible and most commonly used E-education media like presentations, videos, theory and books. And it is open source platform.

## REFERENCES:

1. [www.php.net](http://www.php.net)

2. [www.w3schools.com](http://www.w3schools.com)
3. [www.stackoverflow.com](http://www.stackoverflow.com)
4. [www.youtube.com](http://www.youtube.com)