

**ONLINE LEARNING THROUGH VIDEO**

**By**

|                               |                         |
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This Report Presented in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science in Computer Science and Engineering

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

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## **APPROVAL**

This Project titled “**ONLINE LEARNING THROUGH VIDEO**”, submitted by Md. Mahabub Alom, ID No: 152-15-6267, Afsara Tasnim Jahangir, ID No: 152-15-5958, Nabajit Dash, ID No: 152-15-5713, Shuly Akter Shilu, ID No: 152-15-5530 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 03 May, 2019.

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## DECLARATION

We announce that, this project has been completed by us under the supervision of our honorable sir Md Zahid Hasan, Assistant Professor, Department of CSE, Daffodil International University. I also declare that neither this project nor any part of this project has been presented elsewhere for award of any degree or recognition.

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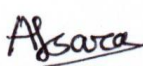
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## **ABSTRACT**

This project is on “Online Learning Through Video”. The concept of online education system is getting more popular day by day. In the past, if we wanted to get a qualification, or even simply learn something new, we should sign up for a course at a institution, pay any relevant fees, and then physically attend class. That was until the online learning revolution started. It is growing dramatically so the opportunities for such kind of software has increased and will continue to increase in future. At the time of more online collaboration and tremendous use of information technology in all spare of our everyday activities. We want to make an online platform to get the class lectures through video. This will give feedback to all the students specially for DIU. When we need the class lectures most of the time we contact with our friends and sometimes we can not get the proper exact lessons and that impacts on our results. The system is recommended to have a unique username and password so that nobody can misuse it. The main idea behind this system is to create an online learning platform that is more versatile and much more easily usable online based learning system.

We hope that it will help every students to get the proper lessons that will be supervised by our teachers for this online learning platform. In future the system will be integrated with more extra features by taking the user review.

## TABLE OF CONTENTS

| <b>CONTENTS</b>  | <b>PAGE</b>  |
|--|--------------|
| Approval   | i            |
| Declaration  | ii           |
| Acknowledgements   | iii          |
| Abstract   | iv           |
| Table of Contents  | v            |
| <br>   |              |
| <b>CHAPTERS:</b>   |              |
| <b>CHAPTER 1: INTRODUCTION</b>                           | <b>01-03</b> |
| 1.1 Objectives   | 02           |
| 1.2 Motivation   | 02           |
| 1.3 Expected Outcome                                     | 02           |
| 1.4 Report Layout  | 02-03        |
| <br>   |              |
| <b>CHAPTER 2: BACKGROUND</b>                             | <b>04-07</b> |
| 2.1 Introduction   | 04           |
| 2.2 Related Works  | 04-05        |
| 2.3 Comparative Studies                                  | 06           |
| 2.4 Scope of the Problems                                | 07           |
| 2.5 Target of the project                                | 07           |
| 2.6 Challenges   | 07           |
| <br>   |              |
| <b>CHAPTER 3: SOFTWARE REQUIREMENT<br/>SPECIFICATION</b> | <b>08-18</b> |
| 3.1 Business Process Model                               | 08           |
| 3.2 Requirement Collection and Analysis                  | 09-10        |
| 3.3 Use Case Model                                       | 10-14        |

|   |                               |              |
|---|-------------------------------|--------------|
| 3.4   | Implementation & Requirements | 14-17        |
| 3.5   | Logical Data Model            | 18           |
| <b>CHAPTER 4: DESIGN SPECIFICATION</b>          |                               | <b>19-27</b> |
| 4.1   | Front-end Design              | 19-23        |
| 4.2   | Back-end Design               | 23-25        |
| 4.3   | Testing and Integration       | 25-27        |
| <b>CHAPTER 5: CONCLUSION &amp; FUTURE SCOPE</b> |                               | <b>28</b>    |
| 5.1   | Conclusion                    | 28           |
| 5.2   | Future Scope                  | 28           |
| <b>REFERENCES</b>                               |                               | <b>29</b>    |

## LIST OF FIGURES

| <b>FIGURES</b>                              | <b>PAGE NO</b> |
|---|----------------|
| Fig. 2.1: Related Works : Udemy             | 04             |
| Fig. 2.2: Related Works : Khan Academy      | 05             |
| Fig. 2.3: Related Works : 10 Minute School  | 05             |
| Fig. 2.4 : Comparative analysis Table       | 06             |
| Fig. 2.5 : Time Scheduling Table            | 07             |
| Fig. 3.1: Business Process Model            | 08             |
| Fig. 3.2: Admin use case model              | 11             |
| Fig. 3.3: User or student use case model    | 11             |
| Fig. 3.4: Logical Data Model                | 18             |
| Fig. 4.1: Home Page                         | 20             |
| Fig. 4.2: Log-In Panel                      | 20             |
| Fig. 4.3: Course interface                  | 21             |
| Fig. 4.4: Content interface                 | 21             |
| Fig. 4.5: Mentor insert page                | 22             |
| Fig. 4.6: Mobile Application User Interface | 22             |
| Fig. 4.7: Mobile Application View           | 23             |
| Fig. 4.8: Users database                    | 23             |
| Fig. 4.9: Mentor database                   | 24             |
| Fig. 4.10: User registration database       | 24             |
| Fig. 4.11: Subscriber database              | 25             |



## LIST OF TABLES

| <b>TABLES</b>   | <b>PAGE NO</b> |
|---|----------------|
| Table 2.4: Comparative analysis Table                 | 06             |
| Table 2.5: Time Scheduling Table                      | 07             |
| Table 4.1: List of the Interface Screen of the system | 19             |
| Table 4.8: User Database Table                        | 23             |
| Table 4.9: Mentor Database Table                      | 24             |
| Table 4.10: User registration database                | 24             |
| Table 4.11: Subscriber database table                 | 25             |

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

DIU online learning or E-learning is an education platform via the Internet, network, computer, smartphone etc. Online based learning is for the most common part that the system empowered pass on of abilities and information. Online training is an adaptable instructional conveyance framework that incorporates any sort of discovering that happens by means of the Internet. The quantity of distance learning and online degrees in most disciplines is large and increasing rapidly. This often involves both out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum. E-learning is the computer and network-enabled transfer of skills and knowledge. E-learning applications and procedures incorporate Web-based learning, Android based portable application learning, PC based learning, virtual training openings and advanced joint effort. Content is conveyed by means of the Internet. The framework enables just enrolled clients to subscribe and new clients are permitted to resister on the application. This is proposed to be a web and android based application.

### 1.1 Objectives

The main objective of DIU online learning system is to provide an online platform to get the class lectures through video.

The goals of our system are:

- To provide the class lectures topic based video tutorial
- Only admin can upload videos
- Admin can change the video status .There is two status ,one is active and other is inactive.
- At first ,User need to confirm registration to subscribe the course.
- By subscription user can find the sequential playlist.

## 1.2 Motivation

There are many technologies have been developed in this world. The computer is the best among all of these. Long time before, People used pen and paper for writing documents.

- For many reasons, most of the students can not ensure to attend all the classes .
- Sometimes we can not remember some important class note points to write down.
- Sometimes many students can not catch the proper lesson during class .

If we can present a proper stage to get the accurate lessons video supervised by our faculty ,then they can overcome those situation better than now. We hope that it will help every students.

## 1.3 Expected Outcome

In our Project our main focus is to provide one stop dashboard to an organizer for uploading, controlling and managing the system.

- It will help all the students to improve their knowledge.
- Overcome their weak points.
- Improve their results.
- They can learn from anywhere by this online platform
- The teachers don't need to repeat the same lesson and may be it also saves our class times.
- Student can access the videos, how many times they need.

## 1.4 Report Layout

We all know, Practical information is more valuable than theory. This project gives us scope to share our knowledge and utilize our thought. By doing this project we can actualize our capacity more practically.

- **Part 1: Introduction**

This section discusses the important theoretical concepts behind our project. Here also discusses our project motivation, objectives and expected outcomes.

- **Part 2: Background**

This section discusses our project related works, comparative studies and scope of the problem.

- **Part 3: Requirement Specification**

This section discusses our project Business Process Modeling, requirement collection and analysis, use case modeling and description, logical data model.

- **Part 4: Design Specification**

This section discusses our project front-end design, back-end design, interaction design and UX and implementation requirements.

- **Part 5: Implementation and Testing**

This section discusses about the Implementation of database, front-end design, interactions, testing. Also discuss about test results and reports.

- **Part 6: Ending and Oncoming Designation**

This section discusses about the conclusion and future scope of our project. This report contains all about our web and android app, its problem, solution and use of the system.

# CHAPTER 2

## BACKGROUND

### 2.1 Introduction

DIU online learning system is an online-based website with mobile Application. This chapter consist the detailed work present, comparative analysis with both platform.. Details about Scope of the application is explained. Our target and challenges that we faced are described here.

For Backend we used PHP 7.2, Laravel 5.7, API PASSPORT, AWT, AuthO, Laravel Collective (From Builder), Javascript

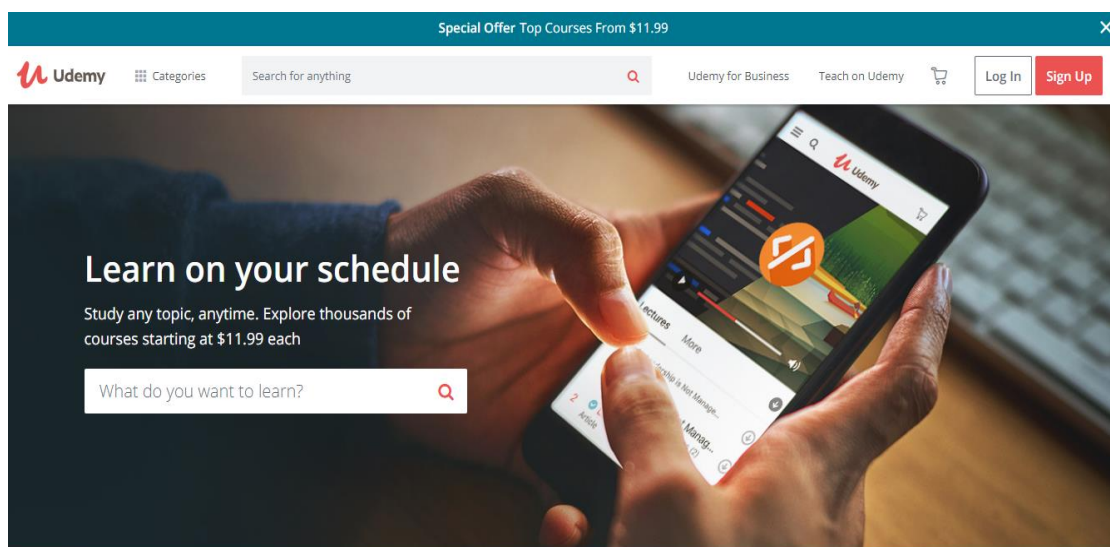
Tools: PhpStrom (Backend), Postman, Photoshop, Notepad++, ColorPiker

Server: Linux 18.04 LTS Server, WinSCP FTP Server, Curl, Nginx Web Server.

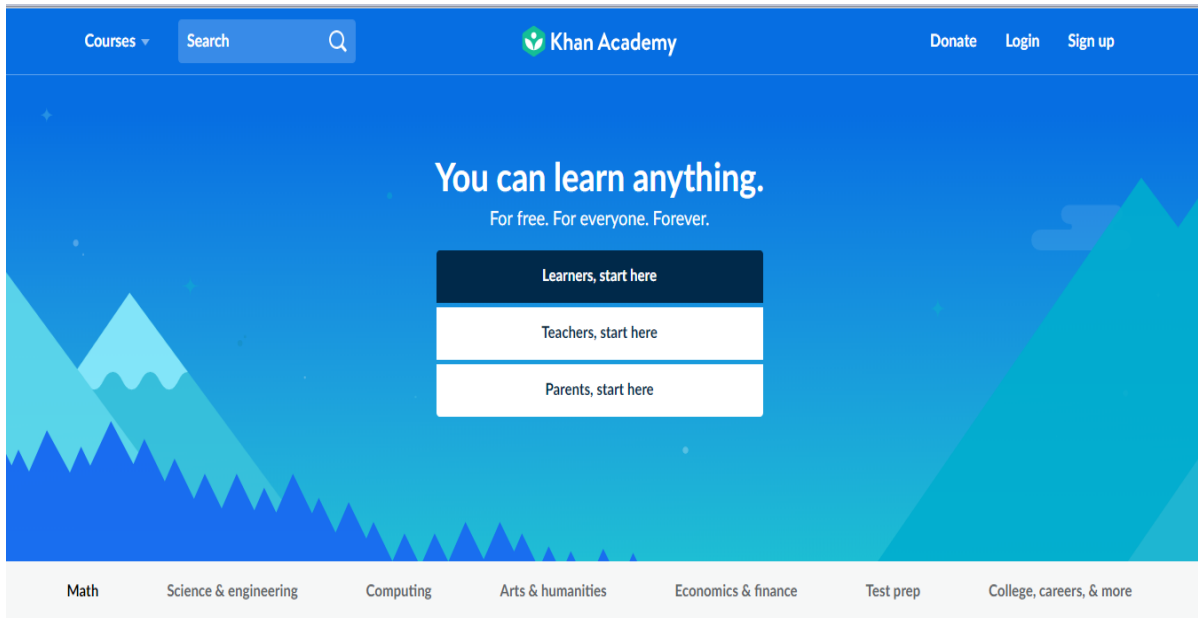
Cpanel. Database: MySql (InnoDB), Phpmyadmin

### 2.2 Related Works

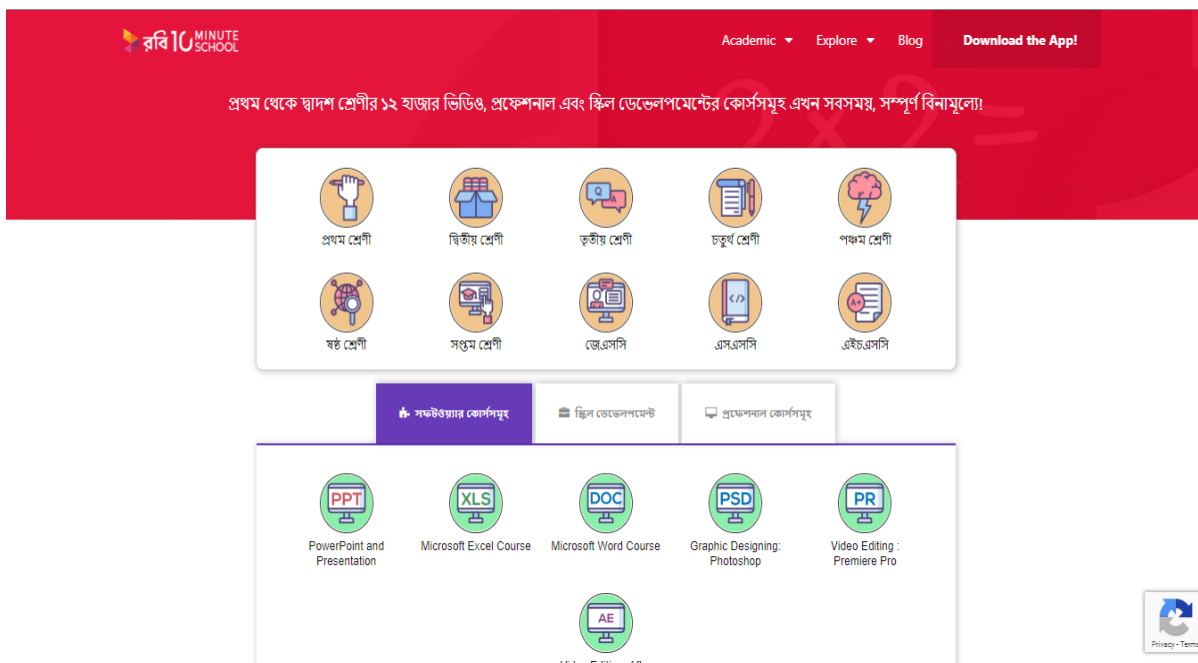
There are a few website with mobile applications for online learning video platform. Specifically if we talk about our country we have 10minutes school, eShikhon.com etc. They have different types of focusing points of view. If we look out of our country there are: Khan Academy, Udemy etc. But they reached their coverage everywhere and that reason they are using their own video platform for business purpose.



**Fig:2.1** Related Works : Udemy



**Fig:2.2** Related Works : Khan Academy



**Fig: 2.3** Related Works :10 Minute School

## 2.3 Comparative Studies

First of all, DIU online learning Video is a platform with android based mobile application and web based platform . There are a few online based learning platform with different types of features in different platform. Some of them are using their own video platform.

Table 2.4: Comparative analysis Table

|   | Khan Academy | Udemy | 10 minutes school | Diu online learning system |
|---|--------------|-------|-------------------|----------------------------|
| 1.User Registration                         | Yes          | Yes   | Yes               | Yes                        |
| 2. Edit Profile                             | Yes          | Yes   | Yes               | Yes                        |
| 3. Admin can control all                    | Yes          | Yes   | Yes               | Yes                        |
| 5. Need mobile verification                 | No           | No    | No                | NO                         |
| 6. Need email for registration              | Yes          | Yes   | Yes               | Yes                        |
| 7. Admin can active or inactive the content | Yes          | No    | NO                | Yes                        |
| 8. User can subscribe                       | NO           | No    | No                | Yes                        |
| 9. Can chat with each admin                 | Yes          | No    | No                | NO                         |
| 10. Sequentially content                    | Yes          | Yes   | Yes               | Yes                        |
| 11. Admin can add mentors                   | Maybe        | Maybe | Maybe             | Yes                        |
| 12. Admin see full statistics               | Maybe        | Maybe | Maybe             | Yes                        |

## 2.4 Scope of the Problems

We worked on the website and mobile application following the software development process. We went through each part completion the previous one. The web application with android app was planned for a few month long to collect requirements and gathered information extensively.

Diu online learning video planning and time management schedule is given below.

### 2.4.1 Time Scheduling

The time scheduling of our project is shown in table 2.5.

|                            |   |                     |
|----------------------------|---|---------------------|
| Planning                   |   | 2 Month and 2 Weeks |
| Design and Analysis        |   | 2 Month             |
| Coding                     |   | 5 Month             |
| Testing and Implementation |   | 2 Month and 2 Weeks |
| Total                      | = | 1 Year              |

## 2.5 Target of our Project

The target of our project is to create an online based video platform for the students to make the learning system easy for everyone.

## 2.6 Challenges

The most challenging part was data synchronization which took a long time to plan. Additionally, a designing database for the whole system was challenging. We faced several bug issues in our system while coding and it took in depth searching to come up with a solution which is kind of frustrating on that time.

The most challenging part is using the video platform. If we want to use our own video platform that will cost us a lot and that is not possible now .So, we used Youtube video platform.



# CHAPTER 3

## SOFTWARE REQUIREMENT SPECIFICATION

### 3.1 Business Process Model

Business process displaying is the graphical portrayal of an organization's business procedures or work processes, as a methods for recognizing potential upgrades. This is normally done through various diagramming techniques. For example: the flowchart, information stream chart and so on. There will be a completely free permit for each club of Daffodil International University. BPM of DIU online learning video shown in figure 3.1.

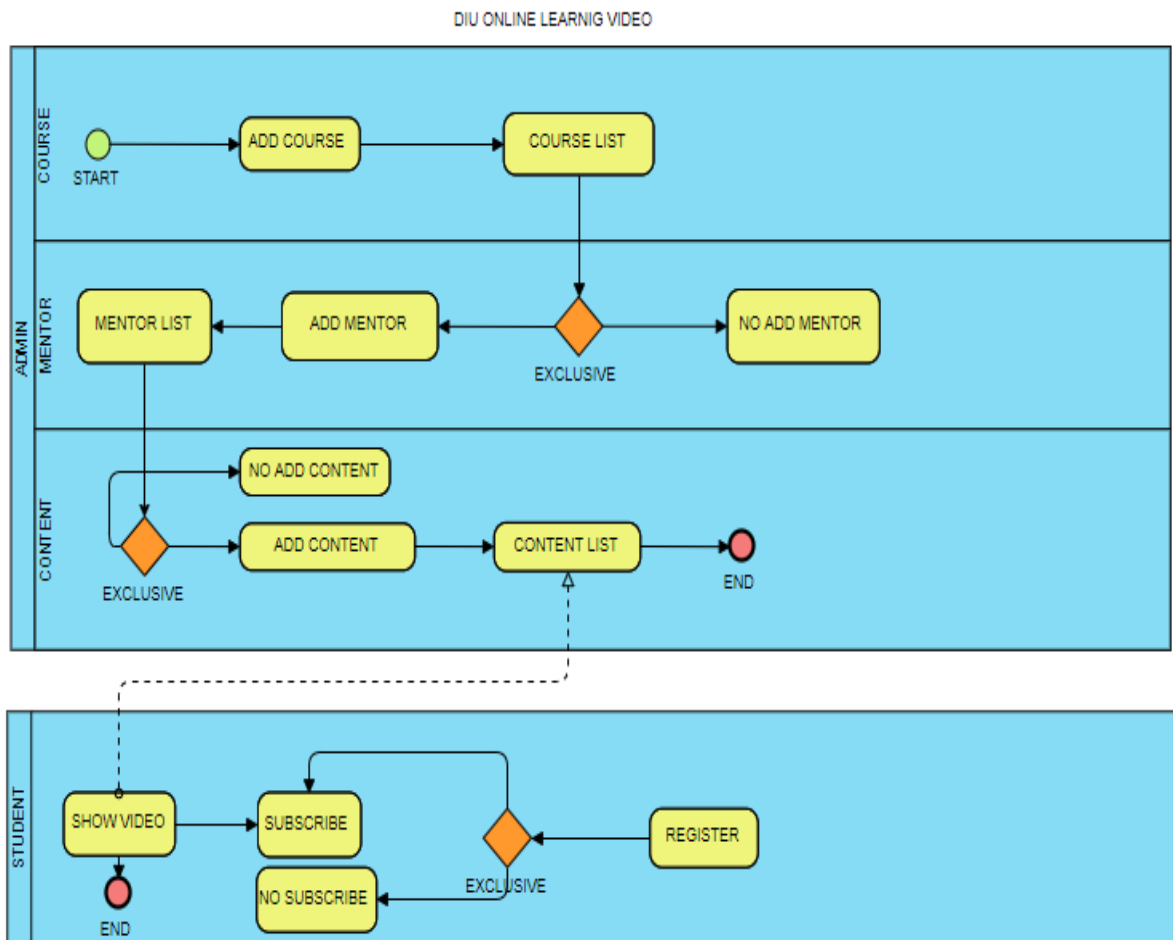


Fig:3.1 BPO model of online learning video

## 3.2 Requirement Collection and Analysis

### 3.2.1 Software Requirements

To develop this application we used the following necessity software:

- Operating System: Windows 7, Windows 8.1, Windows 10, Linux.
- Android: Java 8, Android Studio 3.3.1, Gradle version 3.3.1
- System Design-(Front End): HTML5, CSS3, Animated CSS, Bootstrap Framework, JQuery, Json,ES6
- Language-( Backend ): PHP 7.2, Laravel 5.7, API PASSPORT, AWT, AuthO, Laravel Collective (From Builder), JavaScript
- Database: MySql (InnoDB), Phpmyadmin
- Tools: Android Studio, JDK, PhpStrom (Backend), VSCode(FrontEnd), Postman, Photoshop, Notepad++, ColorPiker
- Debugger: ReactJS Debugger Console.
- Device: Android Smart Phone, Computer.
- Server: Linux 18.04 LTS Server, WinSCP FTP Server, Curl, Nginx Web Server. Cpanel.

Software Requirements, for running the application:

- Operating System: Common Modern Operating System.
- Network: Wi-Fi or Cellular Network.
- Compatible Device: Any android smartphone, any desktop or laptop

### 3.2.2 Hardware Requirements

To develop this application we need the following necessity Hardware:

- Processor: Intel Core i3, Intel Core i5.
- Random Access Memory: 4GB
- Disk Space : At least 0.2GB

### 3.2.3 Functional Requirements

- Graphical User interface which the application user.
- Give ease of understanding to the application through Wi-Fi or cellular network MySQL that stores the data or information to be displayed to the user.

### 3.3 Use Case Model

An use case demonstrates how unique kinds of clients interface with the framework to take care of an issue. All things considered, it portrays the objectives of the clients, the collaborations between the clients and the framework, and the required conduct of the framework in fulfilling these objectives. An use case show comprises of various model components. The most critical model components are: use cases, performing artists and the connections between them. An use case outline is utilized to graphically portray a subset of the model to disentangle correspondences. There will regularly be a few use-case charts related with a given model, each demonstrating a subset of the model components applicable for a specific reason. A similar model component might be appeared a few use-case charts, however each occurrence must be predictable. In the event that apparatuses are utilized to keep up the use case display, this consistency limitation is robotized with the goal that any progressions to the model component (changing the name for instance) will be naturally considered each use case outline that demonstrates that component.

The use case model may contain bundles that are utilized to structure the model to rearrange examination, interchanges, route, improvement, upkeep and arranging. A significant part of the utilization case display is in truth literary, with the content caught in the use case determinations that are related with each use case component. These determinations portray the stream of occasions of the utilization case. The use case demonstrate fills in as a bringing together string all through framework advancement. It is utilized as the essential detail of the practical prerequisites for the framework, as the reason for examination and structure, as a contribution to emphasis arranging, as the premise of characterizing experiments and as the reason for client documentation.

### Admin Use case Model:

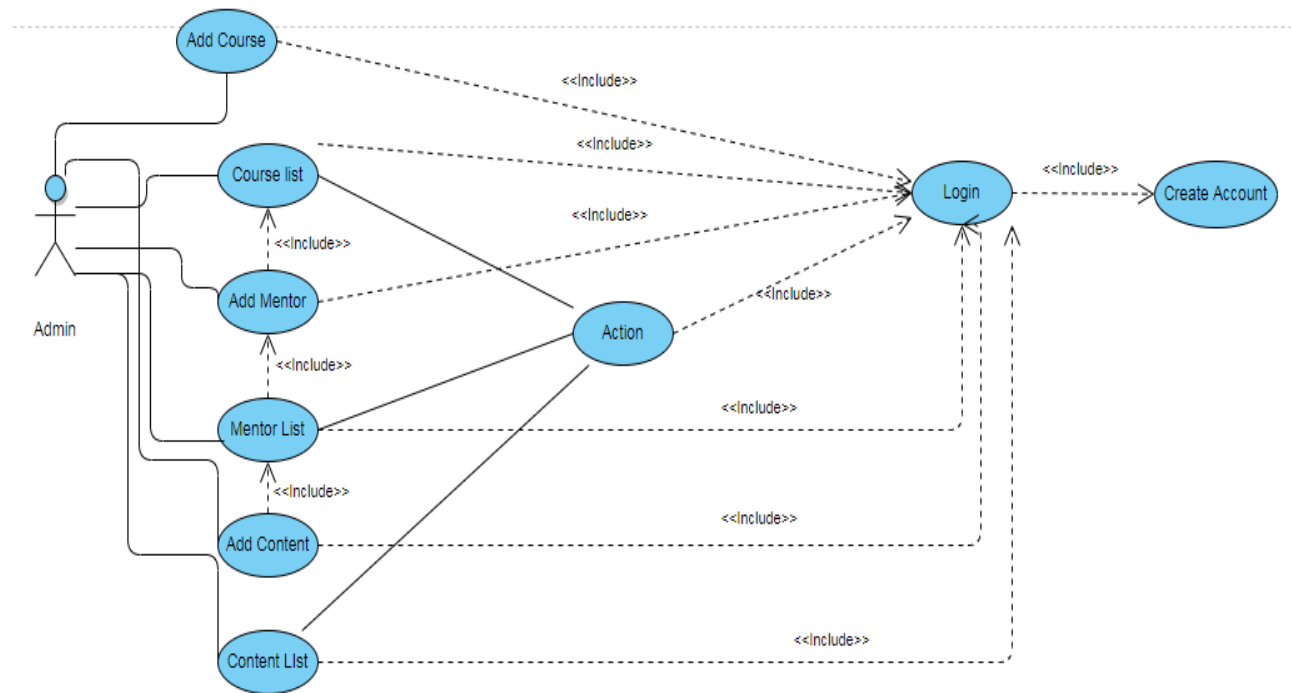


Fig:3.2 Admin Use case model

### Student or User use case model

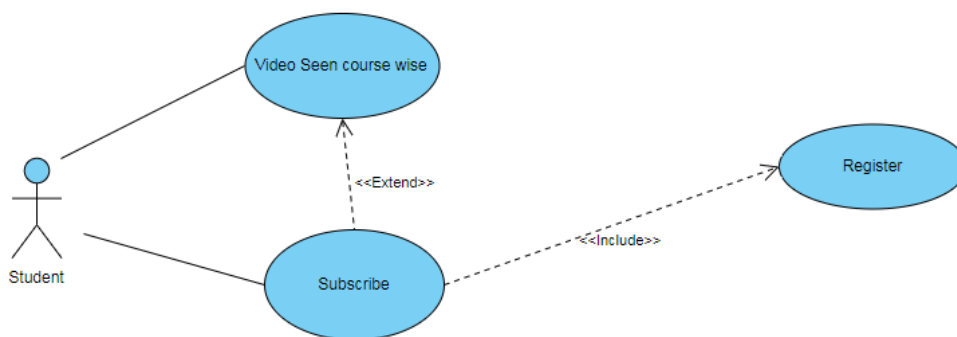


Fig:3.3 User Use case model

- **System Use-Case:**

The system has the following set of use cases. Figure: 3.1 is describing the System use case. Organizer can create event by Log In. Before creating event, the organizer must check display event calendar is there any other scheduled events are booked or not. If the schedule is free then they will select that schedule (Date, time). After that they will submit the event for approval. If admin found the event necessary then approve the event and published the event. An email notification will be sent to the event organizer. Participants user may visit the portal, view the events list, search other event list, login to the site but can't create an event or post any comment in the events.

### **Use-Case Details: Admin Login**

Use case name : Admin Login  
Description : For controlling the system  
Precondition : None  
Actor : System Owner  
Primary Path : 1. enter Login ID  
2. Enter Your Password  
3. Press "Login" button  
Exceptional path : 3.1: Invalid Login ID/ password

### **Use Case Details: ADD Mentor**

Use case name : Add Mentor  
Description :Admin can Add mentors  
Actor : System Owner/Admin  
Primary Path :1.Mentor name  
2.Course  
3.Cover Image  
4.Submit

### **Use Case Details: ADD Course**

Use case name : Add course  
Description :Admin can add course  
Precondition : Admin  
Actor : System Owner/Admin

### **Use Case Details: ADD Content**

Use case name : Add content  
Description :Mentors can add course content  
Actor : Mentor  
Primary Path :1.Title Name  
2.Course  
3.Mentor  
4.Cover image  
5.Video Url  
6.Video Url type  
7.Short Description  
8.Upload

### **Use Case Details: Check Status**

Use case name : Check Status  
Description :Mentors can change content status  
Actor : Mentor  
Primary Path :1. Active  
2.Inactive  
3.Submit

### Use Case Details: User Login

|               |  |
|---------------|--|
| Use case name | : User Login   |
| Description   | :User can login for subscription in the course         |
| Actor         | : User   |
| Primary Path  | :1. Enter Email address<br>2.Password<br>3.Click login |

### 3.4 Implementation Requirements

Before any programming could be done decisions needed to be made on which technologies should be used to program the project with. The following is a critical evaluation of the different programming languages that could be used to program such an online application.

- **Back-End (HTML):**

Hypertext Markup Language (HTML) is utilized for making site pages and web applications. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages.

When a normal document is written using a word processor like Microsoft Word/Office, text is saved in a file with a special format. It is not simply saved as the string of words typed since the document needs to preserve things like the font chosen, the size of the text, which words are in bold, which italics, and so on. The special format includes not only words, but all this extra information so that the next time Word opens the document. It can display the document with the exact appearance created earlier. In the same way, web pages and portals are simply strings of words put in a special format that web browsers are able to display. While the arrangement of Word reports is just called "Word organization" (or "doc position"), freely, one may state that site pages are designed utilizing "HTML".

- **jQuery:**

jQuery is a quick and concise JavaScript library made by John Resig in 2006.

It improves HTML archive crossing, occasion taking care of, quickening, and Ajax communications for Rapid Web Development. With a blend of adaptability and extensibility, jQuery has changed the manner in which that a large number of individuals compose JavaScript. Using jQuery there is two ways, Local Installation- you can download jQuery library on your local machine and include it in your HTML code and CDN Based Version which you can include jQuery library into your HTML code directly from Content Delivery Network (CDN).

- **PHP:**

PHP Hypertext Pre-processor (PHP) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. PHP is a server side scripting language, and is the open source option in contrast to asp. Php is a cross stage, implies that it tends to be kept running on any webserver, and alongside MySQL( database server). Php codes are comparative in linguistic structure to c. It permits in fundamental website page control. We need php so as to associate with the database .

Why we Used:

- It keeps running on each major working framework and most minor ones.
- It runs on almost any hardware.
- It's very easy, comparatively speaking, to learn.
- It gives moment delight (you can compose code, spare it, and run it without the requirement for compiling).need php so as to connect with the database .
- It's well documented and dynamically it stores value into database and retrieve it. It is a part of application server .

- **MySQL:**

MySQL is the world's most popular open source database, enabling the cost-effective delivery of reliable, high-performance and scalable web-based and embedded database applications. It is based on the structure query language (SQL), which is used for adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE can be used with MySQL. MySQL can be utilized for an assortment of utilizations however is most ordinarily



found on Web servers. A site that utilizes MySQL may incorporate Web pages that get to data from a database. These pages are frequently alluded to as "dynamic," which means the substance of each page is produced from a database as the page loads. Sites that utilization dynamic Web pages are frequently alluded to as database-driven sites. Numerous database driven sites that utilization MySQL additionally utilize a Web scripting language like PHP to get to data from the database.

- **CSS:**

Research was done into Cascading Style Sheets (CSS) and the different ways it could be used to control both layout and style of the site. There was some experimentation with using <div> tags and CSS to controlled layout, as well as using tables to control layout with some CSS to format things like alignment and color. By learning CSS you can adjust pre-assembled layouts with the goal that they have your hues and styles. In this way you'll have a tweaked site without a great deal of exertion. Numerous more established sites that were worked without CSS are exceptionally hard to upgrade. In any case, when a site is worked with CSS snares it tends to be upgraded in all respects rapidly. Changing things like the hues and foundations can change how a site looks with almost no exertion. Indeed, numerous locales currently set up extraordinary forms of their destinations for unique events and they can do this since it just takes a couple of hours to make an other template for the occasion. CSS offers you the chance to make destinations that appear to be extremely unique from page to page, without a great deal of broad coding. For instance, numerous locales presently do slight shading minor departure from the distinctive areas of the site. Utilizing page IDs, you can change the CSS for each area and utilize a similar HTML structure for each segment. The main thing that changes is the substance and the CSS.

- **Bootstrap Framework**

Bootstrap is an open-source Javascript framework developed by the team at Twitter. They Used HTML CSS JS for building user defined interface. Bootstrap is a free collection of tools for creating a websites or web applications. There are lots of design templates and classes for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Use of Bootstrap: Easy to get

started , Great grid system , Base styling for most HTML ,Bundled Javascript plugins, Good Documentation, Responsive Design etc.

- **Laravel**

Laravel is a web application framework with expressive, elegant syntax. We trust development must be a pleasant, inventive encounter to be genuinely satisfying. Laravel endeavors to remove the agony from advancement by facilitating normal errands utilized in most of web ventures, for example, confirmation, directing, sessions, and caching. It means to make the improvement procedure a satisfying one for the engineer without yielding application usefulness. Glad engineers make the best code. To this end, we've endeavored to join the absolute best of what we have seen in other web structures, incorporating systems actualized in different dialects, for example, Ruby on Rails, ASP.NET MVC, and Sinatra. Laravel is open, yet amazing, giving useful assets expected to substantial, powerful applications. A brilliant reversal of control compartment, expressive relocation framework, and firmly incorporated unit testing bolster give you the apparatuses you have to assemble any application with which you are entrusted.

- **Javascript**

JavaScript is dynamically typed like most other scripting languages. We need JavaScript to add interaction to websites. Otherwise all sites would be mostly read only static text and images or we'd need third party plug-ins like Adobe Flash or Sun Java. There is some low level animation possible with CSS and HTML5 now but for real functionality you need JS.

### 3.5 Logical Data Model

This ER diagram representing the relationship among the entities in the Figure 3.4 and it is also known as the Logical Data Model or ER Diagram of this project . Each entity has its own quality.

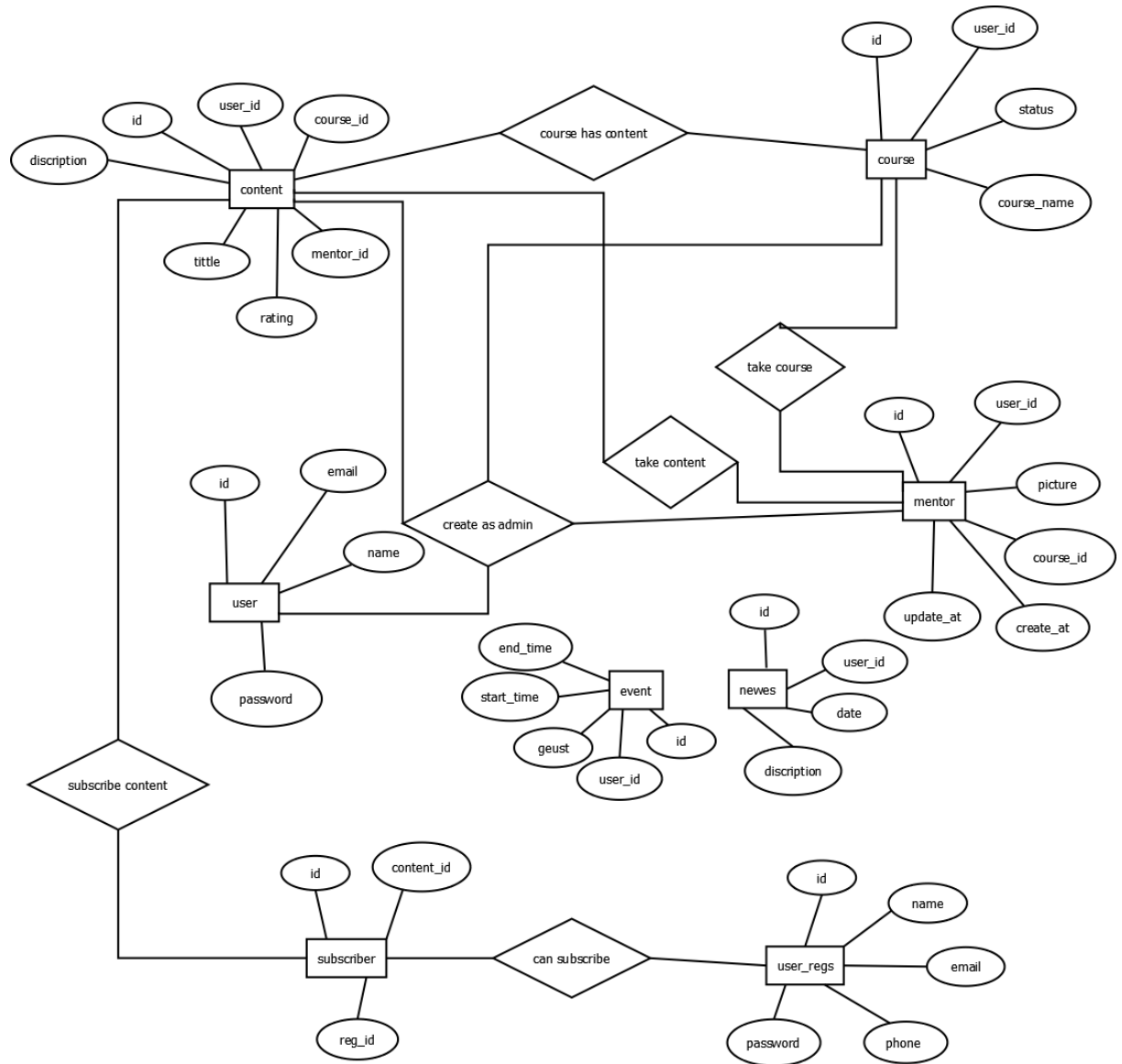


Figure: 3.4 Logical Data Model

## **CHAPTER 4**

### **DESIGN SPECIFICATION**

#### **4.1 Front-end Design**

Table 4.1: List of the Interface Screen of the system

1. Home Page
2. LogIN Interface Page
3. Course Interface Page
4. Add course Interface Page
5. Mentor Interface Page
6. Add Mentor Interface Page
7. News Interface Page
8. Add news Interface Page
9. Event Interface Page
10. Add event Interface Page
11. Admin login Interface Page
12. Course Interface Page
13. Dashboard Interface Page
14. Blog Interface Page
15. Add Contact Interface Page

## Homepage:

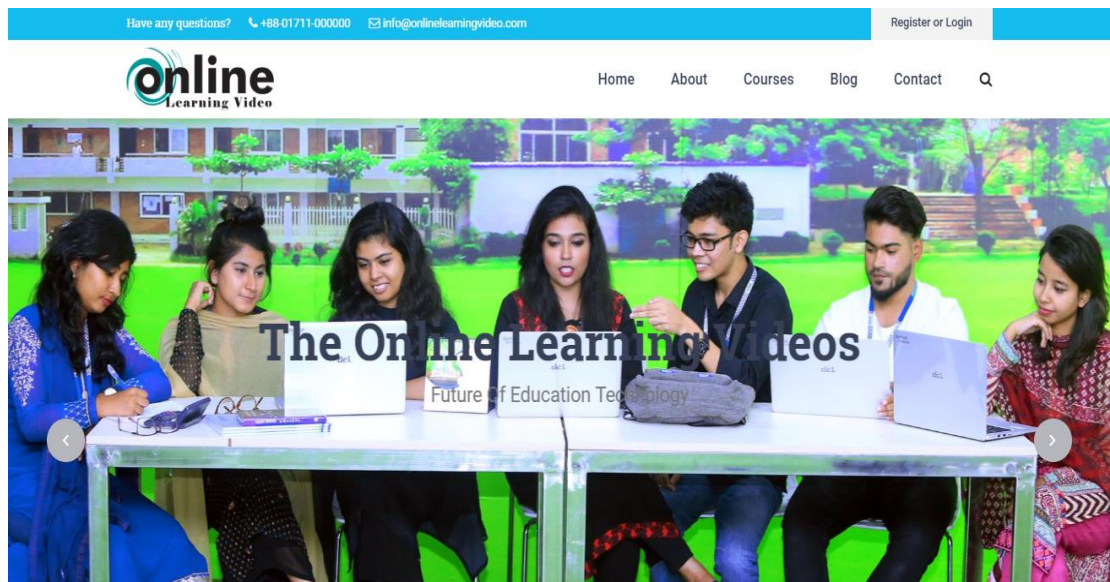


Fig.: 4.1 Home Page

## Login Panel

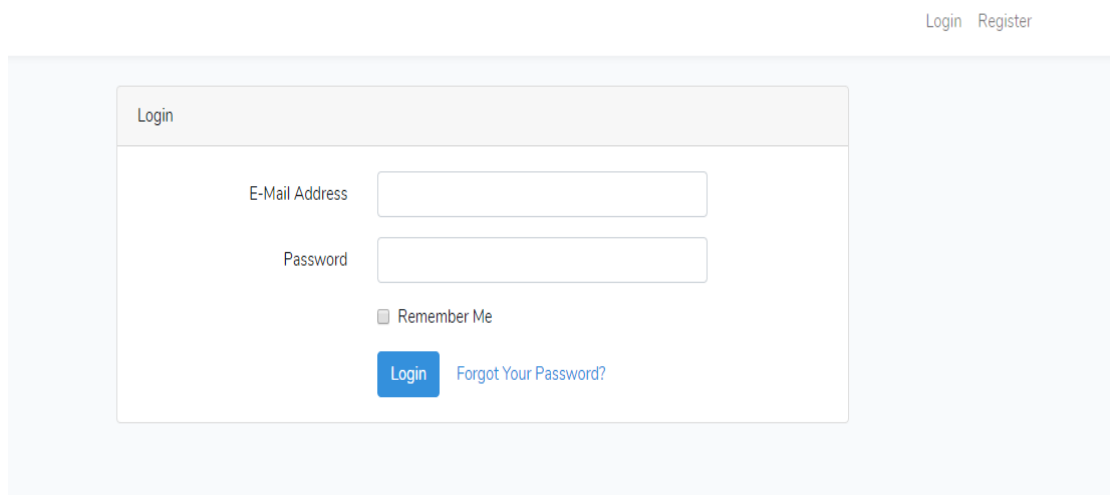


Fig.: 4.2 Log-In Panel

## Course Page

**online**  
Learning Video

Home About Courses Blog Contact Q

### Popular Online Courses

Study any topic, anytime. Choose from thousands of expert-led courses and books.

- Ethical Hacking**  
Shadon  
Welcome to the best ethical hacking course on the internet, i will be taking you through all you need to know from terminology to sql Everything you need to get started as a hacker and take your hacking skills to an expert level is included in this series. Begin
- Java Programming 2019**  
Nabajit Dash  
Cheat Sheet is Here : <http://goo.gl/OPMjte>  
Cheat Sheet is Here : <http://goo.gl/OPMjte>  
Cheat Sheet is Here : <http://goo.gl/OPMjte>
- Android choosing Image from Camera / Gallery with Crop Functionality**  
Nabajit Dash

Fig. 4.3 course interface

## Add Content Screen

Online Learning Videos

Home > Content

Content » Add

### Content Upload Form

Title:

Course:

Mentor:

Cover Image:  No file chosen

Video Url:

Video Url Type:

Short Description:

Description:

Fig. 4.4 Content interface

## Mentor Insert Screen

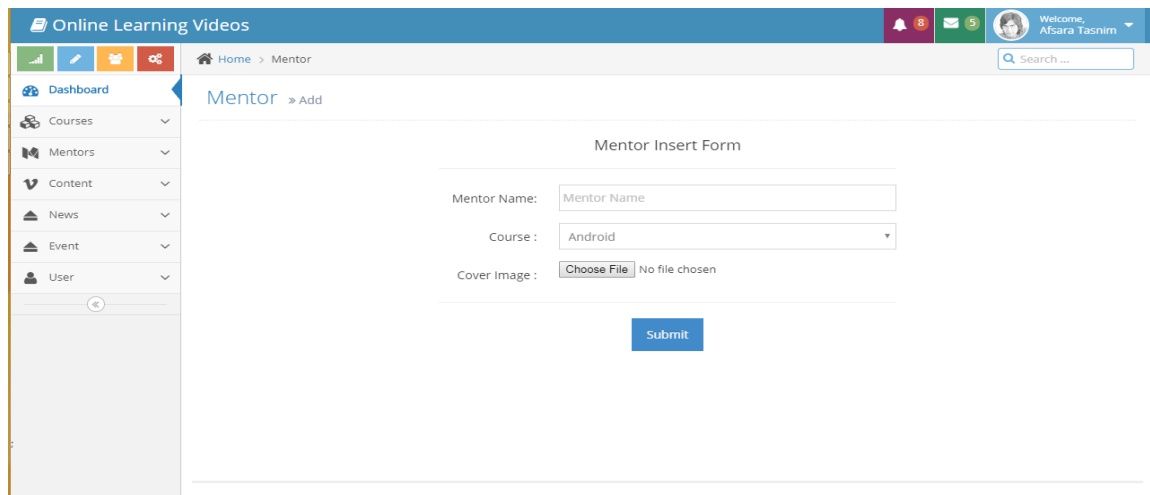


Figure 4.5 mentor insert page

## Mobile Application View

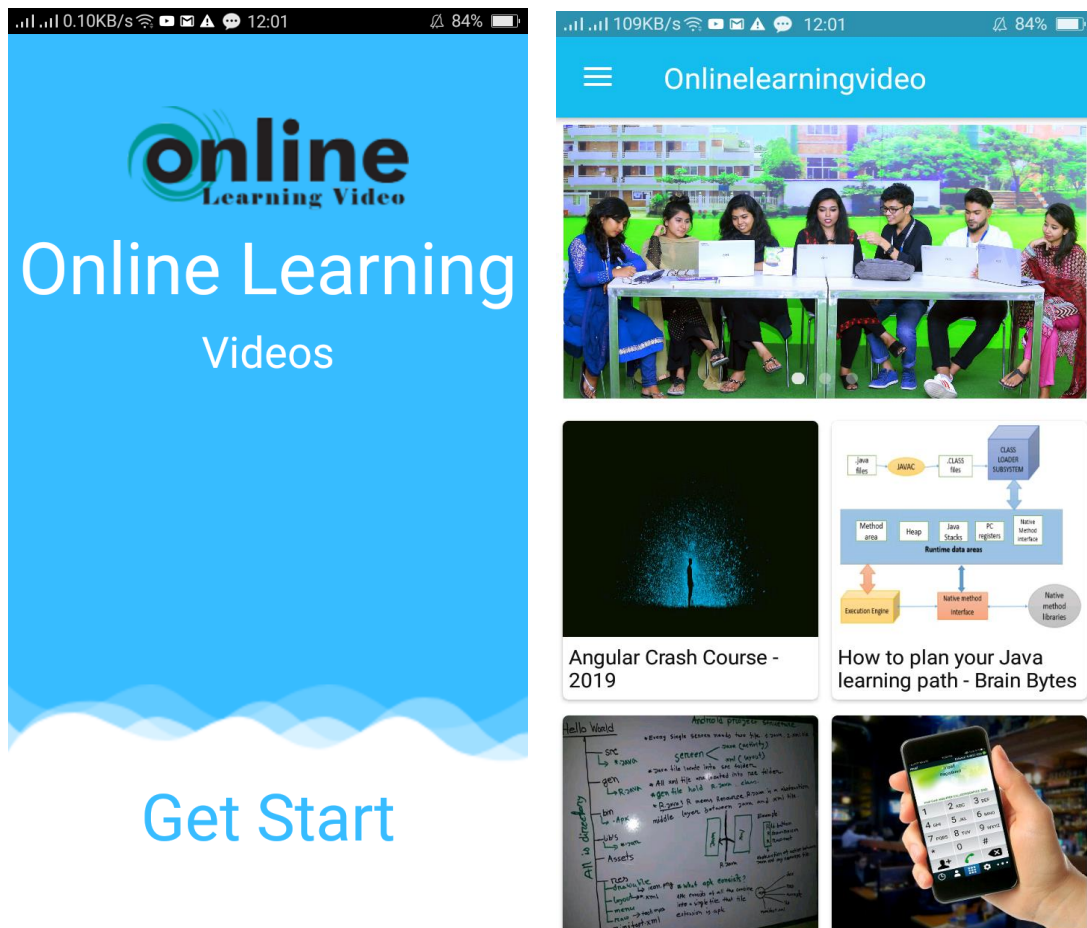


fig:4.6 mobile app user interface

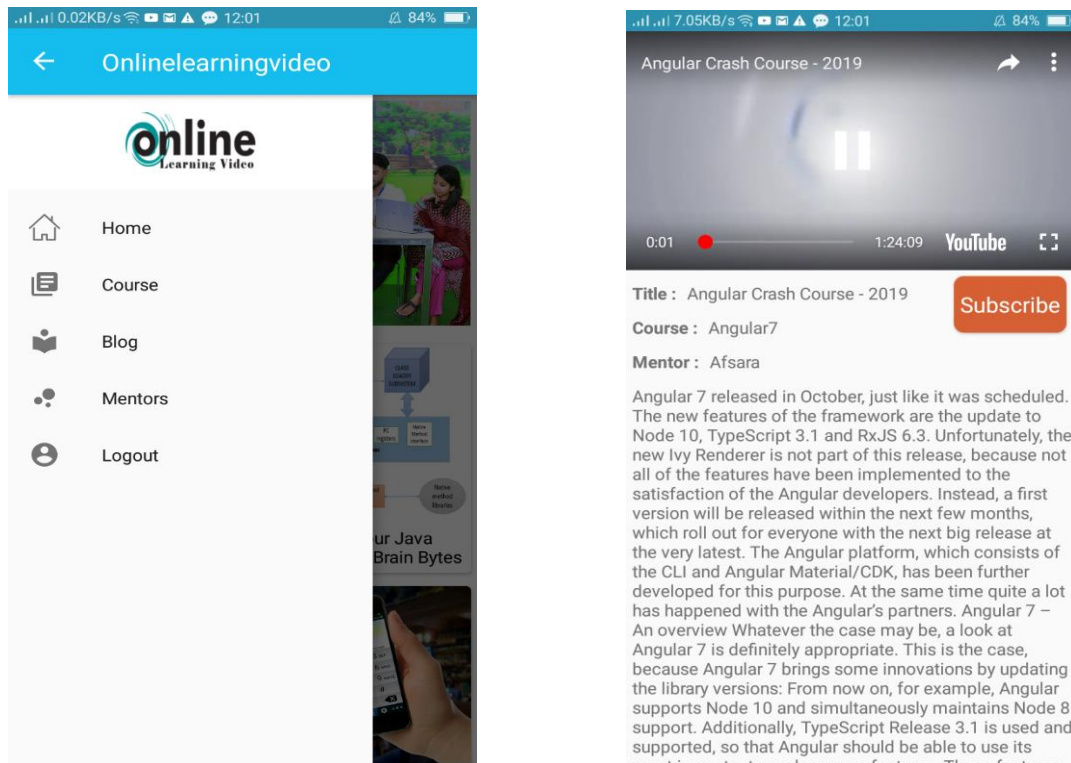


fig:4.7 mobile application view

## 4.2 Back-end Design

### User

Table 4.8 shows the Users database table of the system

SELECT \* FROM `users`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

| Options                                   | id | name          | email                | email_verified_at | password   | remember |
|---|----|---------------|----------------------|-------------------|--|----------|
| <input type="checkbox"/> Edit Copy Delete | 2  | Shadon        | shadon@gmail.com     | NULL              | \$2y\$10\$skz0QJL2tfK3BeMslD5xOW88xFQQTdxLswfEWWhYOkp... | yq4URASv |
| <input type="checkbox"/> Edit Copy Delete | 3  | shadon        | ssss@gmail.com       | NULL              | \$2y\$10\$PiBslUmTNp0t1mCNA8wORu2D5NaLnsaiG5lkDr0q/w3... | s4f9qVQN |
| <input type="checkbox"/> Edit Copy Delete | 4  | zahid         | zahid.cse@diu.edu.bd | NULL              | \$2y\$10\$UTCSlsqd77uQ6LMNtMsEBegrDaG2fb6FcUCj.Wmka8M... | NULL     |
| <input type="checkbox"/> Edit Copy Delete | 5  | Nabajit Dash  | nabajit@gmail.com    | NULL              | \$2y\$10\$YsIlwlgcdG7jDNNoAnU4UWeUy53z2ZtC6H8RL6OkRi...  | 9yZMhrZN |
| <input type="checkbox"/> Edit Copy Delete | 6  | Afsara Tasnim | afsara@gmail.com     | NULL              | \$2y\$10\$Jbx7RpuSlmN2SCaZXoxmd.KxyBT2eMYvJbDf7/ghJF8... | QWTPkCo  |

Check all | With selected: Edit Copy Delete Export

Figure: 4.8 Users database



## Mentors

Table 4.9 shows the Mentor database table of the system

Showing rows 0 - 4 (5 total, Query took 0.0010 seconds.)

```
SELECT * FROM `mentors`
```

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

|   | id | user_id | course_id | mentor_name   | created_at          | updated_at          | picture                                 |
|---|----|---------|-----------|---------------|---------------------|---------------------|---|
| <input type="checkbox"/> Edit Copy Delete | 17 | 2       | 3         | Nabajit Dash  | 2019-02-11 04:04:52 | 2019-02-15 18:03:15 | /images/CU96rxlrGZ85Af1H7y8bUDxHIGcCA7  |
| <input type="checkbox"/> Edit Copy Delete | 18 | 2       | 5         | Shadon        | 2019-02-11 04:05:18 | 2019-02-15 16:54:18 | /images/oF2X96XiCz47n35c3HaVQJVwMsxwr   |
| <input type="checkbox"/> Edit Copy Delete | 19 | 2       | 4         | Afsara        | 2019-02-11 04:05:36 | 2019-02-15 18:03:15 | /images/CbZeyCYAfdRKAbdVs2QfMecCLAnC    |
| <input type="checkbox"/> Edit Copy Delete | 20 | 2       | 6         | shilu         | 2019-02-11 04:06:36 | 2019-02-15 16:54:18 | /images/f9oYXduc1fLX695TpErE8doaxbR2km  |
| <input type="checkbox"/> Edit Copy Delete | 21 | 3       | 8         | Afsara Tasnim | 2019-02-15 16:10:54 | 2019-02-15 16:10:54 | /images/jHqTME4JLhzbFYr3lWVVPrtl0kWh8cu |

Check all | With selected: Edit Copy Delete Export

Figure: 4.9 Mentor database

## User registration

Table 4.11 shows the Users registration database table of the system

Showing rows 0 - 12 (13 total, Query took 0.0011 seconds.)

```
SELECT * FROM `user_regs`
```

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

|   | id | name   | phone       | email              | password  | created_at          | updated_at          |
|---|----|--------|-------------|--------------------|-----------|---------------------|---------------------|
| <input type="checkbox"/> Edit Copy Delete | 4  | v,hchc | 60906060    | gxb@h@h            | hxhchcvjv | 2019-02-13 08:36:49 | 2019-02-13 08:36:49 |
| <input type="checkbox"/> Edit Copy Delete | 8  | abcd   | 01789219904 | abc@gmail.com      | 1234      | 2019-02-13 09:25:11 | 2019-02-13 09:25:11 |
| <input type="checkbox"/> Edit Copy Delete | 9  | abcd   | 01789219905 | imranabc@gmail.com | 1234      | 2019-02-13 09:30:07 | 2019-02-13 09:30:07 |
| <input type="checkbox"/> Edit Copy Delete | 10 | fsfaga | 01789219906 | abhshha@gmail.com  | 123456    | 2019-02-13 09:32:40 | 2019-02-13 09:32:40 |
| <input type="checkbox"/> Edit Copy Delete | 11 | abc    | 01789219907 | abcd@gmail.com     | 123456    | 2019-02-13 09:39:33 | 2019-02-13 09:39:33 |
| <input type="checkbox"/> Edit Copy Delete | 13 | haha   | 01789219908 | sggsgsgs           | 12345     | 2019-02-13 10:23:10 | 2019-02-13 10:23:10 |
| <input type="checkbox"/> Edit Copy Delete | 14 | hasab  | 01717677540 | dhsh@gmail.com     | 123456    | 2019-02-13 16:28:25 | 2019-02-13 16:28:25 |

Check all | With selected: Edit Copy Delete Export

Figure: 4.10 User registration database

## Subscriber

Table 4.11 shows the subscriber database table of the system

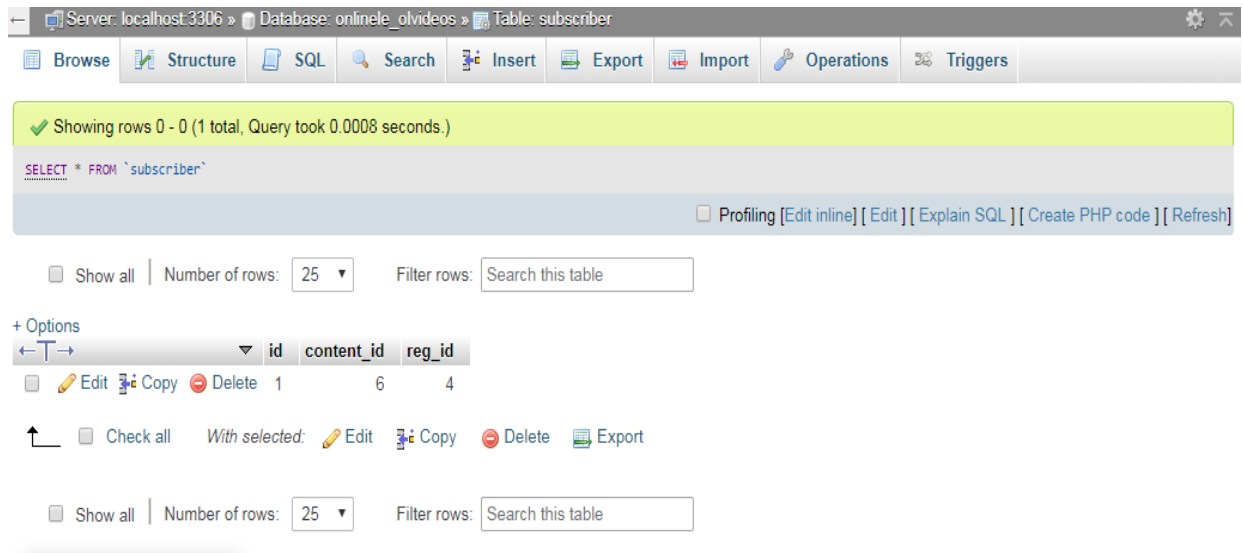


Figure: 4.11 Subscriber database

### 4.3 Testing and Integration

System testing is an valuable phase. System testing is a process of testing which checks the entire system as a whole. When all the modules of application are integrated into one system, system testing is carried out. It is a type of black box testing where inner code knowledge is not required and user is concerned only about inputs given by user and output generated by system. It is very important to test complete software system as it will go to end users for usage. Therefore, system testing plays a major role in the performed before discharging a software/application.

Importance:

- 1) System testing ensures that high quality product is delivered to customer
- 2) Test cases in system testing are created to simulate the real life scenarios.
- 3) System testing ensures that product meet all the requirements mentioned in Requirement Document
- 4) System Testing test both functional and non functional requirements.
- 5) Application in framework testing is tried to approve the all capacities in application those are working perfectly.
- 6) Application is tested in an environment to identify which is copy of production.

These are the following different steps in the testing process.

## **JUnit:**

JUnit is a unit testing framework for Java programming language. It plays a crucial role test-driven development, and is a family of unit testing frameworks collectively known as xUnit. JUnit promotes the idea of "first testing then coding", which emphasizes on setting up the test data for a piece of code that can be tested first and then implemented. This approach is like "test a little, code a little, test a little, code a little." It increases the productivity of the programmer and the stability of program code, which in turn reduces the stress on the programmer and the time spent on debugging. JUnit is an open source framework, which is used for writing and running tests. It provides annotations to identify test methods, assertions for testing expected results, test runners for running tests.

### **• Black Box Testing:**

Black Box Testing is a testing process without the knowledge of the internal workings of the item being tested. For example, when black box testing is applied to software engineering, the tester would only know the "legal" inputs and what the expected outputs should be, but not how the program actually arrives at those outputs. It is because of this that black box testing can be considered testing with respect to the specifications, no other knowledge of the program is necessary. Thus, the analyzer and the software engineer can be free of each other, maintaining a strategic distance from developer inclination toward his very own work.

### **• White Box Testing:**

It is only the opposite way around of the black box testing. There we do not watch the internal variables during testing. This gives clear idea about what is going on during execution of the system. The points at which the bug occurs were all clear and were removed.

- **Stress Testing:**

The main goal of stress testing is to put greater emphasis on robustness, availability, and error handling under a heavy load, rather than on what would be considered correct behavior under normal circumstances.

The motive of this tests may be to ensure the software does not crash in conditions of insufficient computational resources.

- **Cross-Browser Compatibility Testing:**

This is done to ensure that the web system works and looks similar on a variety of different browsers.

The testing is applied on different browsers. Such as:

- Mozilla Firefox
- Chrome
- Microsoft internet Explorer Version 8
- Microsoft Internet Explorer Version 9
- Opera
- Safari
- Duckduckgo

The system is applied in different screen resolutions to confirm that the structure of the site and positioning of the content does not change too much at different resolutions.

The site is checked at the follow screen resolutions.

- 800 by 600
- 1024 by 768
- 1152 by 864

## CHAPTER 5

### CONCLUSION & FUTURE SCOPE

#### 5.1 Conclusion

The design of this project DIU online learning video system is done with the help of HTML, CSS3, PHP, Animated CSS, Bootstrap Framework, JQuery, Json, ES6 and MySQL Database, Laravel 5.7etc. Our project purpose was to make a time-saver online informative modern e-platform for the learners. We want to make an online platform to get the class lectures through video.This will give feedback to all the students specially for DIU . When we need the class lectures ,most of the time we contact with our friends and sometimes we can not get the proper exact lessons and that impacts on our results.

#### 5.2 Future Scope

The project " Diu online learning system " is for all the students to make the online learning platform easier. For these reason we will develop more features for them .

Such as:

- Feedback Section: Student will give their each feedback through the comment section.
- Own Video Platform: This will be the more challenging part for us but we will work for that. Because when we use other platform, there's always some limitations.
- Direct Live class without using others platform.
- We will work for real time speech recognition for the real time video subtitle for the lessons and live class.
- We will also work for some paid class to make our project successful

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