

1. Title of the Project



(E-Learning Management System)

2. Introduction

It is difficult to find time for the training necessary to gain new skills and boost your productivity. With **iSchool** you're able to learn at a pace that is comfortable for you. **iSchool** is a powerful Learning Management System implementing the latest trends in e-learning. E-Learning is learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom. In most cases, it refers to a course, or program delivered completely online. We define eLearning as courses that are specifically delivered via the internet to somewhere other than the classroom where the professor is teaching. E-Learning has been proven to be a successful method of training and education is becoming a way of life for many citizens in India and across the World. iSchool Publisher is a professional team development environment for the rapid development of e-courses by their own.

Any Person who wants to gain new skills can join iSchool. A Person/Student/Learner has to fill up registration form which is absolutely Free. Once Learner registers successfully, they will get UserID/Email and Password for login into Student/Learner Panel. After login they can buy any course as per their choice or requirement which is available in iSchool. They can watch purchased video courses online and can submit their feedback. As well they can update their profile and can change password. Admin of this system will upload new courses which will be available for everyone. Admin can delete or edit student/learner details. Admin can modify course details and can check sells report.

3. Objectives

A flexible web-based learning experience allows you to go through a guided curriculum or choose lessons on an as-needed basis. Following are the main objectives:-

- Ability to recall previously learned material – Students/learners can watch video courses as many times as they need. If they forgot something during the course they can come back and watch that specific part anytime.
- Creative way to present lesson – It is very creative way to present lectures. It will surely enhance teaching ability of tutor.
- Low Cost – As nobody needs to travel or rent anything so it's very cost efficient.
- High Quality – As tutor do not has time boundation so he can teach in his own comfort time.
- Learn anytime from anywhere – Students/Learners can start learning anytime from anywhere they just required internet connection with a compatible device.
- Improve course quality according to learner's feedback – Tutor can improve their course as per student's feedback. It will help tutor to improve their ability to teach.
- Earn Money Online– As courses are paid so we can say it's an online teaching business which has no boundaries means students/learners can join from across the world so this system can make good business with good quality.

4. Project Category

This project as titled “iSchool (E-Learning Management System)” is comes under the Web Based Application. This application is developed with the help of HTML, CSS, Bootstrap, PHP, MySQL etc.



Web Based Application

5. Tools/Platform

5.1 Hardware Requirements

| | |
|------------|---------------------------------|
| Processor | 1.6 GHz or Faster Processor |
| RAM | 4 GB |
| Disk Space | 10 GB of Available Hard Disk |
| Graphic | DirectX 9-Capable Video Card |
| Display | 1024 X 768 or Higher Resolution |

5.2 Software Requirement

| | |
|--------------------|--------------------------------|
| Operating System | Windows 10 |
| Front End | HTML, CSS, JavaScript |
| Back End | PHP |
| Library/ Framework | Bootstrap, JQuery, FontAwesome |
| Plugins | Owl Carousel |
| Code Editor | Visual Studio Code 1.33 |
| Database | MySQL |
| Web Server | Apache |
| Web Browser | Google Chrome |
| Payment Gateway | Paytm |
| Drawing Tools | yEd Graph Editor |
| | StarUML |

6. Reason of using PHP and MySQL

6.1 PHP

PHP is an open source language and all its components are free to use and distribute. PHP is server-side scripting language. It is embedded in HTML source code. PHP supports all major web servers such as Apache, Microsoft IIS and Netscape etc. All the major database such as Mysql, PostgreSQL, Oracle, Sybase, Microsoft SQL Server is supported by PHP. Following are the some major advantage:-

- **Friendly With HTML** - PHP and HTML are interchangeable within the page. You can put PHP outside the HTML or inside.
- **Interactive Features** - PHP allows you to interact with your visitors in ways HTML alone can't.
- **Top-Notch Online Documentation** - The PHP documentation is the best on the web. Hands down.
- **Compatible With Databases** - A good benefit of using PHP is that it can interact with many different database languages including MySQL.

6.2 MySQL

MySQL is the most popular open source relational database management system. It is one of the best RDBMS being used to develop web-based applications. It is easy to use and fast RDBMS. Following are the top reason to use MySQL:-

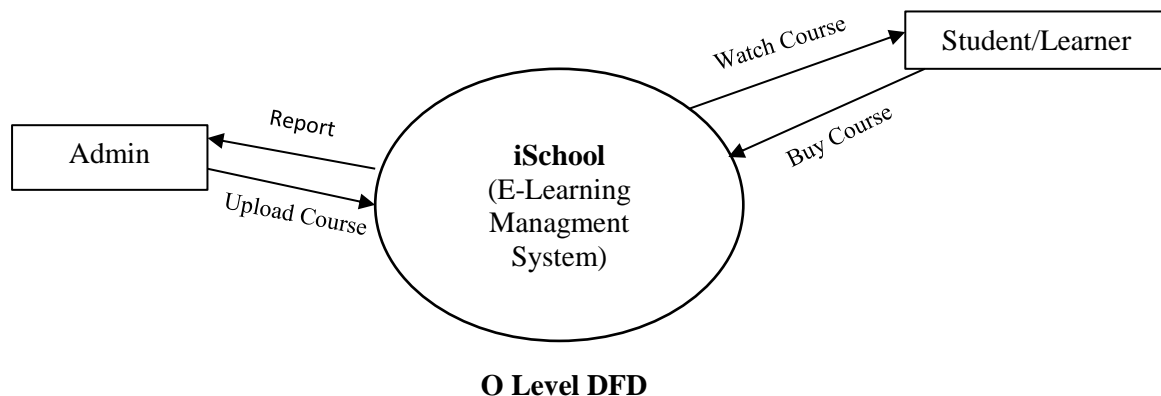
- **High Performance**
- **Robust Transactional Support**
- **Strong Data Protection**
- **Open Source Freedom**

7. Data Flow Diagram

Data flow diagram is graphical representation of flow of data in an information system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination.

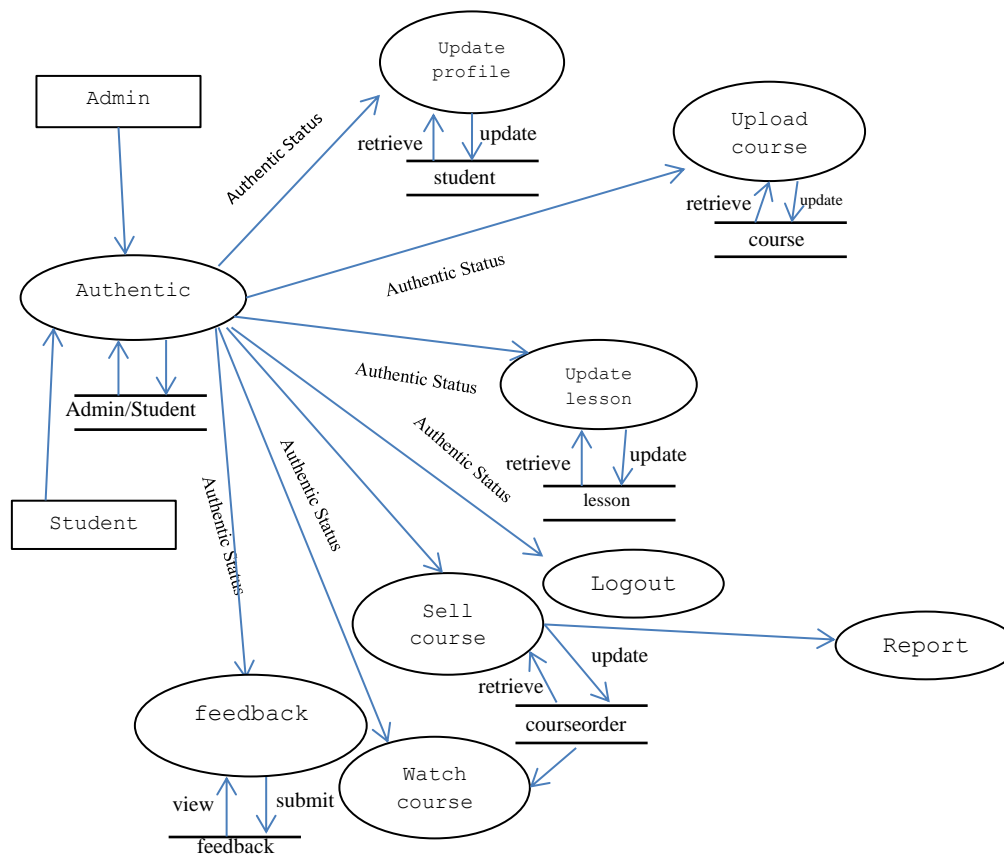
7.1 DFD 0 Level

The 0 Level DFD shows flow of data of application. DFD Level 0 is also called a Context Diagram. It's a basic overview of the whole system or process being analyzed or modeled.



7.2 DFD 1 Level

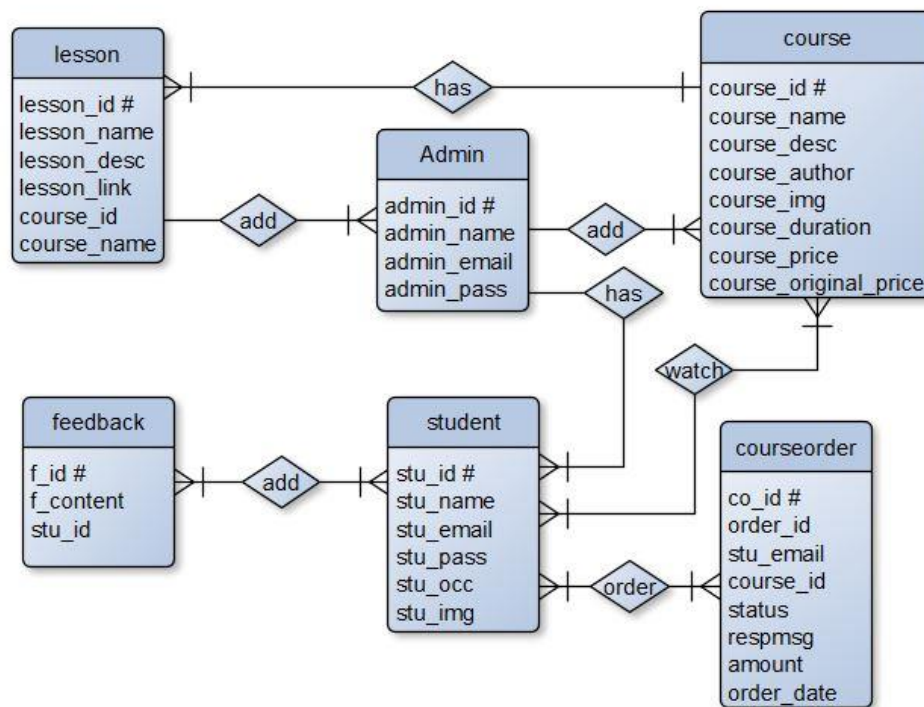
DFD Level 1 provides a more detailed breakout of pieces of the Context Level Diagram. This DFD describes main functions carried out by the system, as we break down the high-level process of the Context Diagram into its sub-processes.



1 Level DFD

8. Entity Relationship Diagram (ER-Diagram)

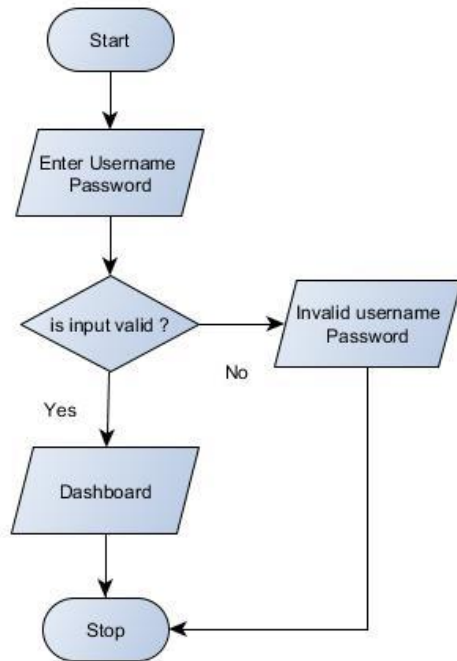
An Entity Relationship Diagram (ERD) is a visual representation of different entities within a system and how they relate to each other.



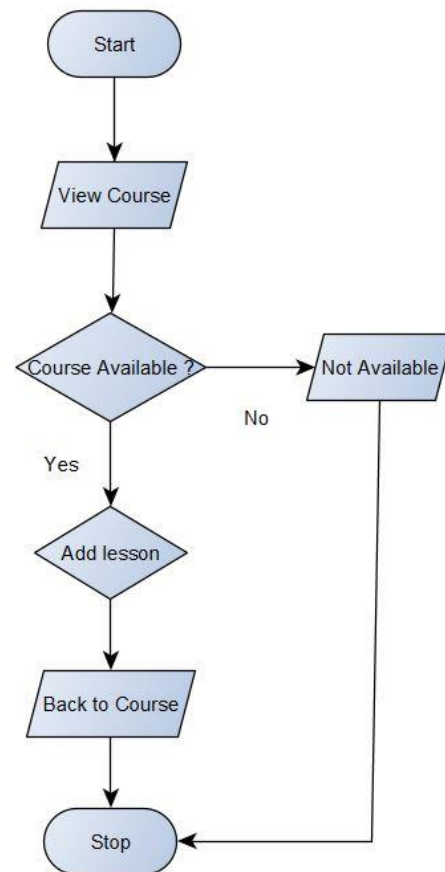
ERD

9. Flow Chart

A flowchart is a diagram that depicts a process, system or computer algorithm. They are widely used in multiple fields to document, study, plan, improve and communicate often complex processes in clear, easy-to-understand diagrams.



Login



Add Lesson

10. Input/ Output Modules of the Project

10.1 Input Modules

- Student/Learner Registration
- Course
- Lesson
- Feedback
- Payment Status

10.2 Output Modules

- Student/Learner List
- Course Detail
- Lesson Detail
- Sell Report
- Payment Receipt

11. Modules and Their Description

Without Registration

Home – This module contains all the links of the application such as Courses, Payment Status, Login, Sign Up, Feedback Section and Contact.

Courses – This module contains list of all the courses which are available at iSchool.

Payment Status – This module is used to check Payment status after purchasing a course.

Login – This module is used to login into Student/Learner Panel.

Sign Up – This module is used to register for the Student/Learner Panel.

Feedback – This section shows feedback given by registered students/learners.

Contact – Learner can use this section to contact the admin/tutor for any kind of queries.

Student Panel

Profile – This module contains all the details about Student/Learner as well as Student can update their details.

My Courses – This module contains list of all purchased courses.

Feedback – This module is used to write feedback.

Change Password – Students can use this module to change password.

Logout – This module is used to return back to Home Page.

Admin Panel

Dashboard – This module displays overview of whole application.

Courses – This module contains all the courses.

Lessons – This module contains all the lesson depends on course id.

Students – This module displays all the registered student details.

Sell Report – This module is used to view and print sells report.

Payment Status – This module displays payment status in more details.

Feedback – This module displays feedback given by students.

Change Password – Admin can use this module to change password.

Logout – This module is used to return back to Home Page.

12. Process Logic

Home:

When the user click on this tab, it will display the other modules and pages of the website such as courses, payment status, login, sign up, popular section, feedback section, contact and admin login. This module will be used to display the brief introduction of the project and will show the title of the project.

Courses:

Student can view all available courses by clicking on courses tab where he can choose course according to his own interest and by clicking on a particular course, will display more details with lesson title of the course, if he wants to purchase he will be able to make payment (required login).

Payment Status:

After purchasing course student will be provided an order id which can be used to get the status of payment using Payment status tab. If student wants he can get print out of his payment status.

Login:

This is a login form. Student/Learner can use their own email and password to login into the student panel.

Sign Up:

This is a Registration form for new Students/Learners. New Students/Learners can fill up the form for registration and after successful registration they can use their email id and password to login into the application.

Feedback:

This is very simple section which displays feedback given by the registered student.

Contact:

Learner can use this section to contact the admin/tutor for any kind of queries.

Student Panel:-

Profile:

Students/Learners can view their student id, registered email id, name, occupation, profile picture as well as they can modify and update the new data if they need.

My Courses:

Students can view all courses which they purchased. This is the place where they can start watching lectures by clicking on Watch Course button which leads to course playlist where they can watch the entire lesson of course.

Feedback:

Students can view/write feedback.

Change Password:

Students can use this module to change password.

Logout:

This module is used exit student panel and return back to Home Page.

Admin Panel

Dashboard:

This module displays overview of whole application such as number of course, number of registered students etc.

Courses:

This is the most important module of admin panel where Admin can view list of course as well as add new courses and modify or delete courses.

Lessons:

Admin can view lesson based on course id as well as new lesson can be added to the course and modification or deletion is also possible using this module.

Students:

Admin can view registered students details. Admin can add, edit and delete student.

Feedback:

Admin can view/delete feedback given by student.

Sell Report:

Analyzing sales is very import for any kind of business and this module is perfect for analyzing sales based on date. It will generate sells report which can be possible to print out for office records.

Payment Status:

If student file any complaints regarding payment Admin can use this module to display payment status in more details such as bank name, transaction id, payment date etc.

Change Password:

Admin can use change password.

Logout:

This module is used exit admin panel and return back to Home Page.

13. Data Dictionary

In order to maintain the data of the database a number of tables are used. Various tables contain data about the various entities.

Table Name: Admin (Stores Admin Detail)

| Attribute | Data Type | Description |
|-------------|--------------|-----------------------|
| admin_id # | int(11) | Stores Admin ID |
| admin_name | varchar(255) | Stores Admin Name |
| admin_email | varchar(255) | Stores Admin Email ID |
| admin_pass | varchar(255) | Stores Admin Password |

Table Name: Student (Stores Student Detail)

| Attribute | Data Type | Description |
|-----------|--------------|--------------------------------|
| stu_id # | int(11) | Stores student ID |
| stu_name | varchar(255) | Stores student Name |
| stu_email | varchar(255) | Stores student Email ID |
| stu_pass | varchar(255) | Stores student Password |
| stu_occ | varchar(255) | Stores student occupation |
| stu_img | text | Stores student profile picture |

Table Name: Feedback (Stores Feedback Detail)

| Attribute | Data Type | Description |
|-----------|-----------|-------------------------|
| f_id # | int(11) | Stores Feedback ID |
| f_content | text | Stores Feedback content |
| stu_id | int(11) | Stores Student ID |

Table Name: course (Stores Course Detail)

| Attribute | Data Type | Description |
|-----------------------|--------------|---------------------------------|
| course_id # | int(11) | Stores Course ID |
| course_name | text | Stores course Name |
| course_desc | text | Stores course description |
| course_author | varchar(255) | Stores course author/instructor |
| course_img | text | Stores course display picture |
| course_duration | text | Stores course duration |
| course_price | int(11) | Stores course selling price |
| course_original_price | int(11) | Stores course original price |

Table Name: Lesson (Stores Lesson Detail)

| Attribute | Data Type | Description |
|-------------|-----------|-------------------------------------|
| lesson_id # | int(11) | Stores Lesson ID |
| lesson_name | text | Stores Lesson name |
| lesson_desc | text | Stores lesson description |
| lesson_link | text | Stores lesson video link/video file |
| course_id | int(11) | Stores course ID |
| course_name | text | Stores course Name |

Table Name: courseorder (Stores Course order Detail)

| Attribute | Data Type | Description |
|------------|--------------|-----------------------------|
| co_id # | int(11) | Stores course order ID |
| order_id | varchar(255) | Stores Order ID (Random) |
| stu_email | varchar(255) | Stores student email id |
| course_id | int(11) | Stores course id |
| status | varchar(255) | Stores payment status |
| respmsg | text | Stores payment response msg |
| amount | int(11) | Stores course amount |
| order_date | date | Stores purchase date |

14. Limitations of the Project

- Only one tutor can access at a time
- It's not SEO friendly
- Risk unauthorized accessibility
- Support is good in modern web browsers but not in legacy ones

15. Future Scope of the Project

- More than one tutor can be added
- Interaction between Student and Tutor can be improved by introducing Discussion forum
- Quiz Facility may enhance this application's market value
- Live Class can be added

16. Bibliography

Books: -

- IGNOU Blocks of Systems Analysis and Design
- IGNOU Blocks of Introduction to Software Engineering
- The Complete Reference PHP
- Head First SQL: Your Brain on SQL by Lynn Beighley

Web Source: -

- www.google.co.in
- www.wikipedia.org
- www.php.net
- www.stackoverflow.com
- www.getbootstrap.com