

PROJECT REPORT  
ON  
**E-Learning Management System  
(Horizon)**

**B.Tech (CE) Sem-IV**

**In the Subject of  
Software Engineering Principles and Project**

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### **CERTIFICATE**

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## **1.Abstract**

In Modern days everything happens online, so why not Studies? So, this Web Application(E-Learning) helps students to study for various exams online from anywhere. All you need to have computer and network and users can study various courses from computer.

Nowadays, online education needs the most and in Corona Pandemic it is more important. It helps People for studying without going to schools, colleges and coaching centre.

Users can see the videos, reading from text document and understand concept well. And even more it is free of cost so, everyone who wants to study they can easily.

## **2. Introduction**

### **2.1 Introduction of E-Learning System :-**

Here We are going to design one e-learning Platform which provide online educational video lecture which you can see from your laptop, mobile or computers by sitting at home only.

In this application all students who wants to study online can visit the site and sign-in if they have already created account otherwise, they have to create new account and then log-in. There is also option for log-in as faculty or as student.

After logged in you can see some iconic courses for which subscription is needed to join them. So, client need to proceed with the card details for doing the payment.

There are some of the free video lectures also available on the site for which you don't need subscription.

There Is facility of tests as well on the site so clients get themselves evaluated and be aware about their progress.

Those people who does not have enough money to join the subscription courses they can go for scholarship test as well. And get scholarship up to some extent.

After subscription user can search for the videos for which they are looking for. There are some options like history in which we can see list of videos we have seen, doubt section in which we can ask our doubt about any topic, test section in which there is quiz for all the topic and also a score board that shows the result of all the participates.

There is your activity option which shows how much time you have spent on this website. There is notification option which give you information about new videos new quiz and all.

There is profile option in which you can change information about your profile and finally a logout option using that you can logged out from the website.

So, here we are going to design a small software of e-learning platform...

## 2.2 Technology/Platform/Tools Used

### HTML :-

Hypertext Markup Language (**HTML**) is the standard markup language for documents designed to be displayed in a web browser. **HTML** describes the structure of a web page semantically and originally included cues for the appearance of the document. **HTML** elements are the building blocks of **HTML** pages.

### Python :-

**Python** is an interpreted, object-oriented, high-level programming language with dynamic semantics. **Python's** simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. **Python** supports modules and packages, which encourages program modularity and code reuse.

## **CSS :-**

**CSS** stands for Cascading Style Sheets. **CSS** describes how HTML elements are to be displayed on screen, paper, or in other media. **CSS** saves a lot of work. It can control the layout of multiple web pages all at once.

## **Django :-**

**Django** is a high-level Python web framework that enables rapid development of secure and maintainable websites. **Django** helps developers avoid many common security mistakes by providing a framework that has been engineered to "do the right things" to protect the website automatically.

## **GitHub :-**

**GitHub** is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

## **Visual Studio :-**

**Visual Studio** is an integrated development environment (IDE). It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. **Visual Studio** includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring.

### **3. Software Requirement Specifications**

#### **E-Learning Management System :-**

##### **R1. Manage user module.**

###### **R1.1 Register user.**

**DESCRIPTION:** A new user can register to this online portal.

**Input:** User's details: Email, name, personal details, password, professional details.

**Output:** Confirmation message for successful registering.

###### **R1.2 User Login.**

**Description:** A registered user can login to the portal.

**Input:** User's email, password

**Output:** Redirect to home page after successful login.

###### **R1.3 Forgot password.**

**Description:** A User can reset the password if it is forgotten.

**Input:** Email Id which is registered.

**Output:** Verification code to be sent to entered email Id.

##### **R2. Manage Subscription-courses and Scholarship Module.**



### **R2.1 Manage Get Subscription.**

**DESCRIPTION:** Users have to pay money for studying some iconic courses like GATE, UPSC, JEE, NEET and many more.

**INPUT:** Enter course name of which user wanted to get Subscription.

**OUTPUT:** Select a plan that suits users and which user can afford for study.

### **R2.2 Manage Plus and Iconic Courses.**

**DESCRIPTION:** It will give two option to user one is PLUS which includes basic plan & another is ICONIC which includes next level with personal coach and all facilities of basic plan.

**INPUT:** Select either PLUS or ICONIC.

**OUTPUT:** Display fees with respect to month like for 1 month 9000, for 6 months 40,000 likewise.

### **R2.3 Manage Paying Process.**

**DESCRIPTION:** It is process to pay respected amount of courses which you want to subscribe.

**INPUT:** Select proceed to pay option.

**OUTPUT:** It will display user to choose payment method

Payment with card, Net Banking, Paytm. If

user select payment with card user need to fill all

card details and select pay option. User can also

proceed with Net banking and Paytm.

#### **R2.4 Manage continue with process option.**

**DESCRIPTION:** It describes further process of paying money.

**INPUT:** Select continue option.

**OUTPUT:** It will display total amount that user have to pay

and all details about user's chosen courses like

which facilities user will get and for how much

duration the course will valid. And lastly select Pay

option to finish the paying process.

### **R3. Manage videos module.**

#### **R3.1 Searching for videos.**

**DESCRIPTION:** searching videos related to the topic which user wants to see.

**INPUT:** Topic name.

**OUTPUT:** Video related to the topic name.

### **R3.2 Save videos.**

**DESCRIPTION:** Save videos which user want to save.

**INPUT:** Click on save option.

**OUTPUT:** Save the video in save list.

### **R3.3 Download videos.**

**DESCRIPTION:** Download videos which user want to download.

**INPUT:** Click on download option.

**OUTPUT:** Download the video in download list n popup the message that video is downloaded.

### **R3.4 History of videos.**

**DESCRIPTION:** Save the list of videos which was shown by the users.

**INPUT:** click on history option.

**OUTPUT:** saw the list of history videos.

## **R4. Manages quiz module.**

### **R4.1 Quiz topic.**

**DISCRIPTION:** Searching for the quizzes related to thew topic.

**INPUT:** Topic name.

**OUTPUT:** Display quizzes related to the topic.

#### **R4.2 Attend quiz.**

**DISCRIPTION:** Attend the quiz and answer the questions.

**INPUT:** Click on accept button and select options for the question.

**OUTPUT:** You can see right mark on the option which you had selected.

#### **R4.3 Submit the quiz.**

**DISCRIPTION:** Submit the quiz's answer.

**INPUT:** Click on submit option.

**OUTPUT:** Popup the massage that quiz submitted successfully.

#### **R4.4 See the result of quiz:**

**DISCRIPTION:** This option sees the result of quiz.

**INPUT:** Click on view scores option.

**Output:** Popup the scores.

### **R5. Manage Profile Module.**

**R5.1 Create your profile:**

**DESCRIPTION:** It helps Users to create their profile.

**INPUT:** Simply click create profile option.

**OUTPUT:** It will display one form that you need to fill and then  
Choose submit button to submit it.

**R5.2 Manage Profile Form.**

**DESCRIPTION:** It manages profile form of user.

**INPUT:** Enter Name, Phone Number, Standard, Date of Birth,  
School name, Upload Photo and Upload user's Aadhar-  
Card. And choose submit button.

**OUTPUT:** It will display your whole form filled with your  
Entered details.

**R5.3 Update your Profile Form.**

**DESCRIPTION:** It will let users to change their enter details.

**INPUT:** Click update your profile option.

**OUTPUT:** It will display profile form which you filled before  
but now you can change details which you wanted  
to change and resubmit the profile form.

**R5.4 Manage some extra information about users.**

**DESCRIPTION:** It manages some extra information like which  
Course user currently watch, how much time  
User spent on this platform.

**INPUT:** Click Profile option.

**OUTPUT:** It will display the course which user currently watch  
and how much time user spent on the platform.

**R6. Manage Doubt Module.****R6.1 Manage Ask Doubt.**

**DESCRIPTION:** This option will help user to ask doubt related  
to lectures or courses they have seen. And they  
can get clear about their studies.

**INPUT:** Select ask doubt option and post query or doubt.

**OUTPUT:** Reply which is given by e-learning platform system's  
administrator or people who are working with this  
system.

**R6.2 Manage doubt or query calls.**

**DESCRIPTION:** This platform also provides facility to call

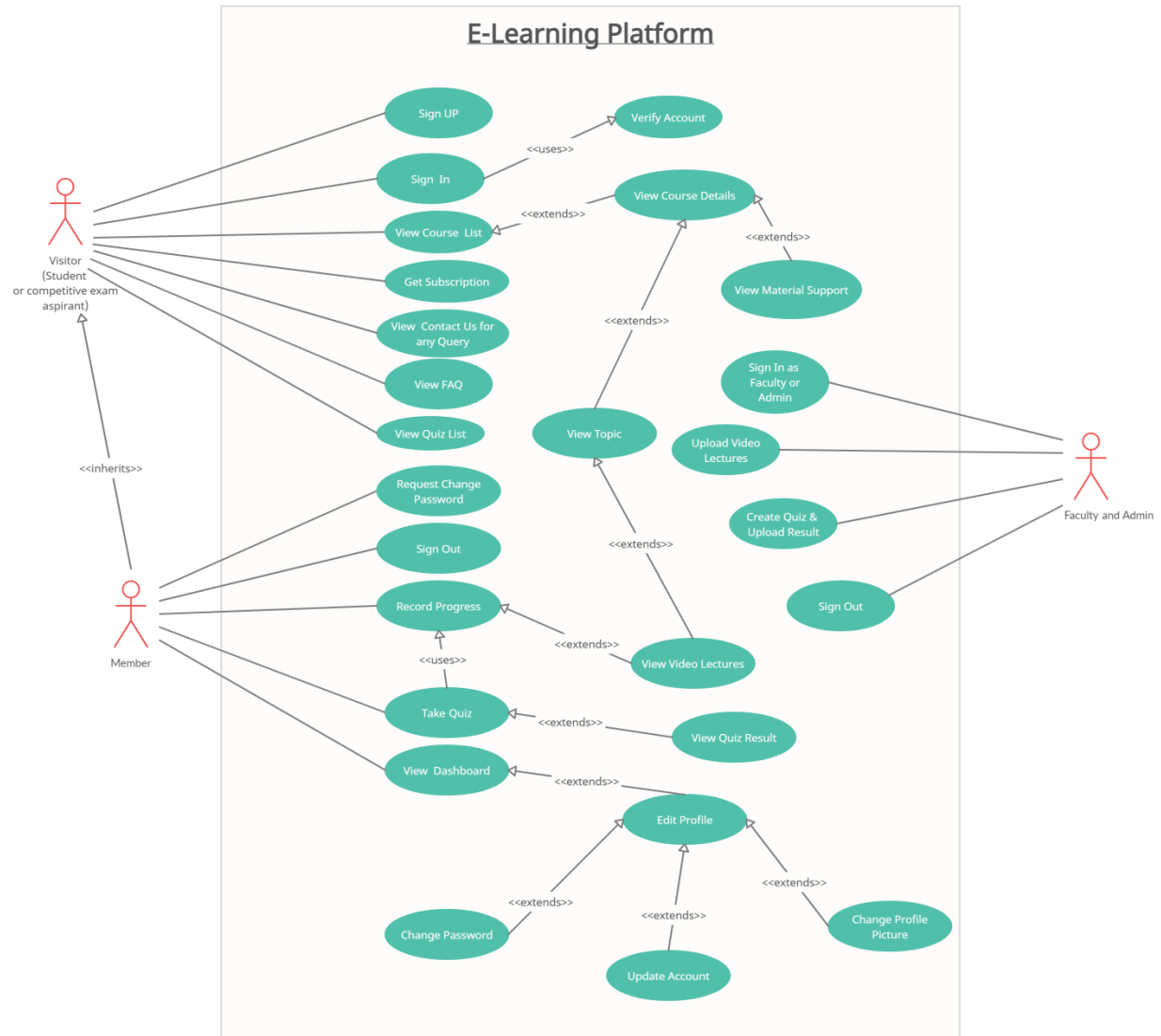
teachers if user have query.

**INPUT:** select call option and then select number on which  
user want to ask doubt.

**OUTPUT:** Call receives by system.

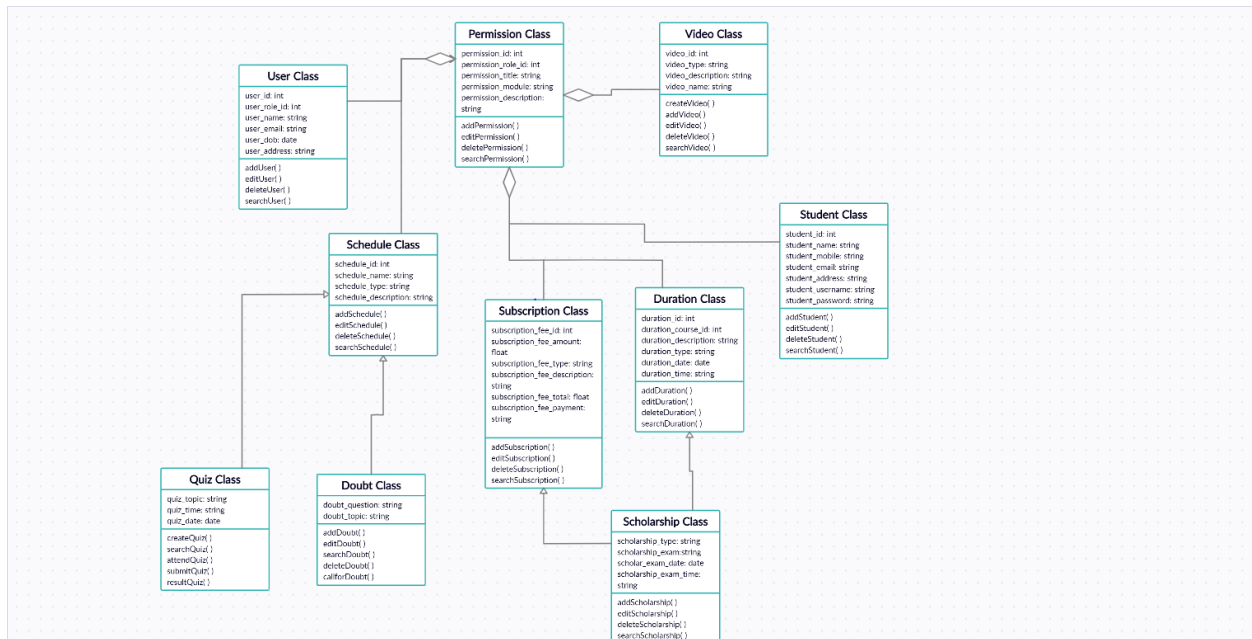
## **4. Designs**

### **1. Usecase Diagram :-**



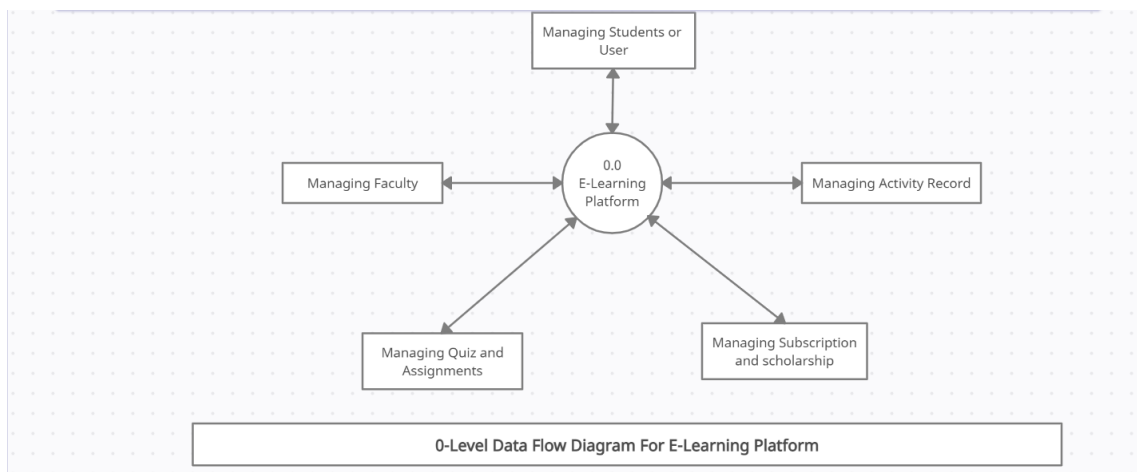


## 2. Class Diagram :-

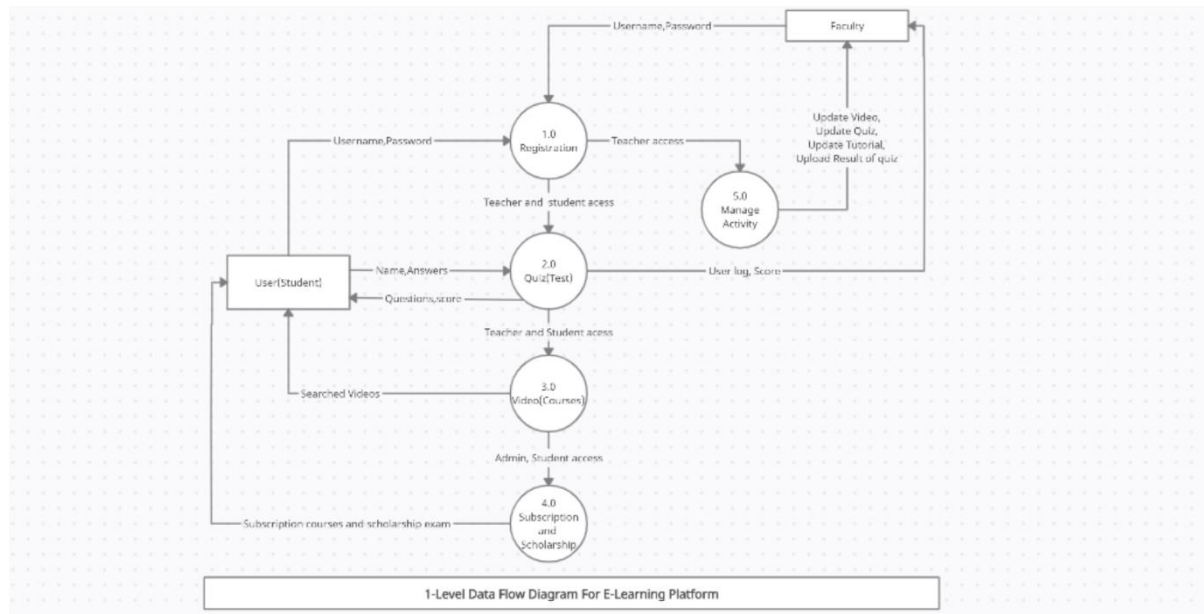


## 3. DFD Model :-

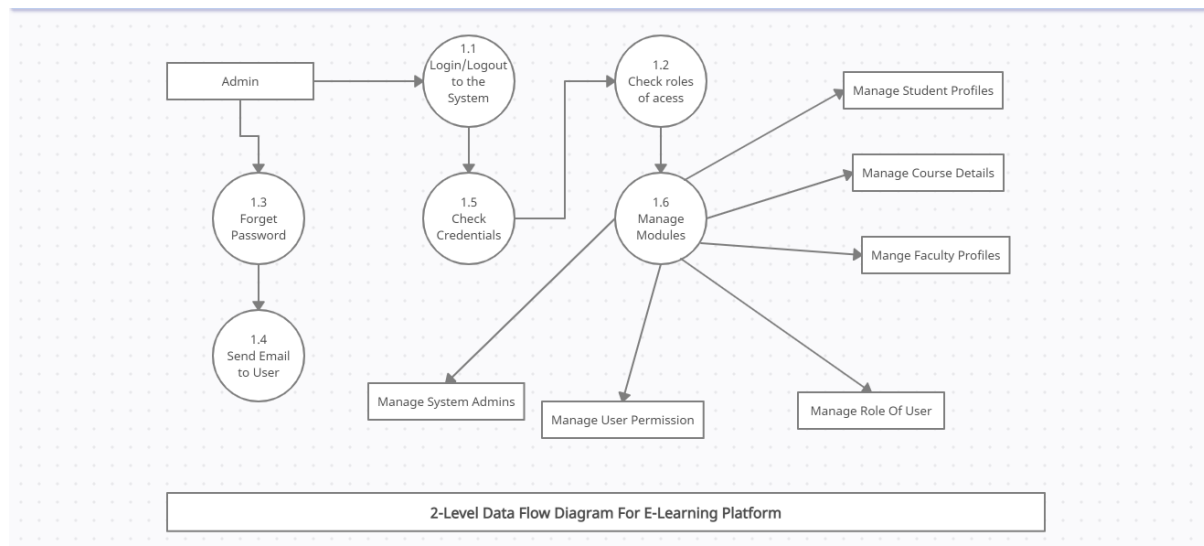
❖ Level 0 DFD for E-Learning Platform:



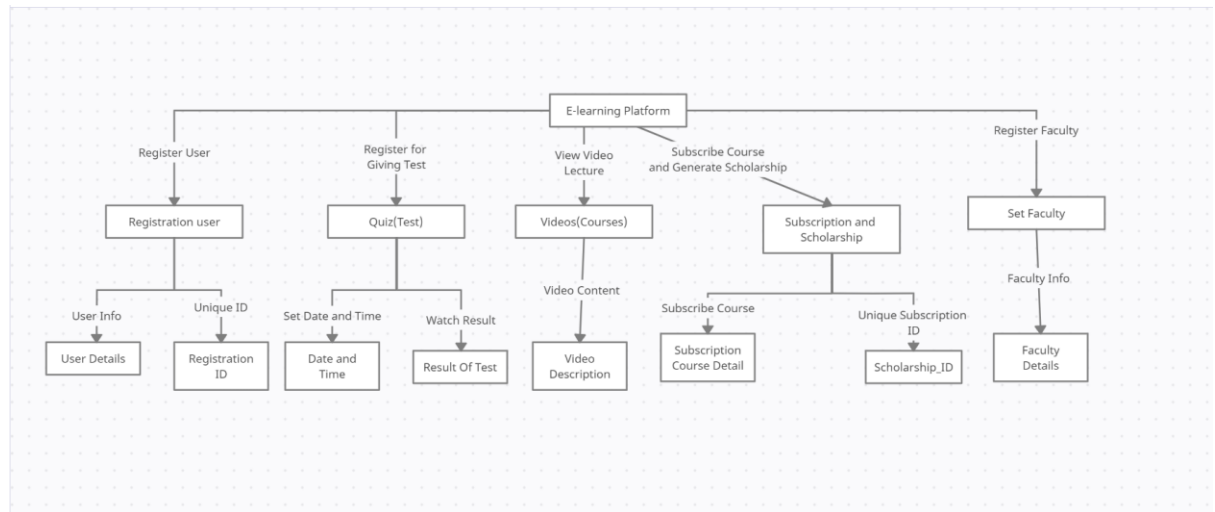
### ❖ Level 1 DFD for E-Learning Platform:



### ❖ Level 2 DFD for E-Learning Platform:

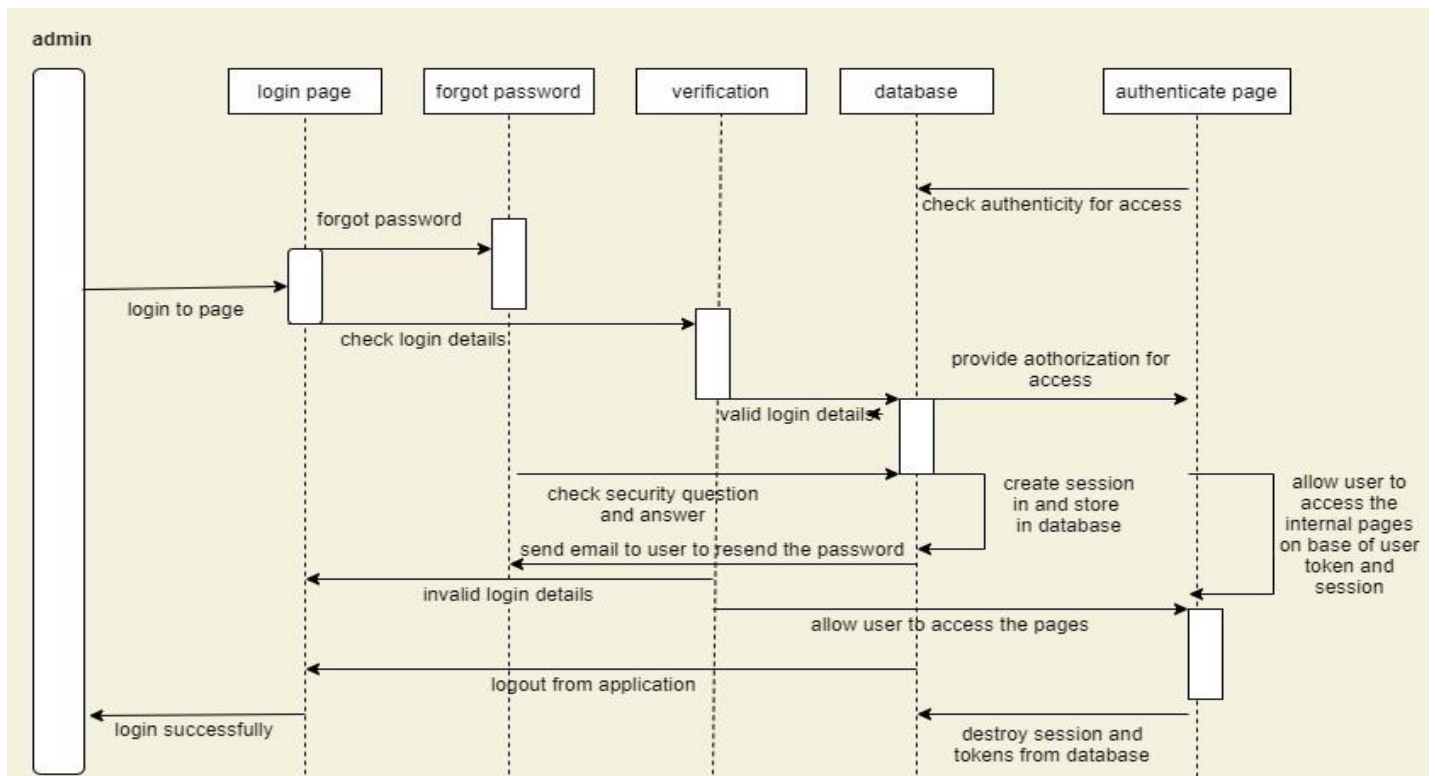


## 4. Structure Chart :-

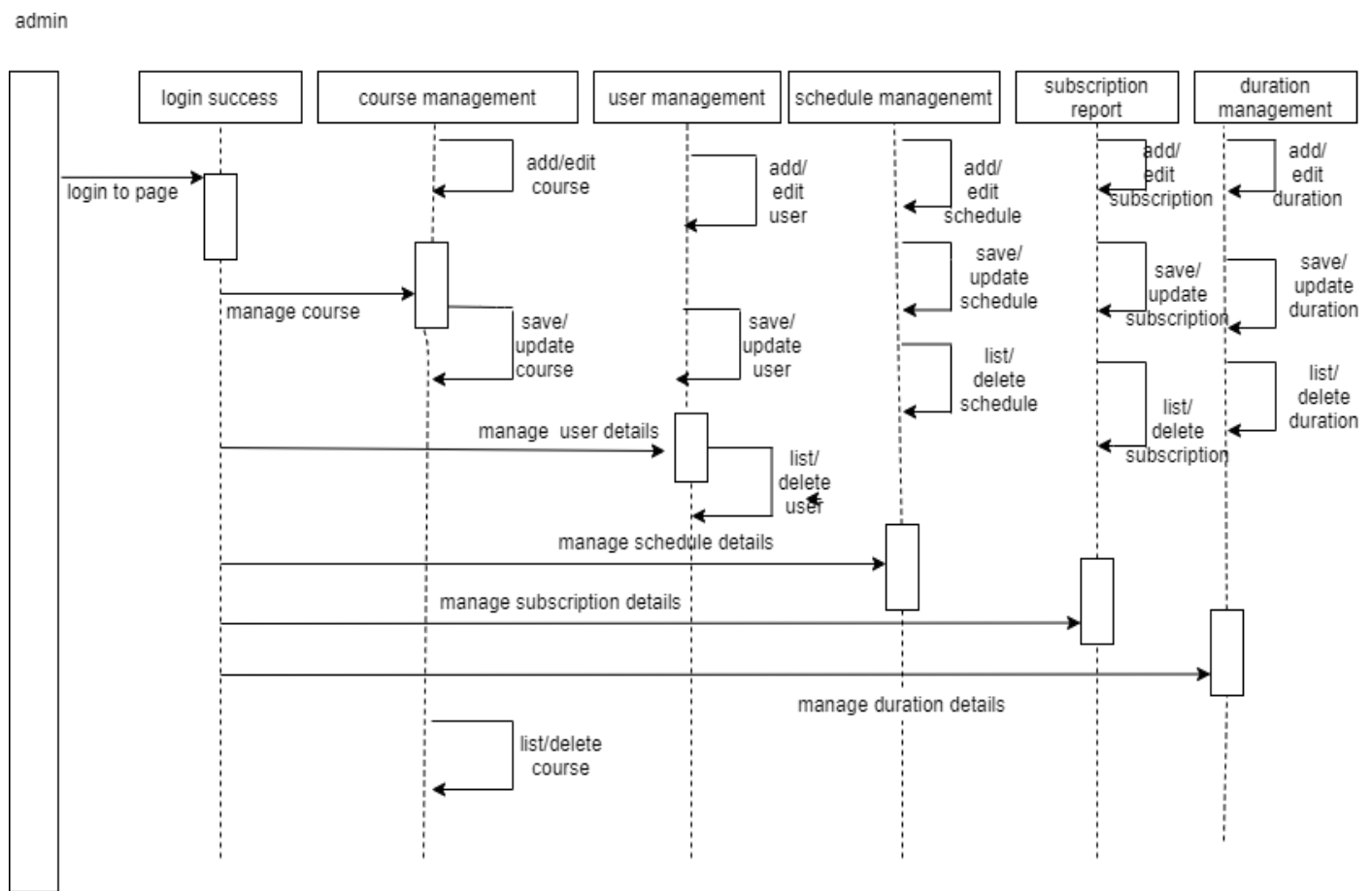


## 5. Sequence Diagram :-

❖ Sequence Diagram for Login User :-

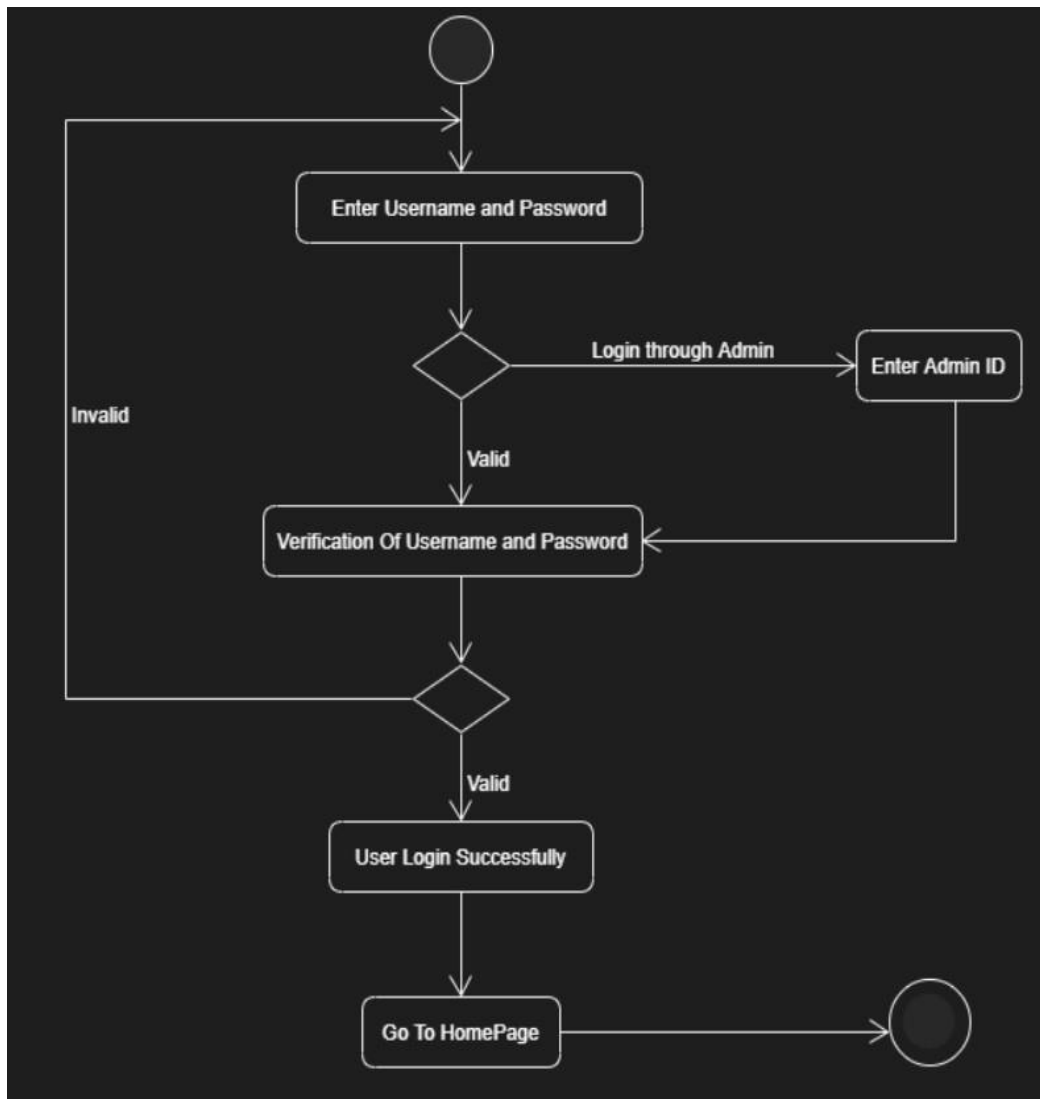


❖ Sequence Diagram For Managing System :-

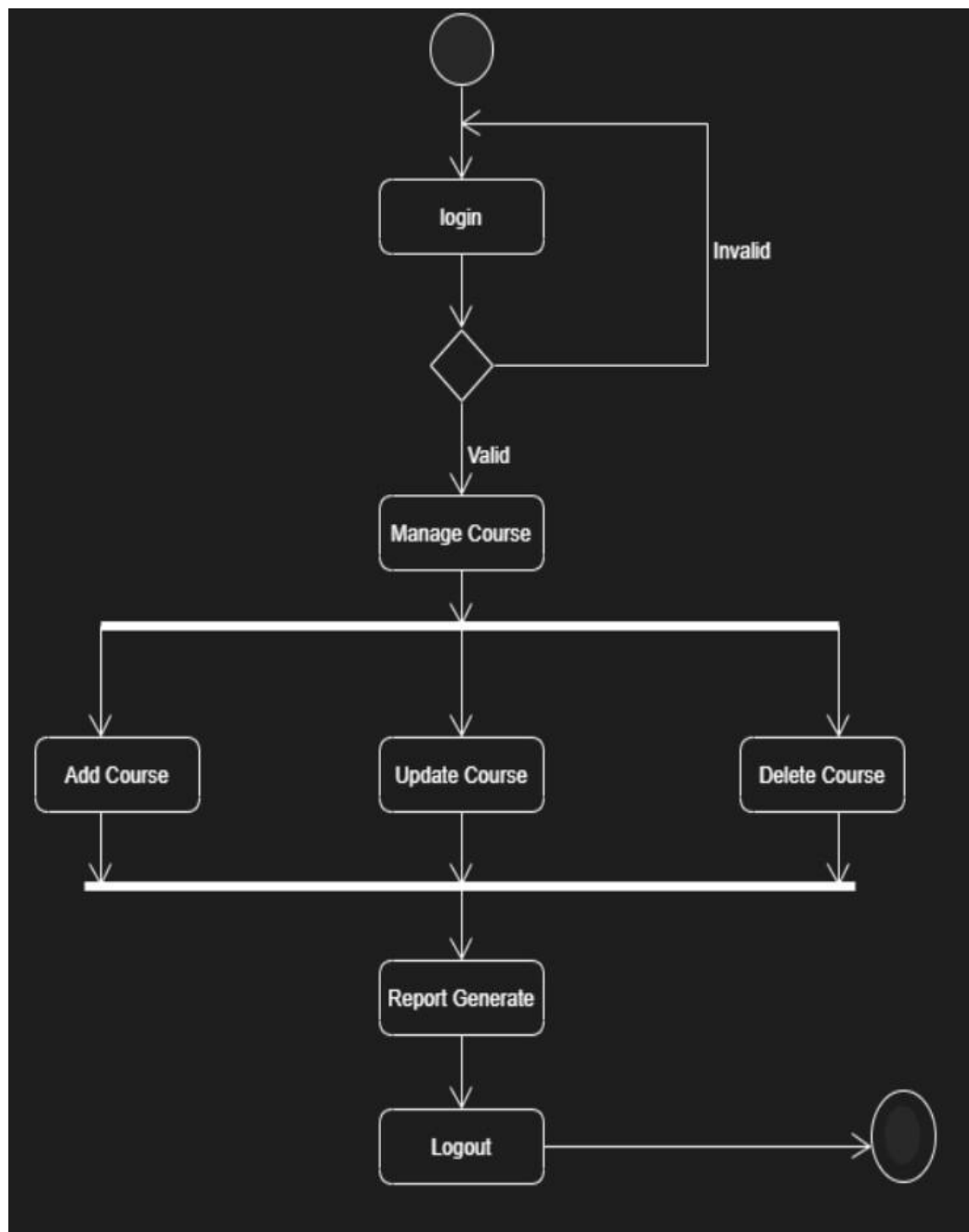


## 6. Activity Diagram :-

### ❖ Activity Diagram For Login User :-



❖ Activity Diagram For Manage Course :-



## **5. Implementation Details**

We implement this Web Application using **Django Framework**.

We used **Python, HTML** and **CSS**. All codes we Push into **Git Repository**.

❖ **URL of Git Repository :-**

<https://github.com/nidhivpatel/elearningplatform.git>

One Can Visit above link and go through the code implementation.

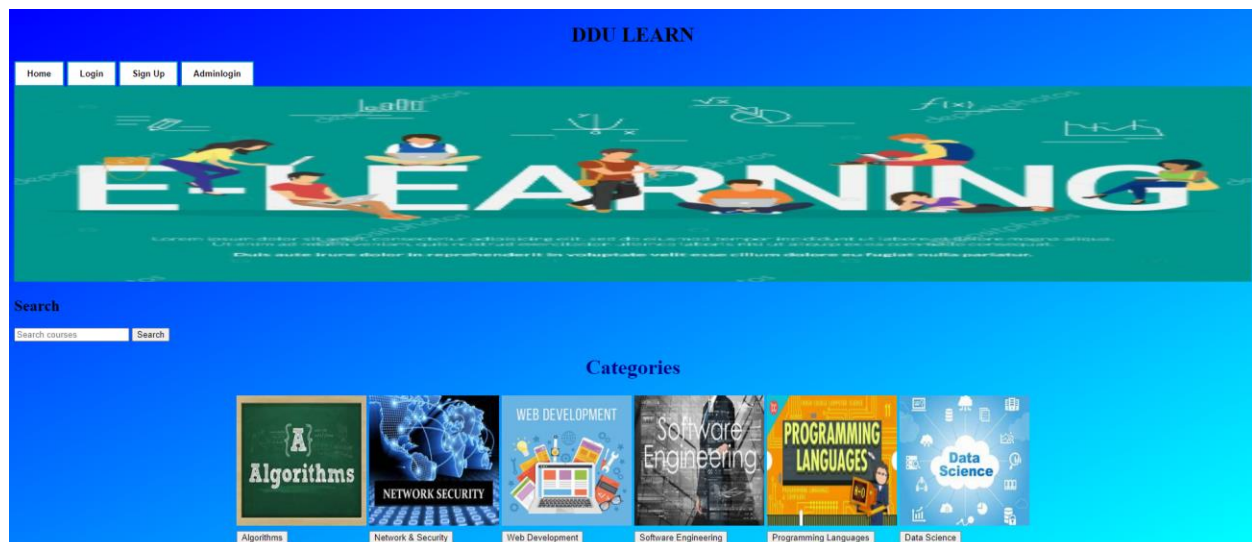
## **6. Testing**

For testing we learnt **Unit Testing** and **Selenium tool**.



## 7. Screenshots

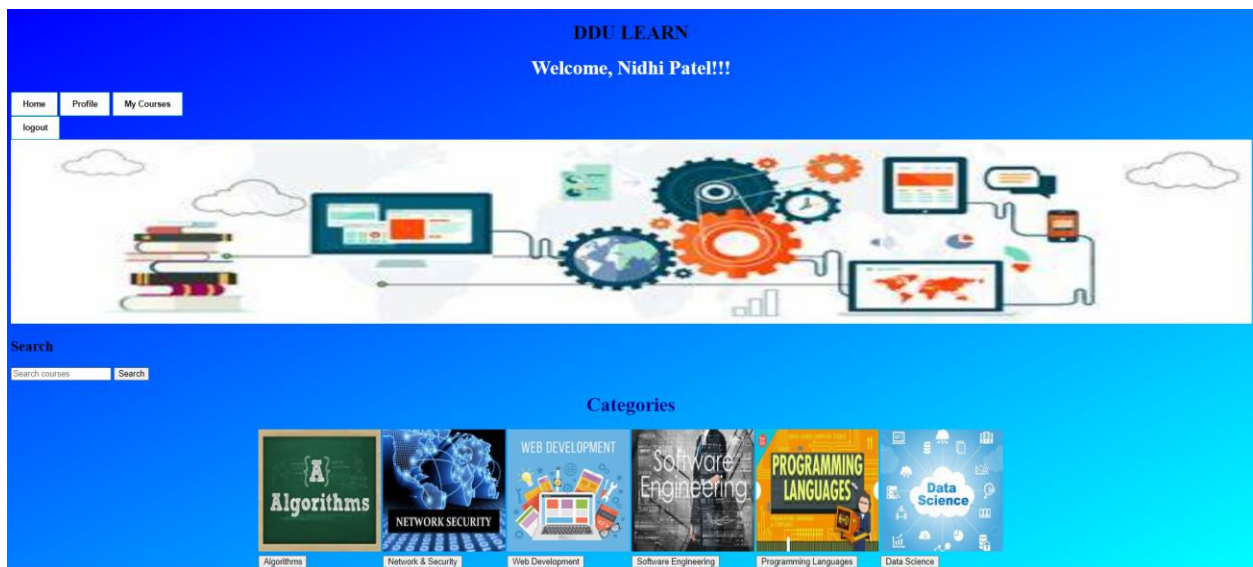
### 1. Home Page



### 2. Login Page



### 3. Home Page After Logging In



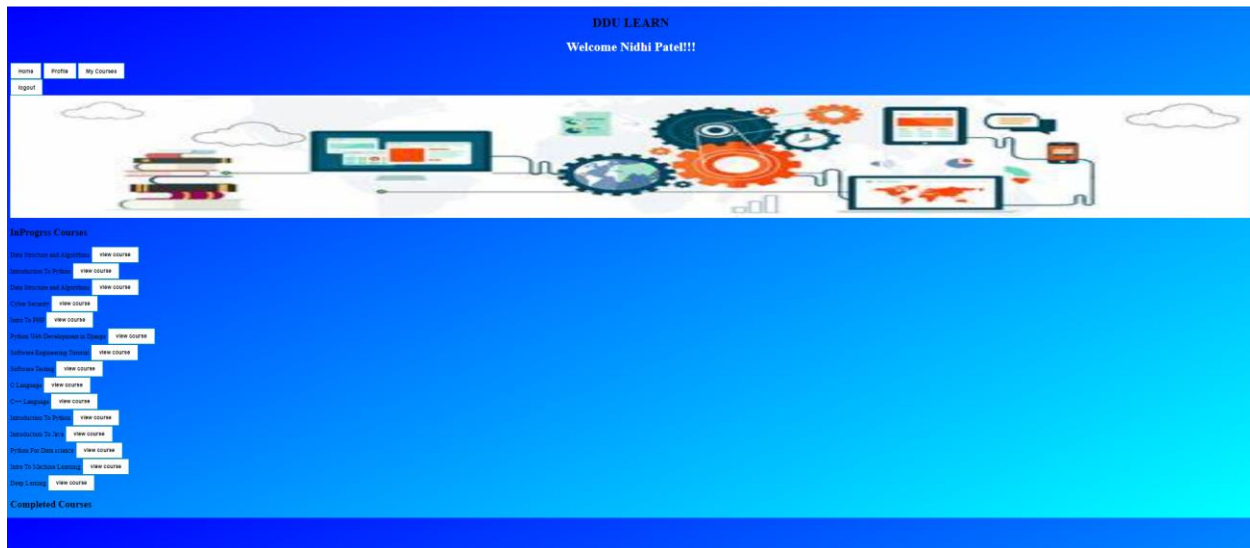
### 4. Admin Log-In Page



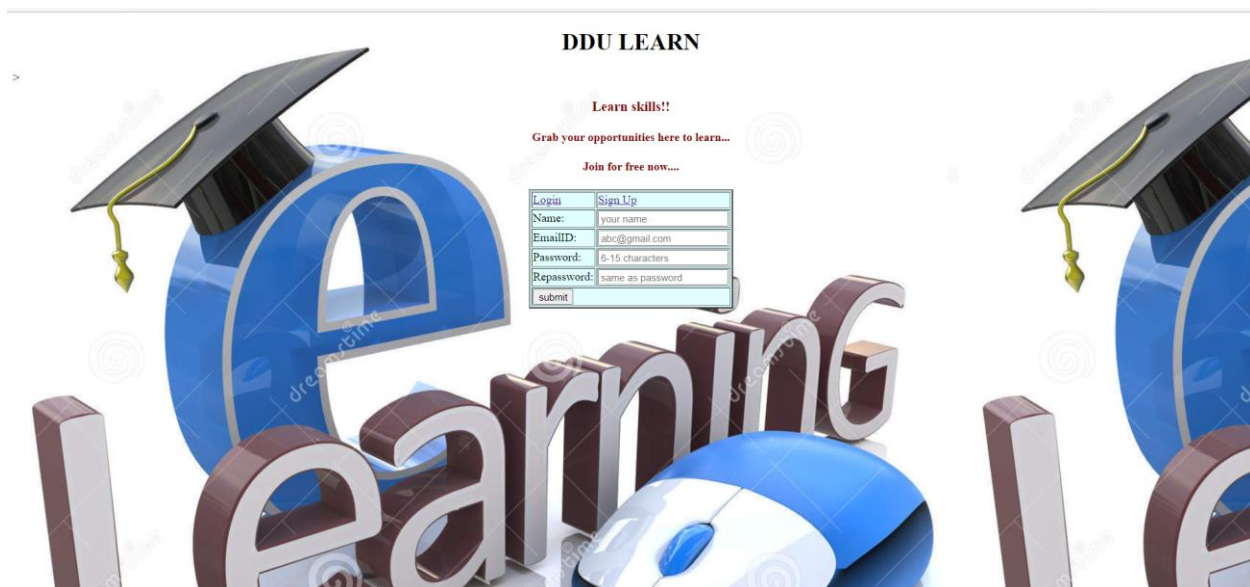
## 5. Profile Page



## 6. My courses Page



## 7. Sign-Up Page



## 8. Forget Password Process



## DDU LEARN

Please enter your email address. You will receive an e-mail  
along with a link which can be used to reset your password.

Email ID

## DDU LEARN

New Password:   
Re-Password:

## DDU LEARN

To:

**nidhi2007patel@gmail.com**

You're receiving this email because you have requested to change password for your user account at 127.0.0.1:8000.

Please go to the following page and create a new password:

Thanks for using our site!  
The 127.0.0.1:8000 team

## DDU LEARN

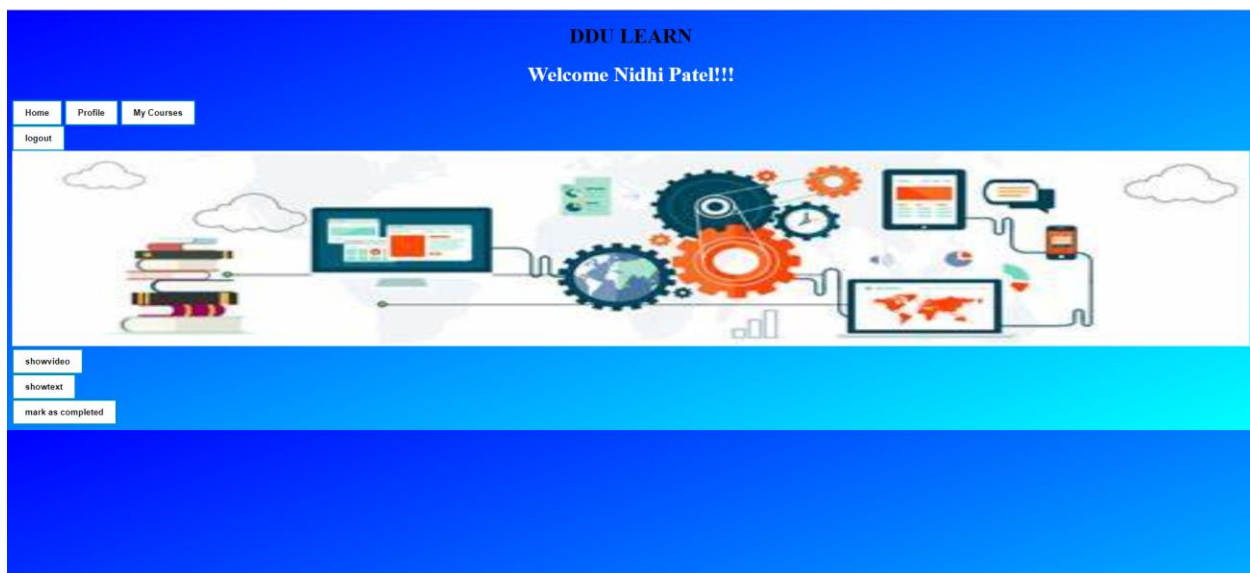
**Nidhi Patel**

Your password has reset successfully.  
Now you can login using your new password.  
[Click here](#) to go to login page.

## 9. Enrol Course Here



## 10. Show Course Content



## 11. Show Text Content of Enrolled Course




## 12. Admin Home Page



## 13. Add Course Here

**DDU LEARN**



Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Home

Course Name:   
 Category: Algorithms  
 Image File: Choose File No file chosen

## 14. Show Course Page

**DDU LEARN**



Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Home

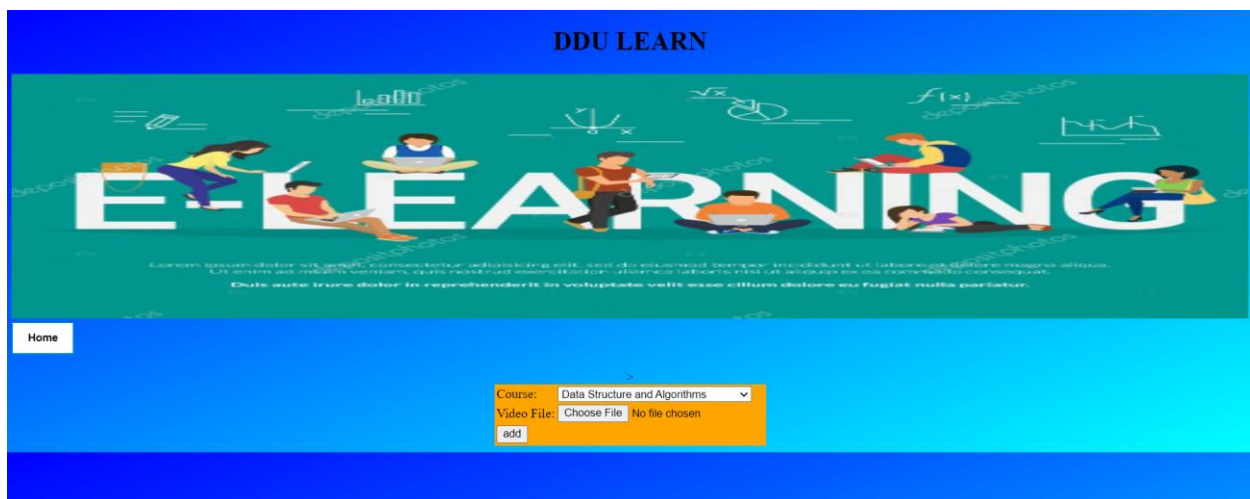
Course Image	Course name	Course Category	
	Data Structure and Algorithms	Algorithms	<input type="button" value="delete"/>
	C Language	Programming Languages	<input type="button" value="delete"/>
	C++ Language	Programming Languages	<input type="button" value="delete"/>
	Introduction To Python	Programming Languages	<input type="button" value="delete"/>

## 15. Add Course Content in Text Format





## 16. Add Course Content in Video Format



## 17. Delete Course Content



## 8. Conclusion

By the successful deployment of E-Learning Platform, team of teachers will be ready to pass their knowledge to the Students.

This Application will help students to study online by sitting at home only and it is absolutely free of cost hence, it saves the money as well as time.

Hence, Students can easily prepare for various kind of examination online.

E-Learning App will turn into very helpful for students those are really expand their acknowledgement.

## **9. Limitation and future extension**

### **Limitation :-**

Background processes can be handled more efficiently.

CSS can be applied more efficiently.

### **Future Extension :-**

User interface will be improved to provide better interaction with system.

Background processes will be efficient and CSS could be applied more efficiently.

Subscription option and Doubt session could be added.

We can also add Test-series and Quiz.

## **10. Bibliography**

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Software Engineering A Practitioner's approach:

by ROGER S. PRESSMAN

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