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AmateurLearning : An E-learning website

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ABSTRACT

This project is about helping the creative people to enhance their creativity by offering various types of courses. Amateurlearning is a leading online platform that helps anyone learn creative skills to achieve his/her goal. We want to inspire and multiply the kind of creative exploration that furthers expression, learning and application. Amateurelearning is an online learning community with thousands of classes for creative and curious people, on topics including illustration, design, photography, video, freelancing, and more. On Amaterurlearning, millions of members come together to find inspiration and take the next step in their creative journey. Here we inspire people to do the things that they love. Help them to bring out their creativity. People will be able learn what they actually love to do, not for any academic purpose. So, this website is mainly built to fulfill people's hobbies, passions and interests. It will help the people to bring out their creativity. The moto of our website is-

Discover Yourself

Link of our website:

amateurlearning.unaux.com

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CHAPTER 1

Introduction

1.1 Introduction

Learning something new is always exciting. It broadens our thoughts and outlook. Our mind finds enjoyment through learning. It improves our brain function. Research shows that there are several ways to improve the health of our brain and learning something new is on top of them. New skills always give good feelings. It helps someone to get new and knowledge-based perspective on the world around him/her.

Learning can be of many types, like educational learning, skill development, creative learning and many more. We all know that education is one of the must learning things, learning other things like life skills, something creative are also have great importance.

But you hardly found any e-learning website that provide you with the courses that you need to please your mind. To get the opportunity where you can work with your hobbies or passion or interest.

So, we decided to make an e-learning website named AmateurLearning to solve the above problem. AmatureLearning is an online learning community with thousands of classes for creative and curious people. On AmatureLearning, millions of people come together to find inspiration.

1.2 Motivation

Once I wanted to learn robotics. So, I started with my little knowledge. I was searching for a proper guideline, as my knowledge was very short. But I didn't get any proper guideline then from where I could learn my interests. There were some resources in online, but they were inadequate and expensive. It was very disappointing for me. My journey hampered and was waiting for the time when I would shift to college/university. So me and my friend decided to make opportunity for them who wants to learn but doesn't get proper guideline

1.3 Objective

The key objective of the project is to build an online platform where users can find interesting courses in their respective interests. Also the other main objectives:

1. Discover his/her interests by reading the article part.
2. Find the proper course based on his/her choice.
3. Make an easy transaction.
4. One can broaden his/her knowledge by communicating with other learner in chat option.
5. One can make connection with experts through our website.

1.4 Expected Outcome

The expected outcomes are:

1. Learners can find their interests and enrich those interests by reading articles in blog section. There will be some success stories there, from those we expect the learners will be inspired.
Hopefully it will encourage them to learn their interests.
2. The connection between trainer and trainee is very important. We expect that our platform will make a strong bond between them.
3. E-learning will be promoted.
4. Hopefully it will my enjoyments in lerners mind and they can improve them.

1.5 Report Layout

We developed an website which name is “**AmatuerLearning**”. We completed our project in time. Respect to our workflow we design our project report.

Background discuss about the Introduction, Related Works, Comparative Studies, Scope of the Problem, Challenges are in chapter 2.

Business Process Modeling, Requirement Collection and Analysis, Use Case Modeling and Descriptions, Logical Data Model, Design Requirements are discussed in chapter 3.

Front-end Design, Back-end Design, Interaction Design and UX and Implementation Requirements are explained in chapter 4.

Implementation of Database, Implementation of Front-end Design, Testing Implementation, Test Results and Reports are described in chapter 5.

We discussed about the Future Scope, Discussion and Conclusion of the whole project in in chapter 6 named Discussion and Conclusion.

CHAPTER 2

Background Study

2.1 Introduction

Learning something new is always exciting. It broadens our thoughts and outlook. Our mind finds enjoyment through learning. It improves our brain function. Research shows that there are several ways to improve the health of our brain and learning something new is on top of them. New skills always give good feelings. It helps someone to get new and knowledge-based perspective on the world around him/her.

Learning can be of many types, like educational learning, skill development, creative learning and many more. We all know that education is one of the must learning things, learning other things like life skills, something creative are also have great importance.

We gave focus on this point and tried to build a platform for creative learning. As it is the age of internet, we choose this platform to do so. So, we've made a website to share experts knowledge with interested ones in respected field.

2.2 Related Works

Though e-learning is very popular today, the concept of our project is quite different. Because we aren't working on traditional education, but on creative learning like crafts, robotics, guitar playing. There are a lot website those are working on academic side, but not as we are doing. So it can be called that we are unique.

2.3 Comparative Studies

As we mentioned in last point, there are many companies are working on e-learning. The top ones are 10-minute school, Repto Education, eShikhon. But their main target is academic education. This system are helpful. But we have to remember that, peoples are increasing in our country day by day. And there are a good demand on non-academic side.

So, we thought a very different thinking to solve this problem. So that we can give a better e-learning system to helping people and solving the problem.

Scope of the Problem

Peoples face difficulties when they want to learn nonacademic things, as the resources are very limited. As the traditional systems don't fulfill this criteria our project is very rational. There are some problem scopes, they are-

1. There is some manual system, but this is fully online based.
2. People should have a smartphone to take this service.

According to these problems, our application offers solutions that will help peoples.

We will look after this from perspectives given below:

For user, helps

1. To find an expert who can teach lessons.
2. To analysis their interests , by the blog section.
3. To communicate with each other in chat section.
4. To share their experience in review section.

2.4 Challenges

There are some challenges in this project. Specially e-learning is always a challenging, we have to face some challenges:

1. It is a web based system, so if a student doesn't have a smart phone or laptop then this system will not help him.
2. It is an online based system. So, user must be connected with internet before opening the application.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

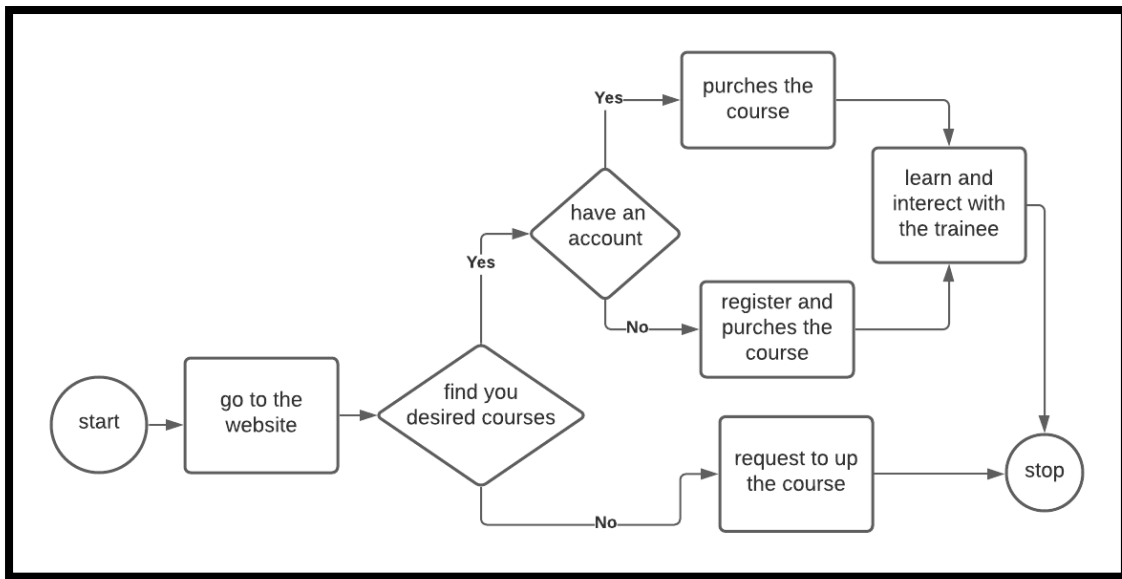


Fig 3.1: Business Process Modeling of “AmateurLearning: An E-learning website”

3.2 Requirement Collection and Analysis

When we start to do our project, there are a distribution time to complete the project in time. For this reason, we have to work very seriously to complete this project in time and delivery the project with solution.

Our project is an online based e-learning project. For this reason, we had to discuss with many teachers to make their courses so that we can upload them in our website . we had to insert the course content and others information accurately. .Because, people can find their information accurately and have no complain about this project.

Software Requirements:

- Users/students/teachers
- Easy to use for everyone

- Searching system for the students
- Time suitability
- Simply reachable

Hardware and Software Requirements for our system:

When we are buying any device which can be software or hardware, we have to ensure that our computer can support this device or system. They are the essential terms our computer can have, so that we can use the computer smoothly with comfort. All kinds of software needs its hardware mechanisms software needs certain hardware mechanisms or additional software properties present in the computer.[2]

For development this website, the system needs all tools and languages described below:

- PHP
- HTML
- CSS
- JavaScript
- Bootstrap Framework.
- Database Connectivity.
- MySQL.
- Text Editor.

3.3 Use Case Modeling and Description

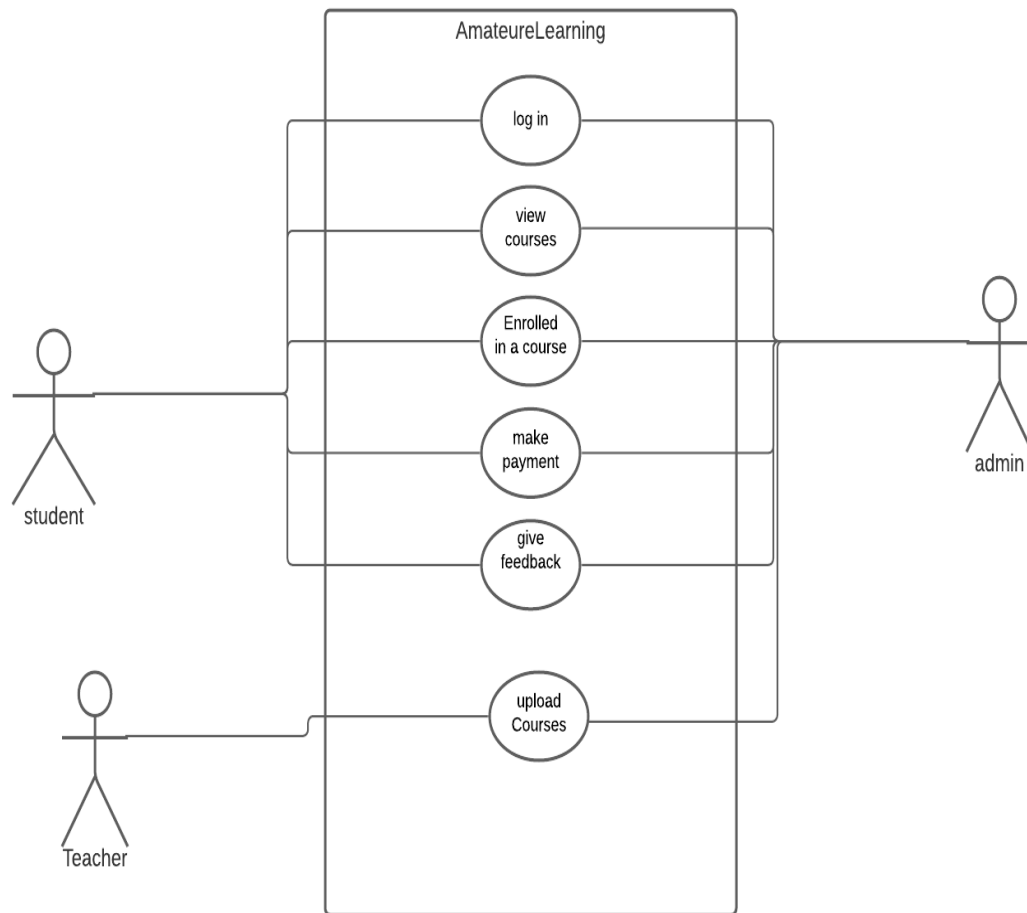


Fig 3.2: Use Case diagram of AmateurLearning: an E-learning website

Use Case 1: Log in

Primary Actor: Students

Precondition: Actor has connected internet and go the website

Main Success Scenario:

1. Input student's ID and password.
2. Check user Id or Password. (User Authentication)
3. Save Id or Password. (cookies)
4. Remember Password.

Exception:

1. Required page is not found
2. No Database Connection.

Use Case 2: View Courses

Primary Actor: Students

Precondition: Actor has connected internet and go to our website

Main Success Scenario:

1. View Courses page.
2. Can search for different courses.
3. Can see different lessons under courses.

Exception Scenario:

1. (a) No Internet Connection
2. (b) No courses found.

Use Case 3: Enrolled in a course

Primary Actor: Students

Precondition:

1. Actor has connected internet
2. Go to the website
3. Have an account.

Main Success Scenario:

1. Find out desired course.
2. Go to the checkout page
3. Make payment.
4. Request is accepted.
5. Redirecting to my courses page.

Exception Scenario:

1. Insufficient amount.
2. Payment failed.

Use Case 4: Give Feedback

Primary Actor: Students

Precondition:

1. Actor has net connection.

2. Go to the website
3. Actor has to log in to their account

Main Success Scenario:

1. Feedback is sent.

Exception Scenario:

2. Unable to connect to the server.
3. Feedback is too long.
4. Net connection is weak.

Use case 5: Upload Courses

Primary Actor: Teacher

Precondition:

1. Connected to the network.
2. Should contact with the website admin.

Main Success Scenario:

1. Request is accepted.
2. Course is uploaded.

Exception Scenario:

1. No internet connection
2. Can't connect to the server.
3. Request is not accepted

3.4 Logical Data Model

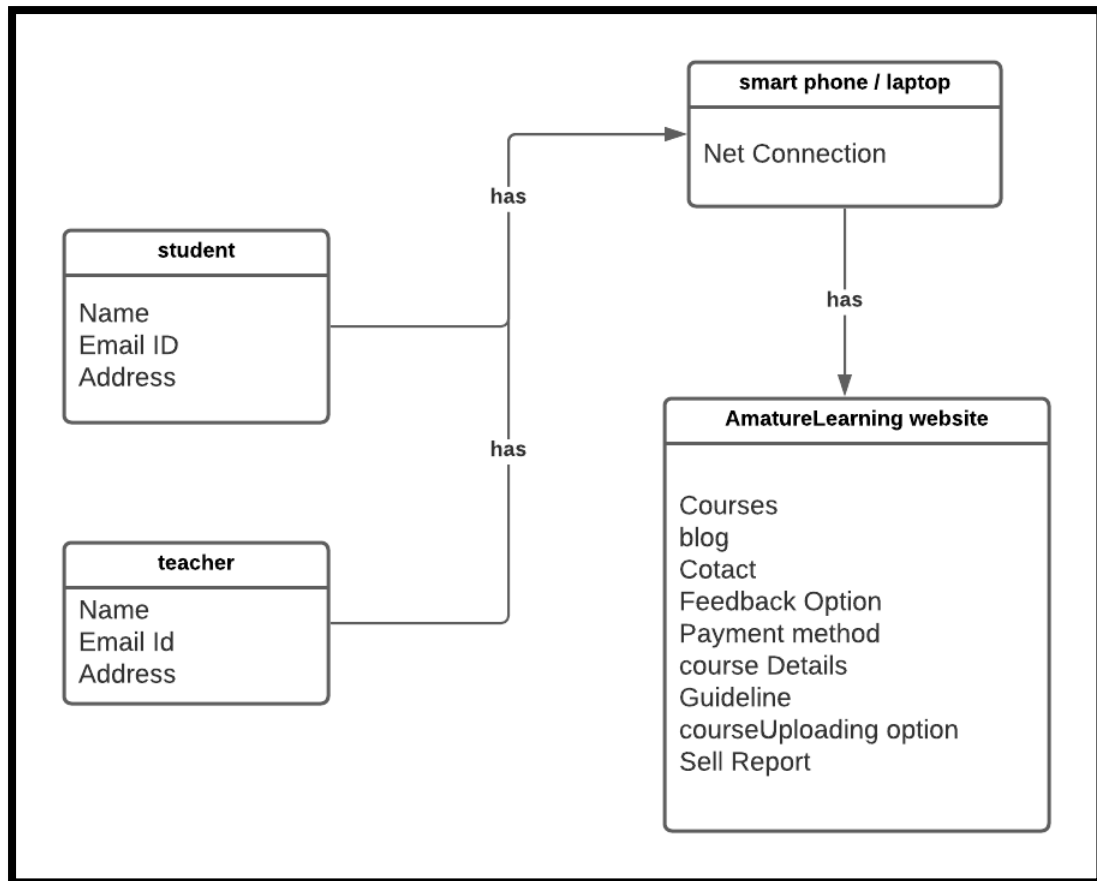


Fig 3.3: Logical Data Model of AmateurLearning: an E-learning website

3.5 Design Requirements

To design a website or system, we deliberate some requirements so that our project can be finished well. The given requirements are most important and obligatory to do.

Ensure the website's Facile and Flexible: This website will be intended as a way that the peoples like, comfort and flexible to visit it.

Reduce User's cognitive Effort: It should not require detailed explanations for it to work. The navigation structure of the website intuitive and visible.

Don't Waste User's Time with Trifles: When you need a user to sign up for a service, keep the process as simple as possible. 3-4 steps on a single page is usually the limit in terms of the number of steps a user is willing to put up with to sign up for your service.

Attempt to focus a visitor's attention: If your website offering something for a limited period, use the design of the webpage to focus the user's attention to it.

Showcase the website's features effectively: If your site offers different divisions that provide access to other pages, make sure that all other division major headers are easily visible. By doing this you will be able to effectively showcase all that you have to offer.

Write effective content: Try to write the content on your website in simple language that is broken down category-wise and which has headers that are easy for a user to scan through.

Don't complicate things: Users typically visit a website to access information and not for the design. In fact, they search for the information despite the design. Try to simplify this process by keeping things as simple as possible.

Communicate Effectively: When using your website as a virtual communication tool, remember to check the content and design for the essentials that need to be communicated. Further, keep the visual cues to the point to enhance distinctiveness and to provide emphasis.

Use familiar formats: Little things like placing the search box in places where users would expect it, using familiar terms like sign-up and log-in and placing the major links in familiar places will help in reducing the user's learning curve for your website.

TETO: This stands for Test Early, Test Often. This is an oft overlooked aspect of the website development lifecycle. Testing early with users makes the difference in sticking to schedule and delivering the product that satisfies your client's requirement.

CHAPTER 4

Design Specification

4.1 Front-end Design

Front-end web development, also known as client-side development is the practice of producing HTML, CSS and JavaScript for a website or Web Application so that user can see and interact with them directly. The objective of designing a site is to ensure that when the users open up the site they see the information in a format that is easy to read relevant. In our website we have used HTML, CSS, JavaScript and bootstrap framework to design the front end part.

4.2 Back-end Design

Back-end Development refers to the server-side development. It focuses on database, scripting, website architecture. It contains behind-the-scene activities that occur when performing any action on a website. It can be an account login or making a purchase from an

online store. Code written by back-end developers helps browsers to communicate with database information. It also helps to make website dynamic and more interactive. In our website we have used PHP and MySQL for developing server side.

4.3 Implementation Requirements

The implementations Requirements gave a very unique thought. The main task is to make all things easier, user pleasant. Some implementation requirements are bellow;

- Easier to make
- Easier to manage
- Easier to analyses
- Easier to interact
- Dynamic pages
- User-friendly
- Easier to change when needed.

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

In the implementation phase we install DBMS on the required hardware, optimize the database to run best on that hardware and software platform, and create the dataset and table.

The following steps are maintained-

1. Installing the DBMS.
2. Tune the setup variable according to the hardware, software and usage conditions.
3. Create the database and tables.
4. Load data.
5. Set up the users and security.
6. Implementing the backup regime.

localhost / 127.0.0.1 / amateurlearning x +

← → ↻ http://localhost/phpmyadmin/db_structure.php?server=1&db=amateurlearning

phpMyAdmin

Recent Favorites

New

- amateurlearning
 - New
 - course
 - courseorder
 - eadmin
 - feedback
 - lesson
 - student
 - elearning
 - information_schema
 - mysql
 - performance_schema
 - phpmyadmin
 - test

Server: 127.0.0.1 » Database: amateurlearning

Structure SQL Search Query Export Import Operations Privileges Routines Events Trigger

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> course	★ Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> courseorder	★ Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> eadmin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> feedback	★ Browse Structure Search Insert Empty Drop	8	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> lesson	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> student	★ Browse Structure Search Insert Empty Drop	7	InnoDB	utf8mb4_general_ci	16.0 KiB	-
6 tables	Sum	32	InnoDB	utf8mb4_general_ci	112.0 KiB	0 B

☐ Check all

Print Data dictionary

Create table

Name: Number of columns:

Fig 5.1: Database Implementation Model

localhost / 127.0.0.1 / amateurle... x

http://localhost/phpmyadmin/sql.php?server=1&db=amateurlearning&table=courseorder&pos=0

phpMyAdmin

Recent Favorites

Server: 127.0.0.1 » Database: amateurlearning » Table: courseorder

Browse Structure SQL Search Insert Export Import Privileges Operations

Showing rows 0 - 5 (6 total, Query took 0.0006 seconds.)

SELECT * FROM `courseorder`

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

+ Options

		co_id	order_id	stu_email	course_id	amount	date
<input type="checkbox"/>	Edit Copy Delete	1	1	tasmimsultana@gmail.com	5	999	2021-04-19
<input type="checkbox"/>	Edit Copy Delete	2	2	tasmimsultana@gmail.com	1	1000	2021-04-19
<input type="checkbox"/>	Edit Copy Delete	3	3	akash2169@gmail.com	5	999	2021-04-19
<input type="checkbox"/>	Edit Copy Delete	4	4	sharminliza@gmail.com	1	1000	2021-04-21
<input type="checkbox"/>	Edit Copy Delete	5	6	sharminliza@gmail.com	5	999	2021-04-21
<input type="checkbox"/>	Edit Copy Delete	6	7	maysharahaman@gmail.com	2	1200	2021-04-21

☐ Check all | With selected: Edit Copy Delete Export

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

Query results operations

Print Copy to clipboard Export Display chart Create view

Figure 5.1.1: Database Implementation Model

In Fig 5.1 and 5.1.1, The implementation of data in the database is given .

5.2 Implementation of Front-end Design

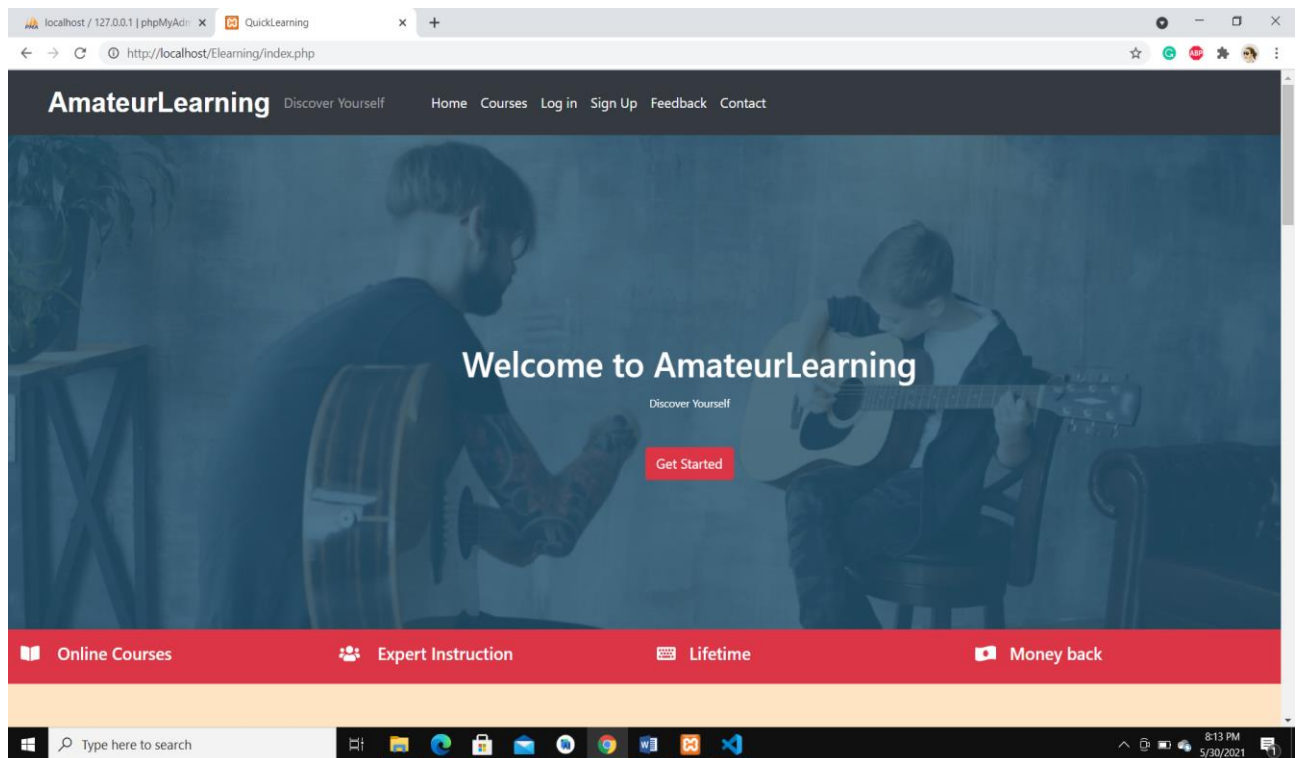


Fig 5.2.1: Home page of AmateurLearning: an e-learning website

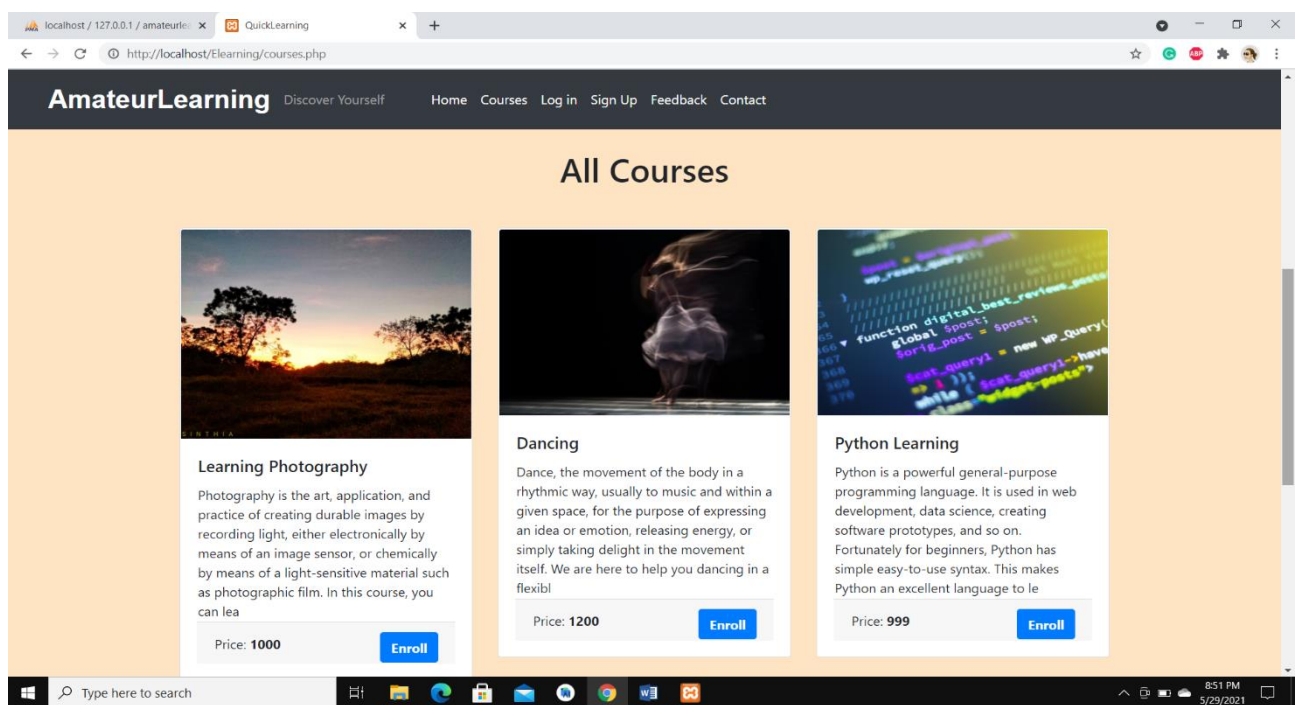


Fig 5.2.2: Part of Course page

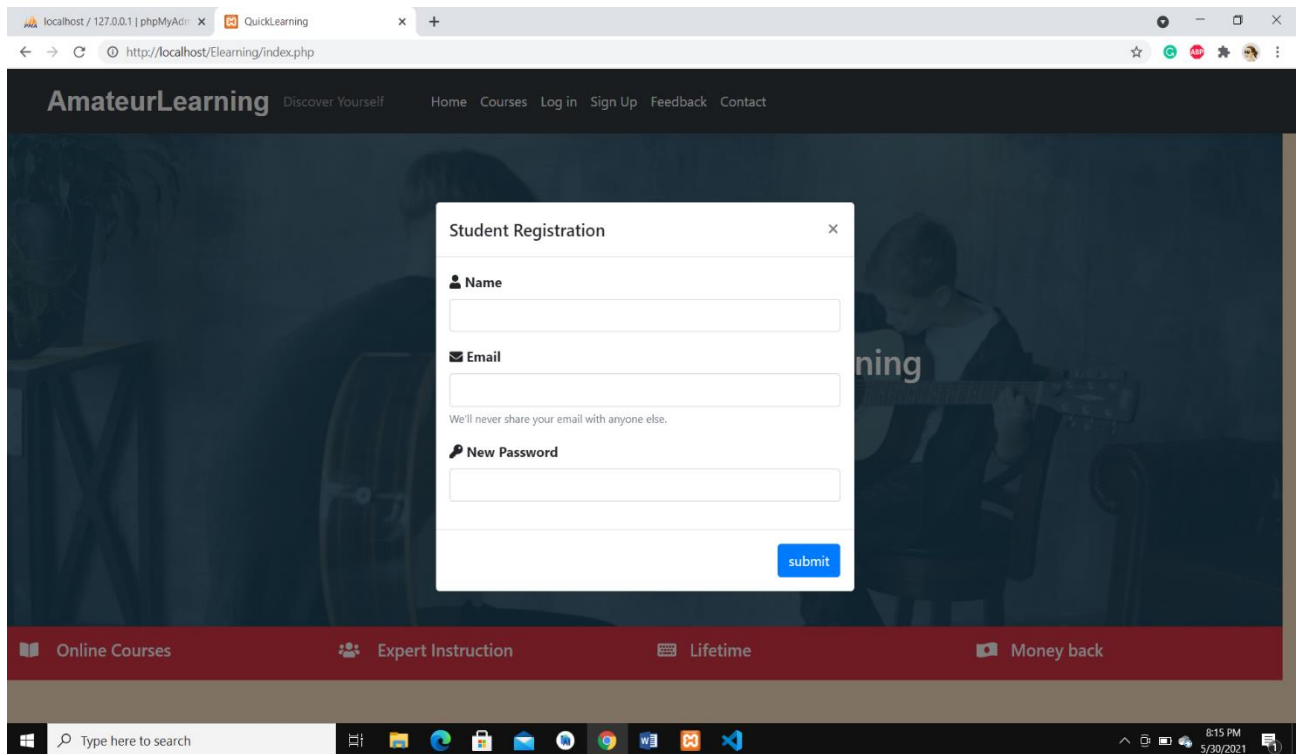


Fig 5.2.3: Sign up option in home page

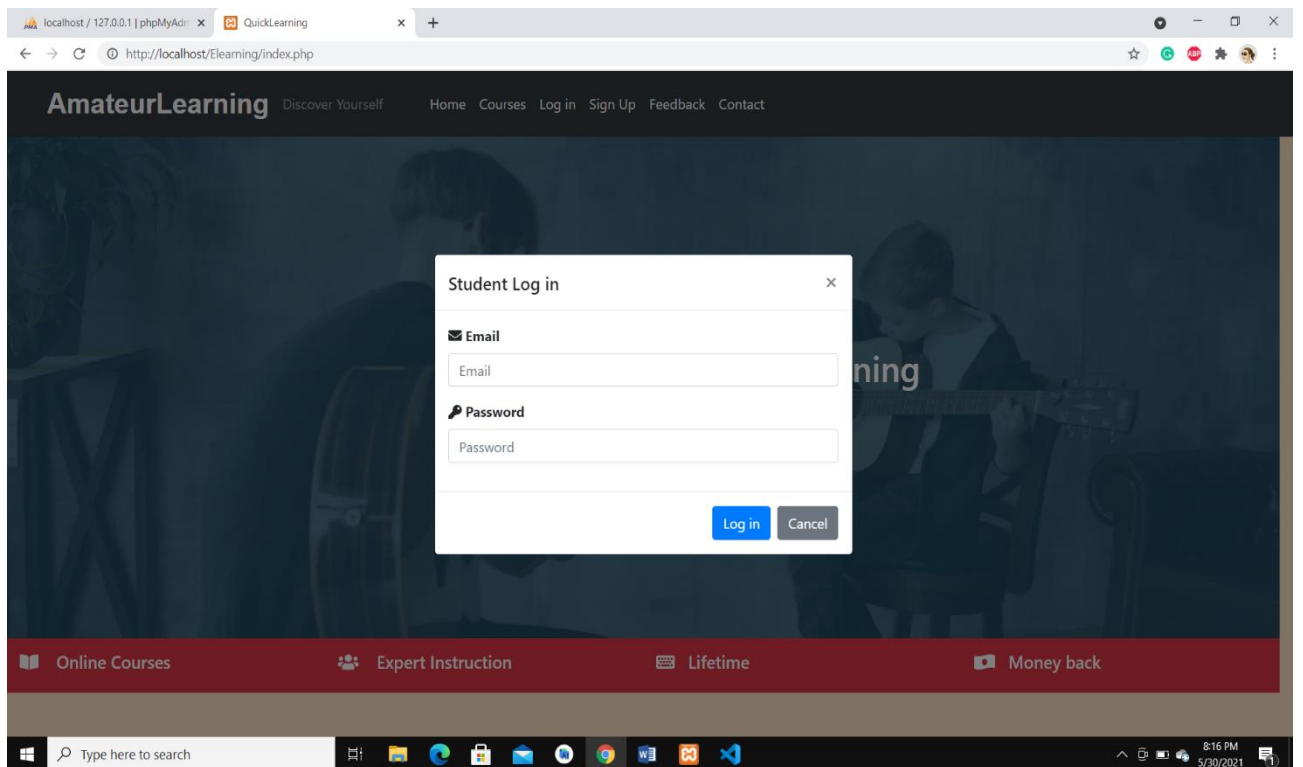


Fig 5.2.4: Log in option in home page

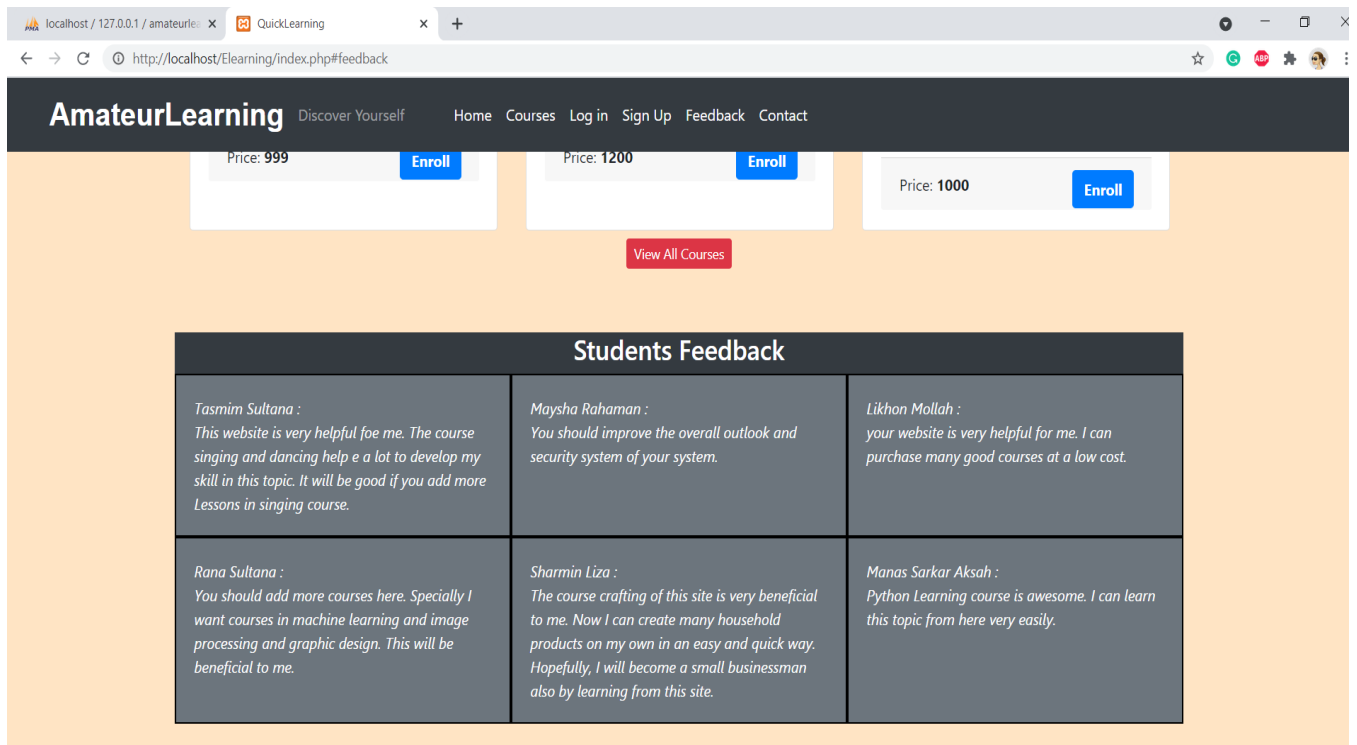


Fig 5.2.5: Feedback part in home page

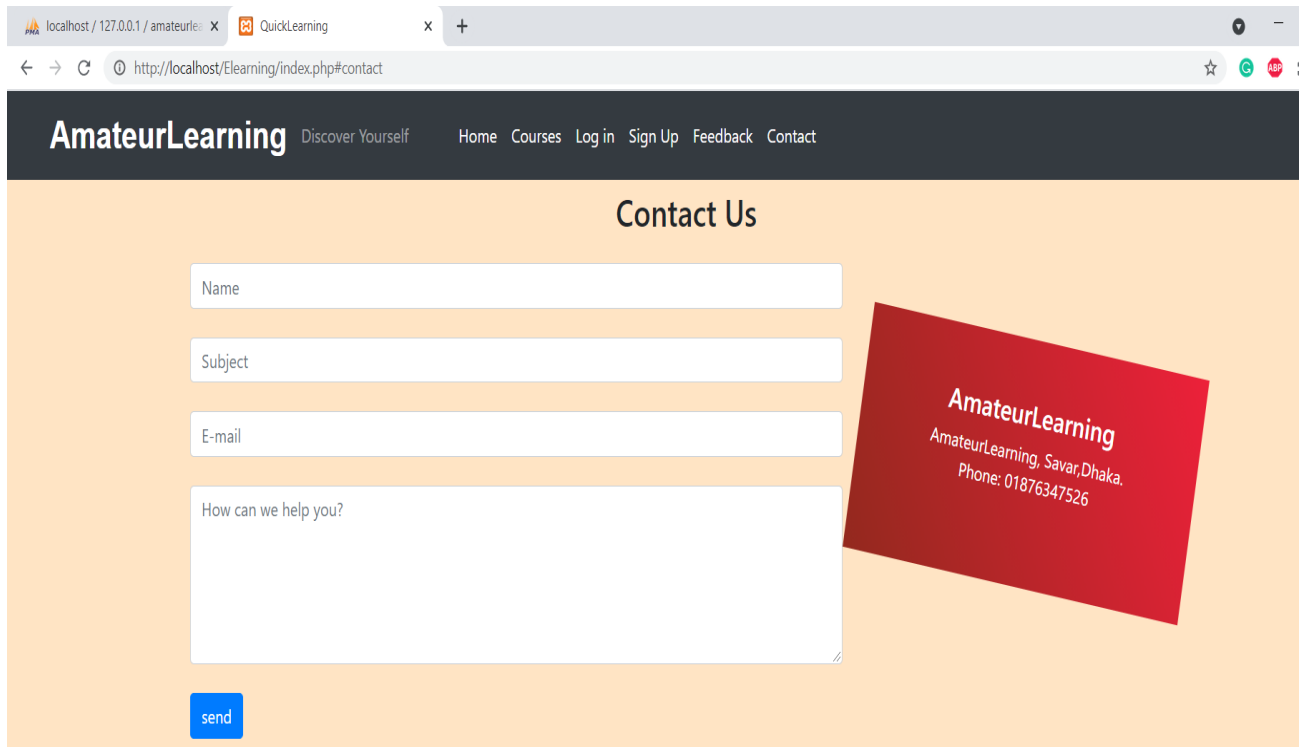


Fig 5.2.6: Contact part in home page

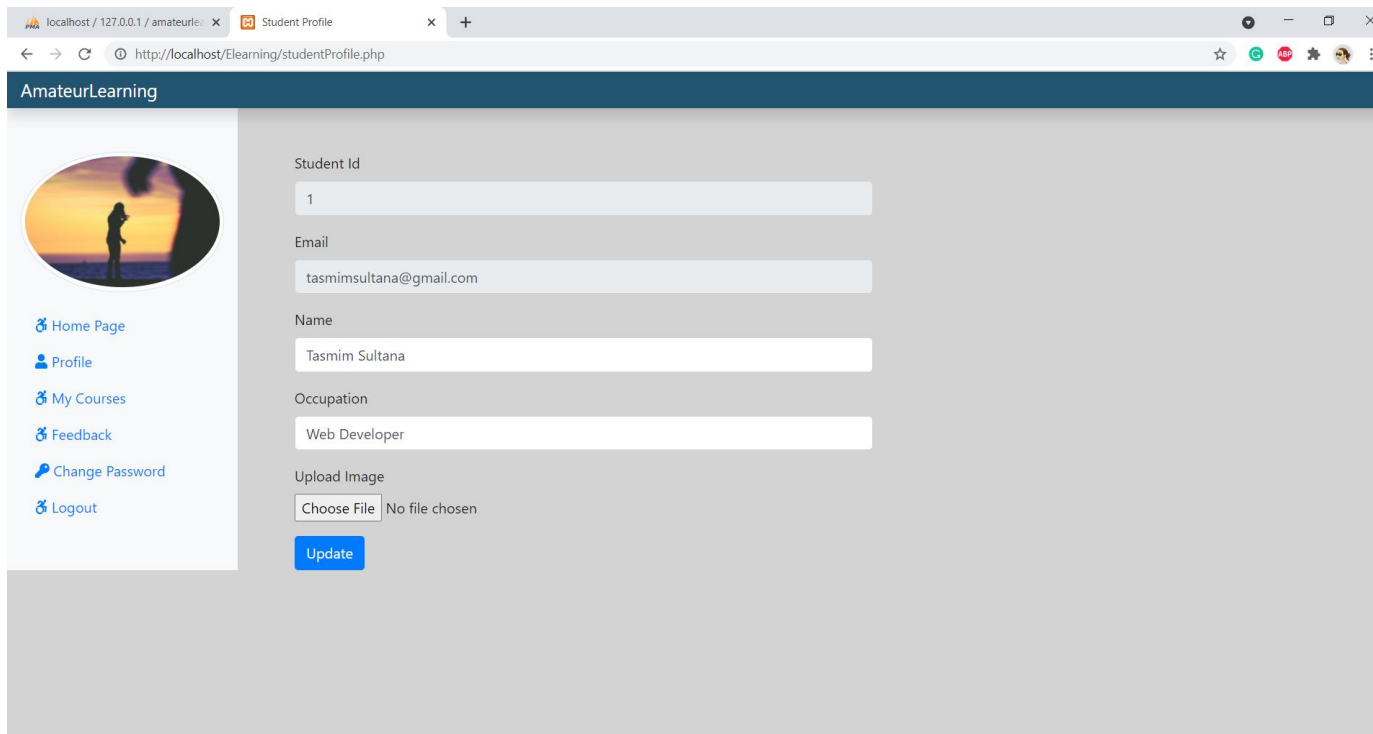


Fig 5.2.7: Student Profile page. Here students can change their name, occupation and image if they want.

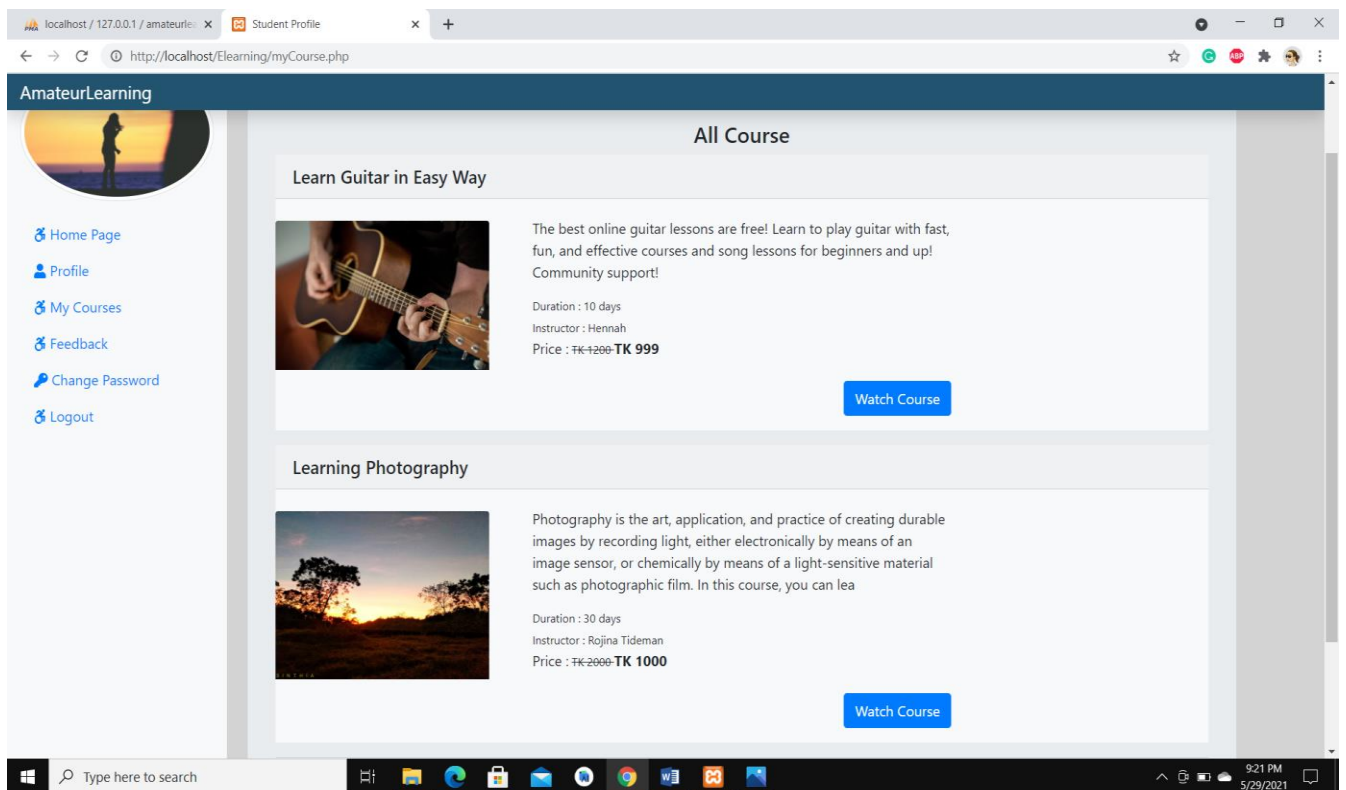


Fig 5.2.8: My course page. All the courses that student have already purchased will be shown in this page. They can see the lessons under all courses by clicking watch course button.

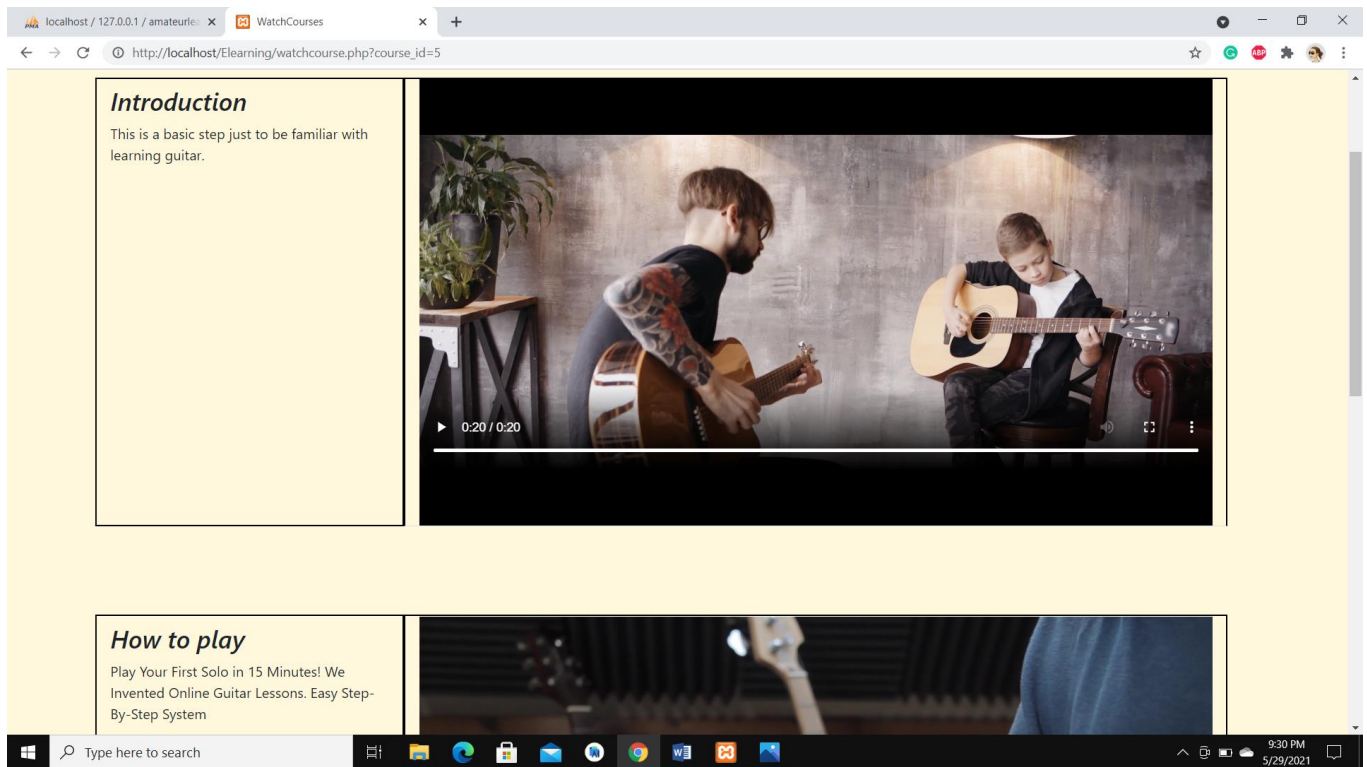


Fig 5.2.9: part of watch course page. Here student can see all the lessons under a particular course by playing them.

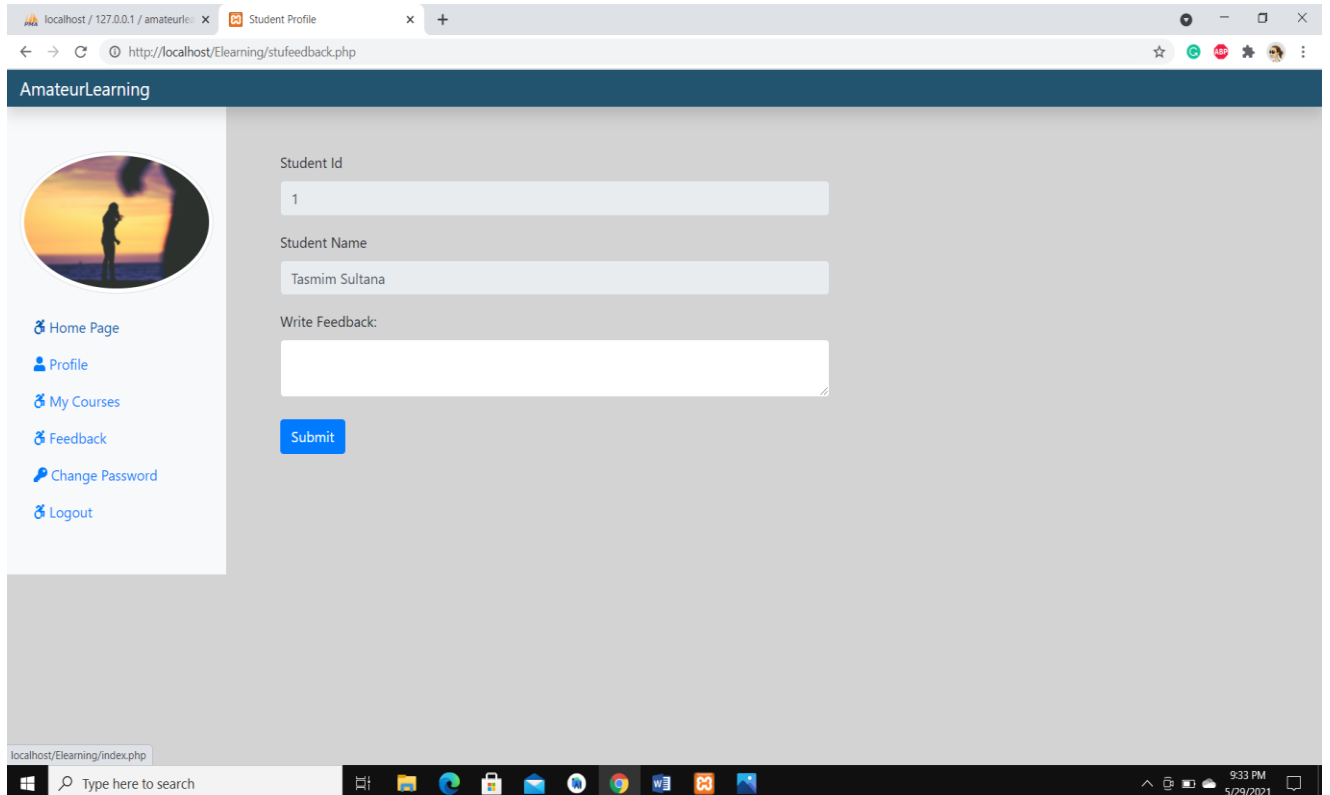


Fig 5.2.10:Feedback Page. Here student can write feedback.

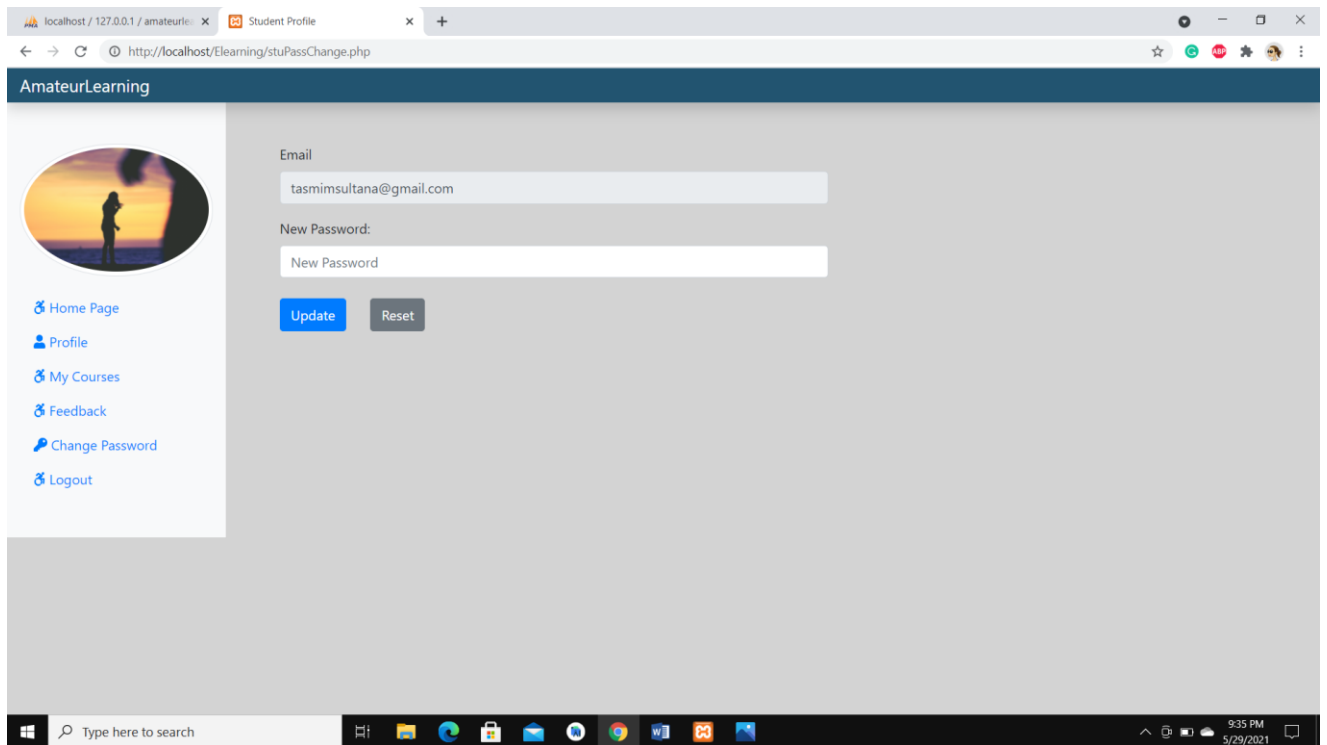


Fig 5.2.11: Change Password page for student.

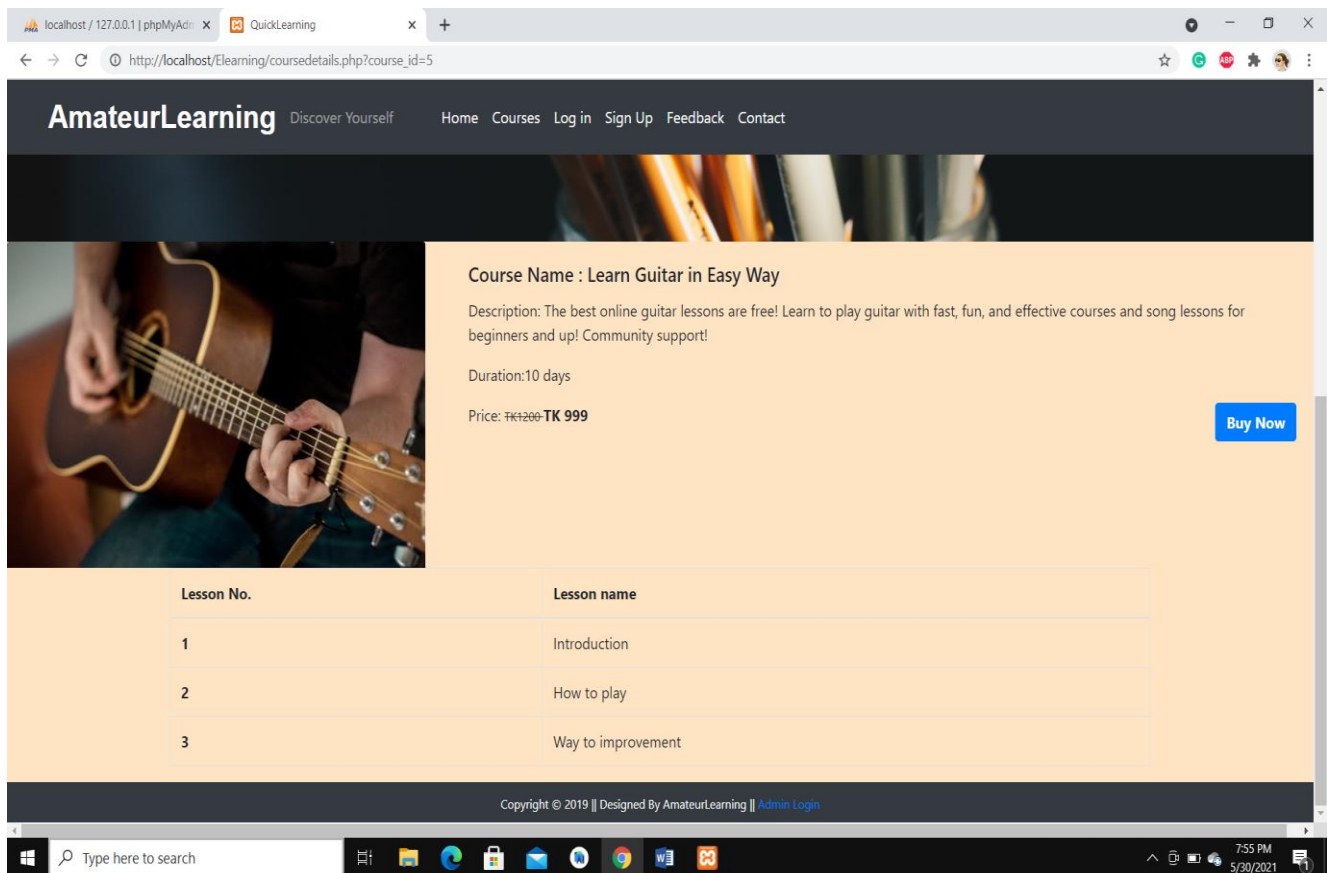


Fig 5.2.12: Course details page. This page will be open if a student click over a course.

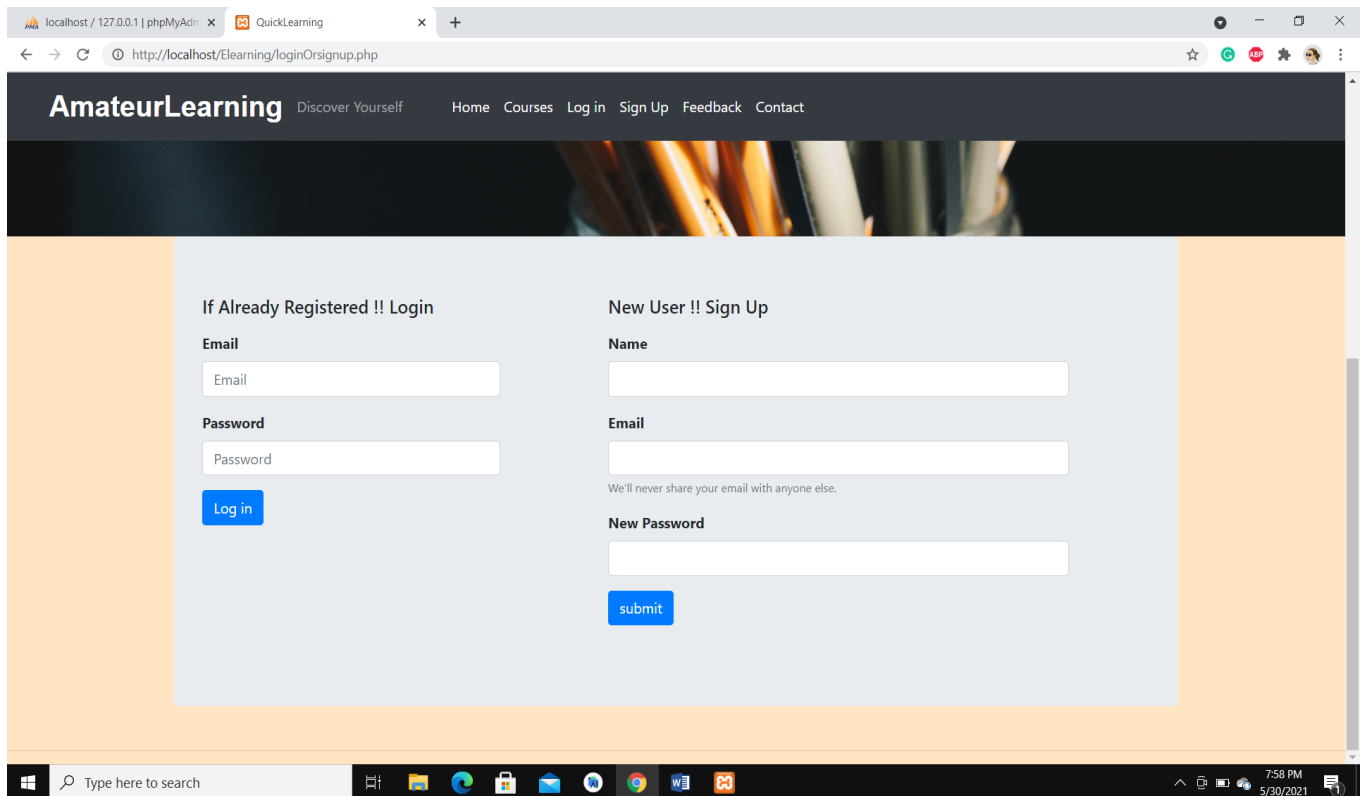


Fig 5.2.13: LoginOrSignUp page. This page will be open if a student click on buy now button but don't have an account or not logged in our website.

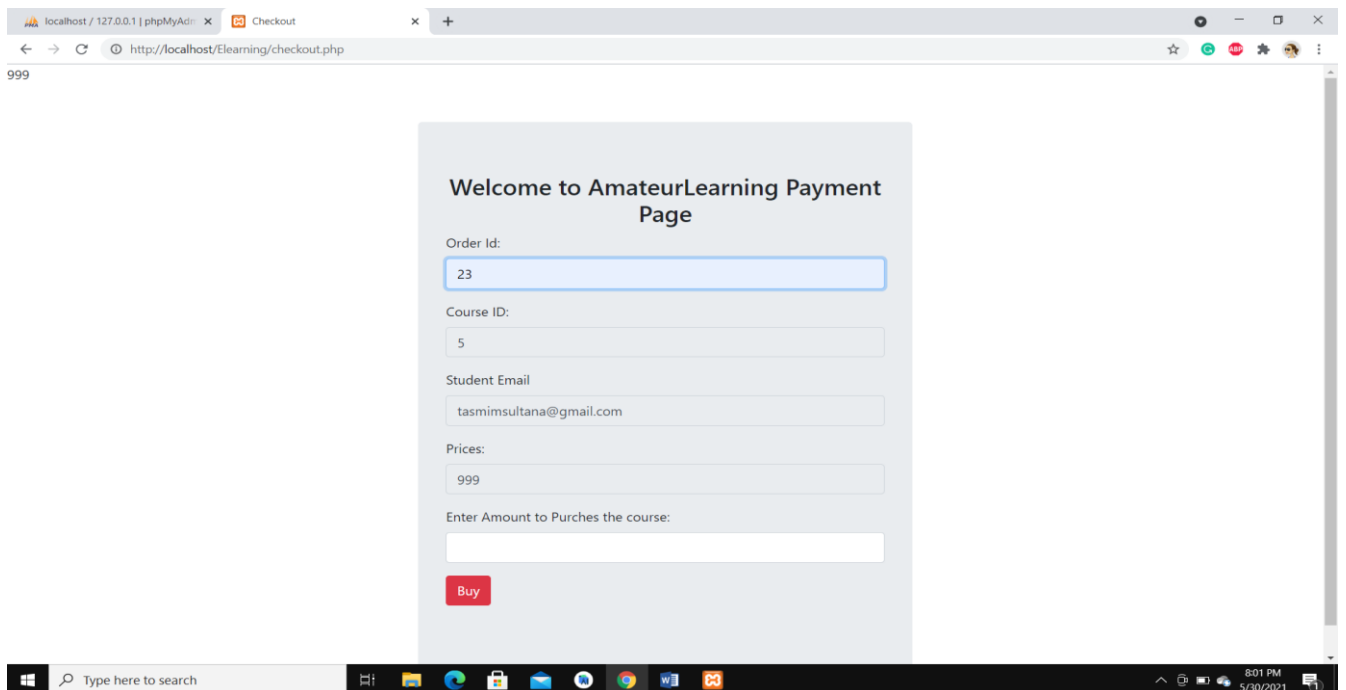


Fig 5.2.14: Checkout page. This page will be open if a registered student click on the buy now button.

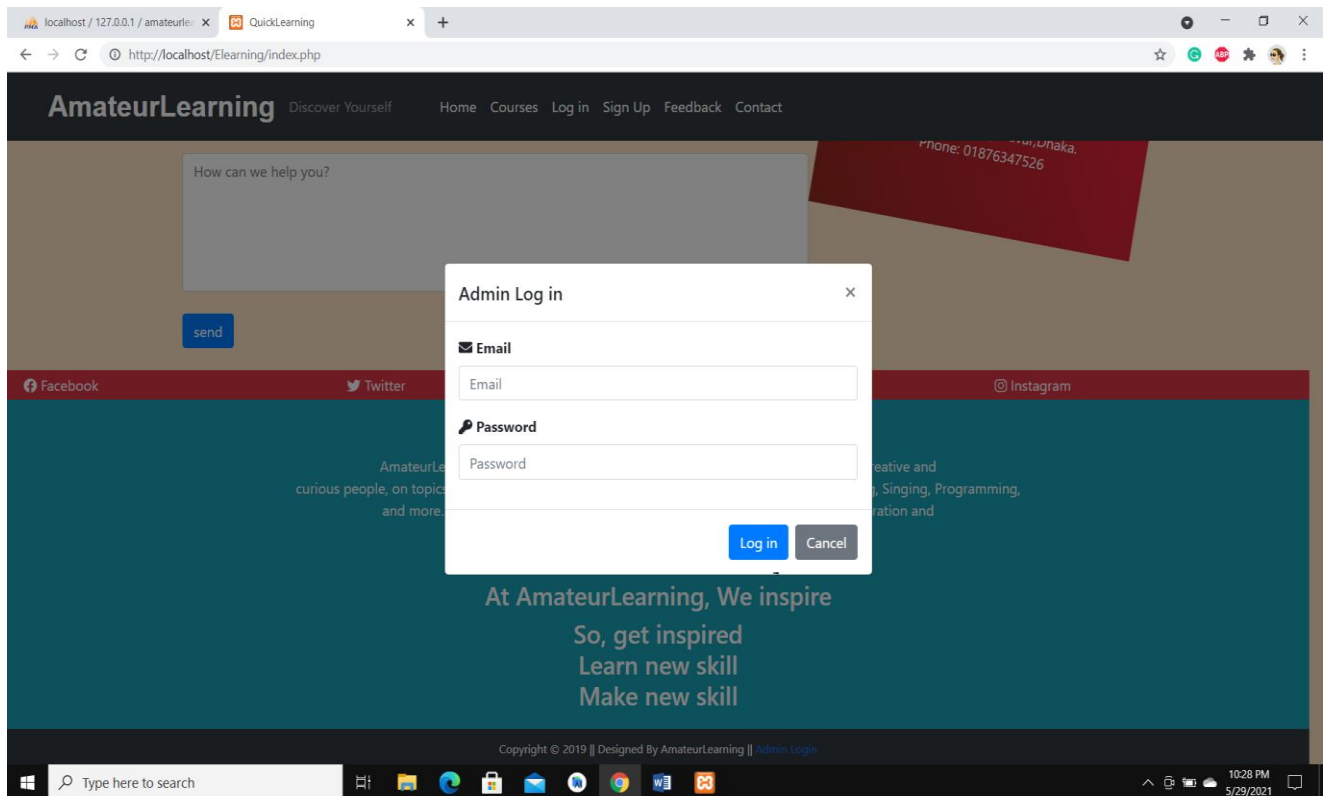


Fig 5.2.15: admin log in modal.

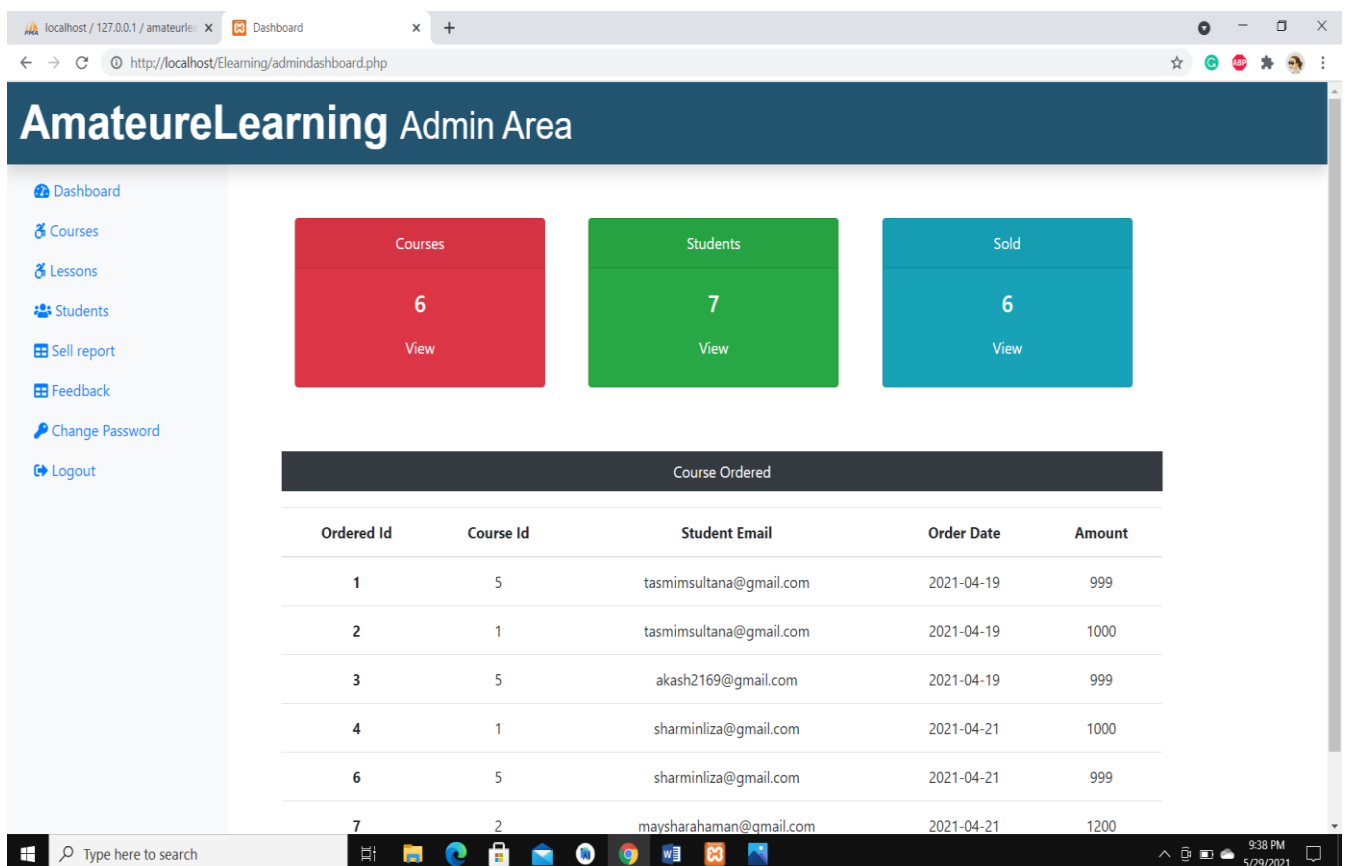


Fig 5.2.16: Admin dashboard page. Total courses, total registered students and total sold admin can see here. Also can see the order details.

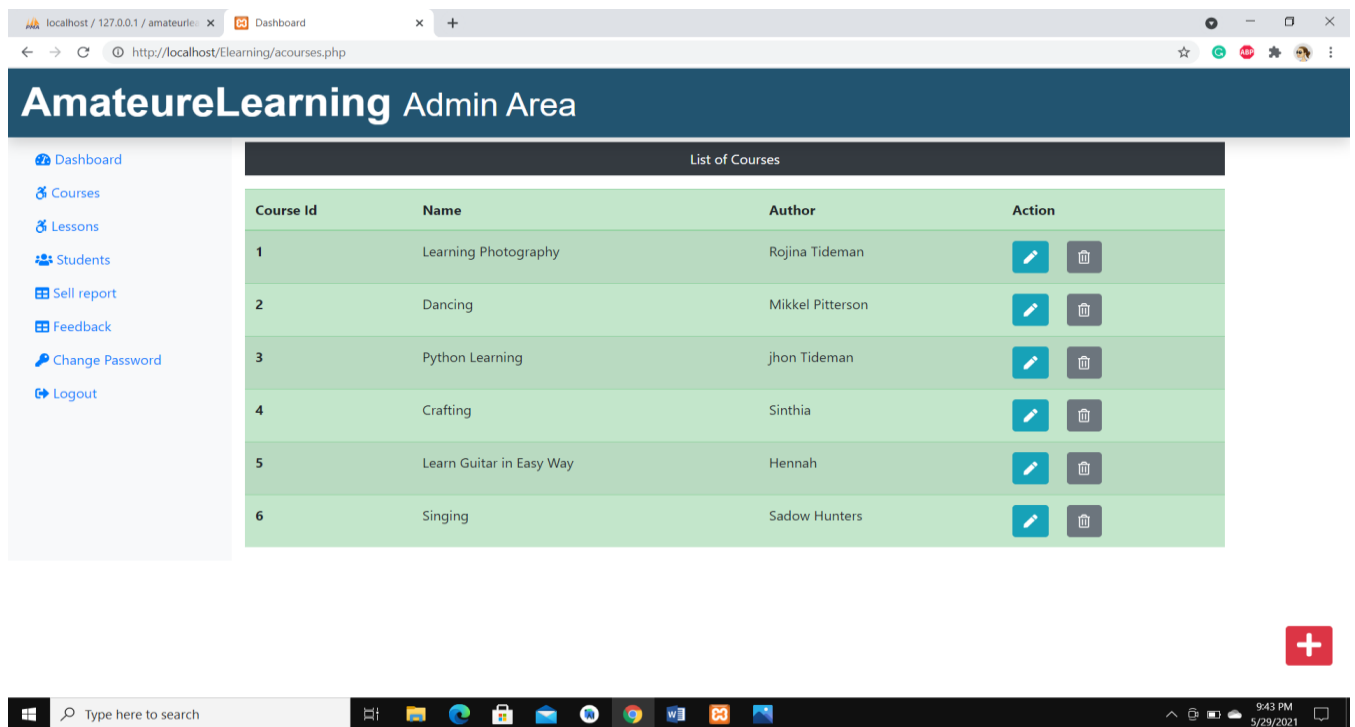


Fig 5.2.17: Course page for admin. Here admin can edit, delete and add a course.

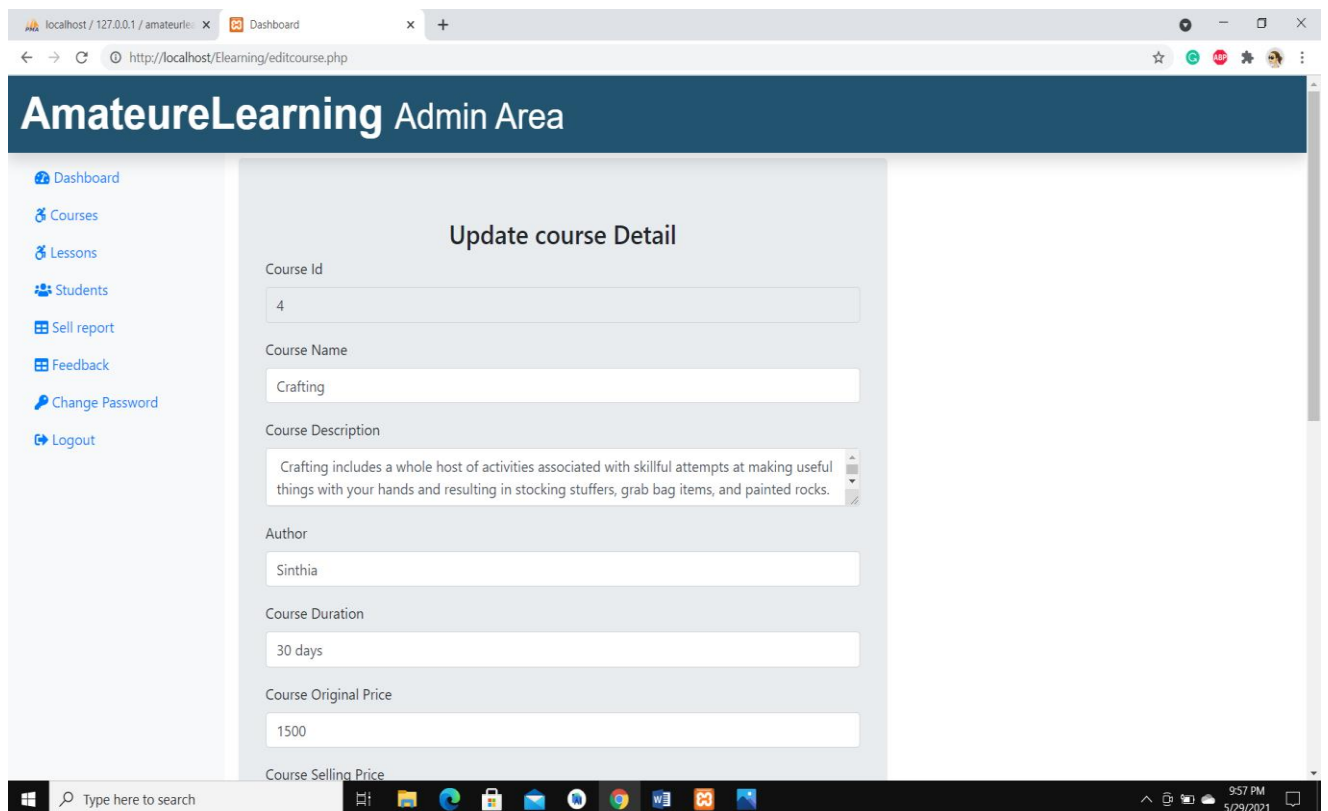


Fig 5.2.18: Course edit page.

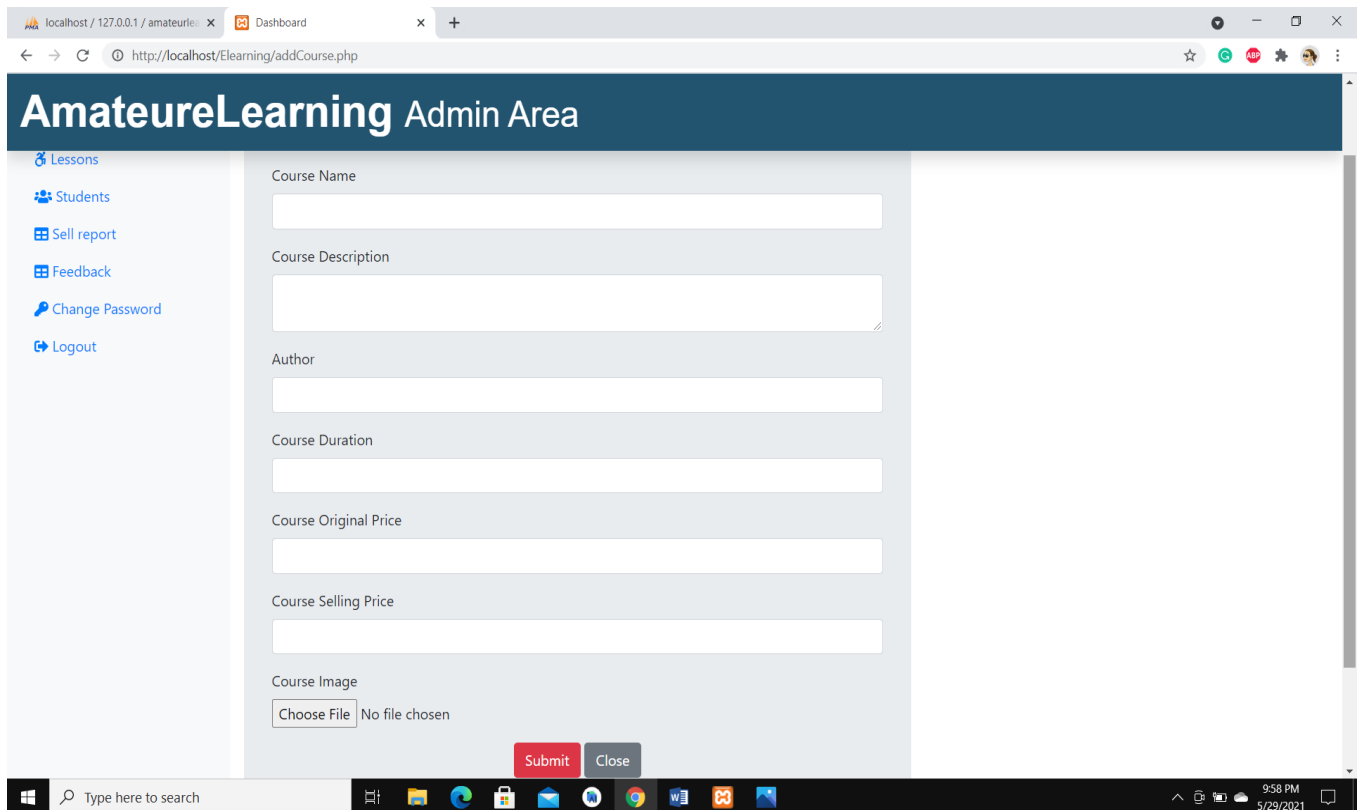


Fig 5.2.19: Part of add course page.

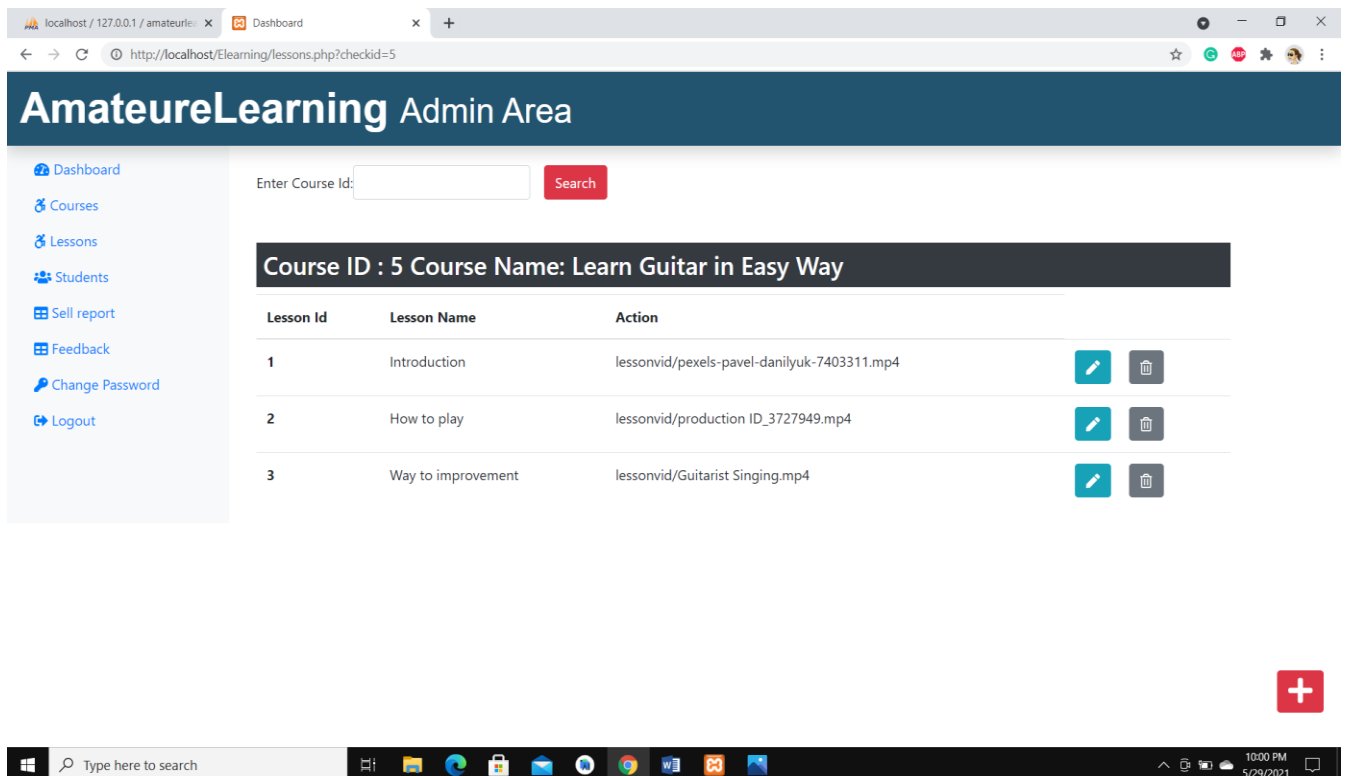


Fig 5.2.20: Lessons page. Admin can search all the courses by course id. Also can edit, delete and add the lessons.

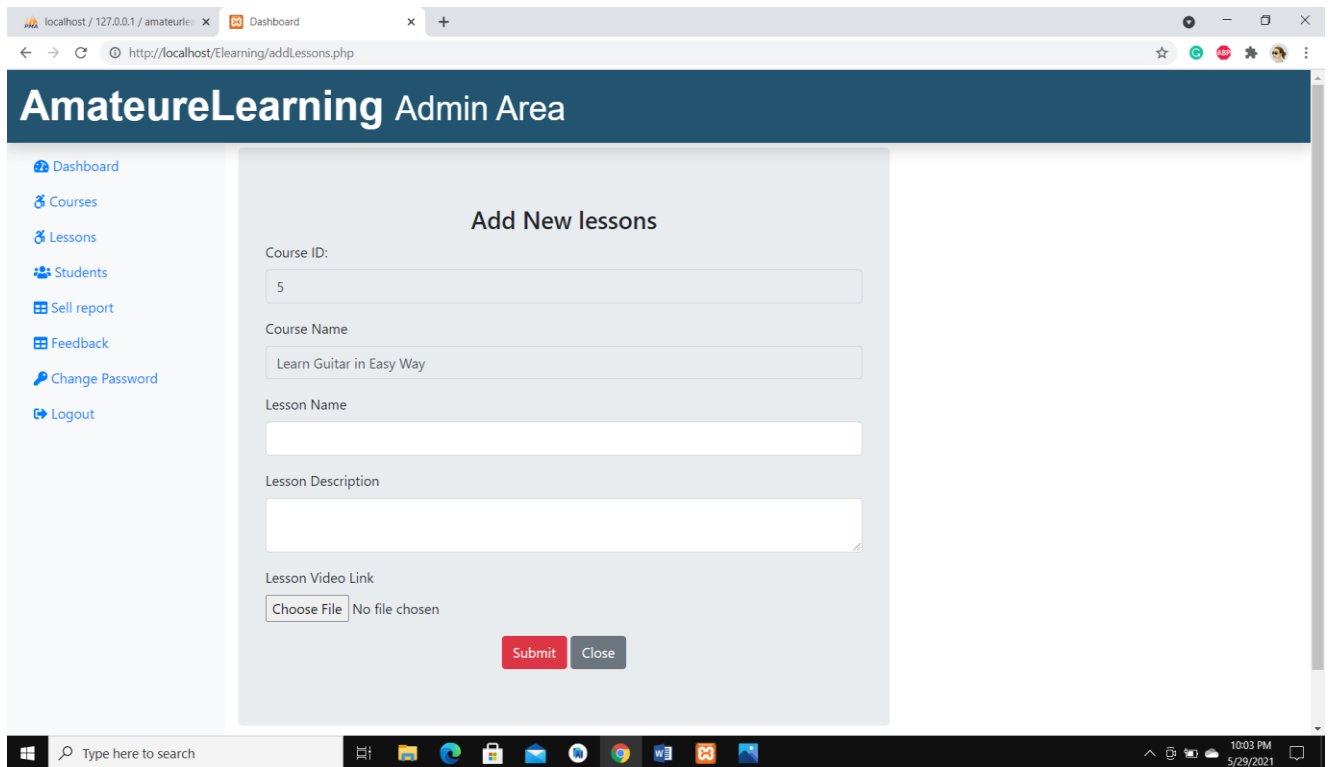


Fig 5.2.21: Page for adding lessons.

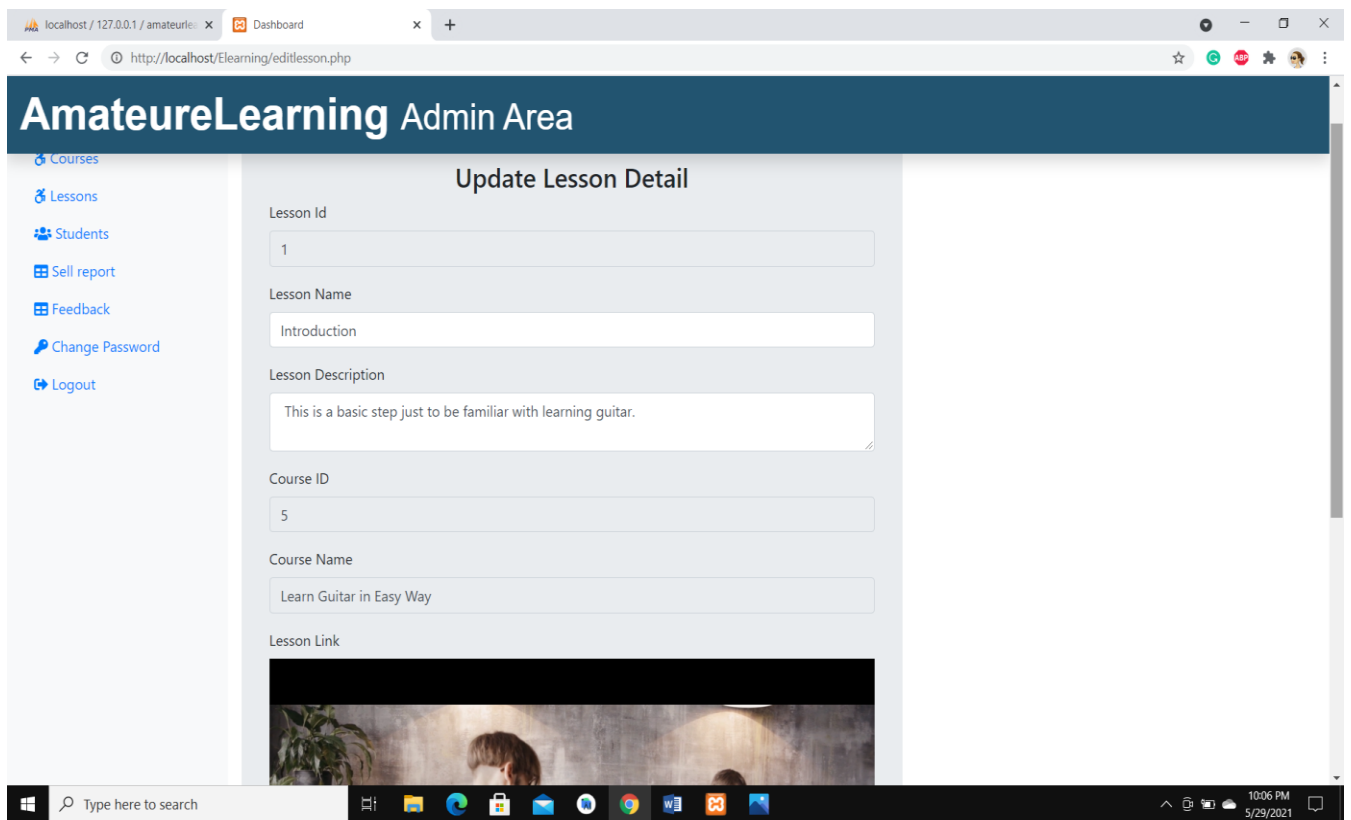


Fig 5.2.22: Page for editing lessons.

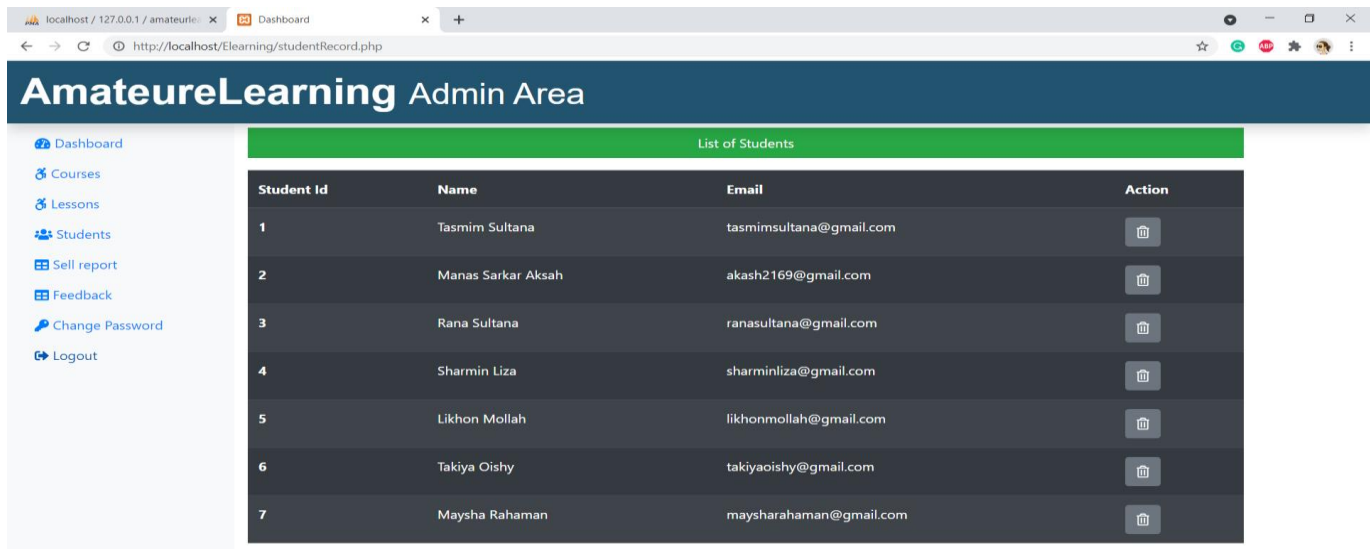


Fig 5.2.23: Student record page. Admin can see list of registered students also can delete them.

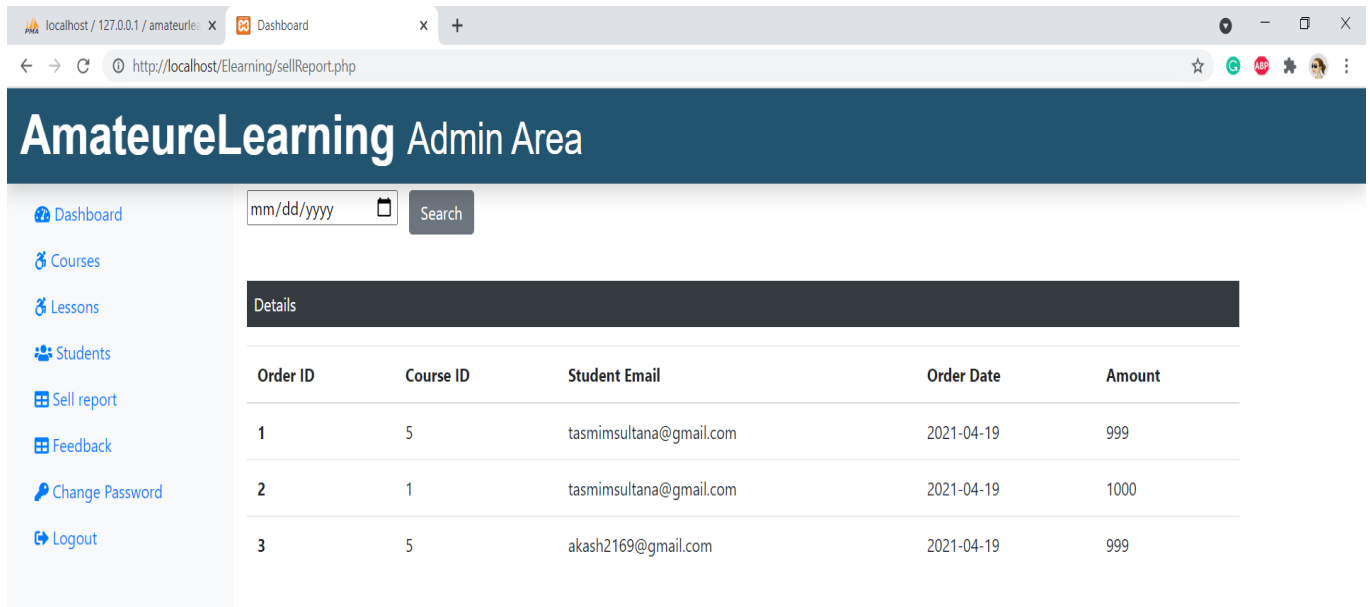


Fig 5.2.24: Sell report page. Admin can see all the courses sold in a particular day searching by date.

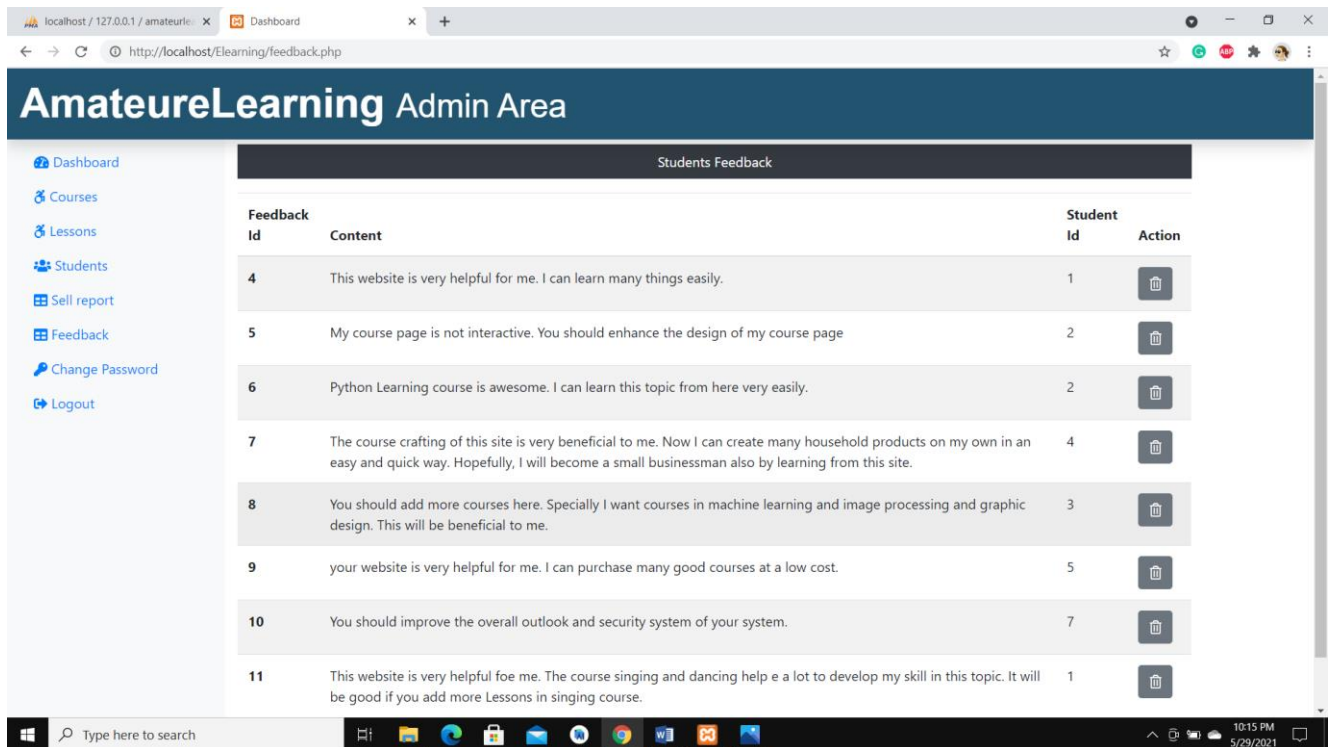


Fig 5.2.25: Feedback page. Admin can see the feedback and can only delete them if he wants. But can not alter the feedback.

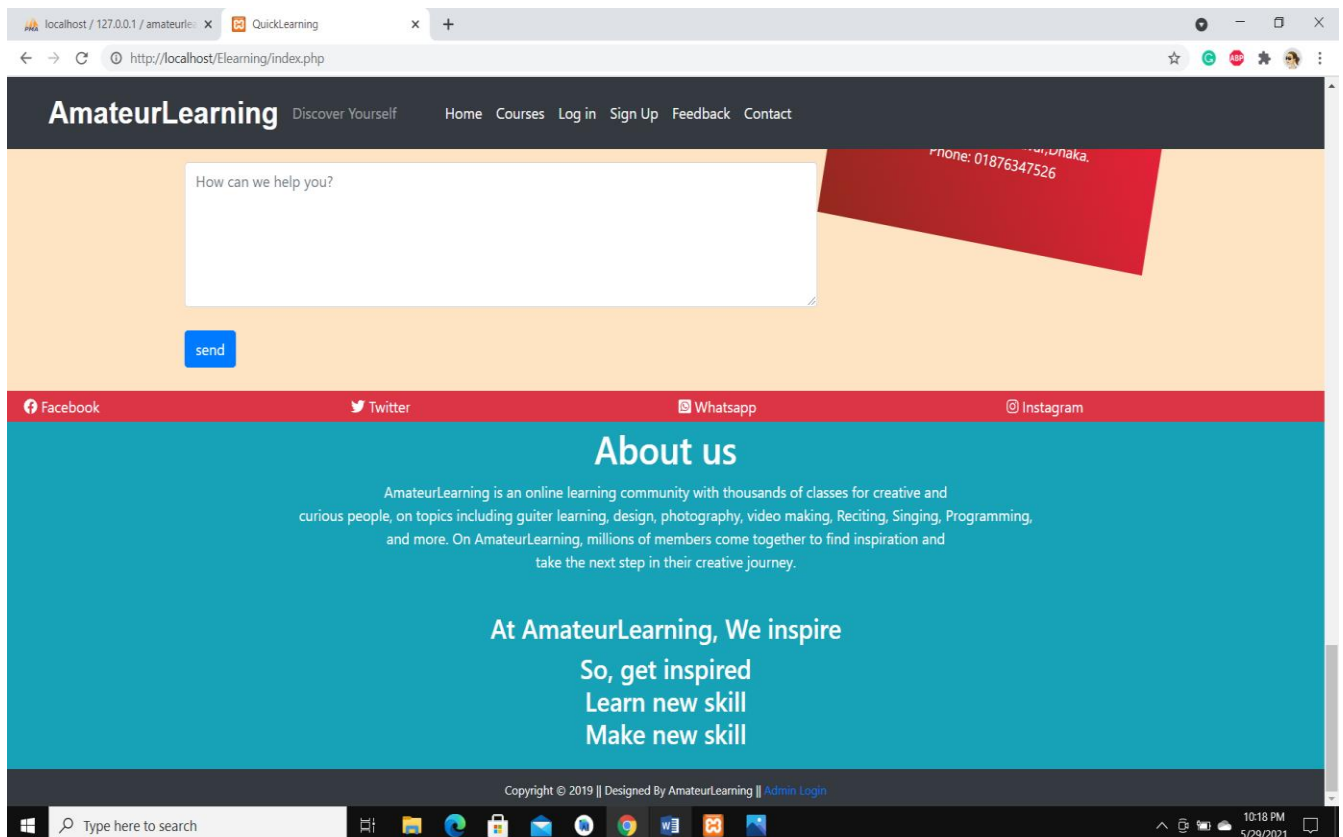


Fig 5.2.26: About as section in the home page.

5.3 Implementation of Interactions

Interactions are well known in our communication system now. It always occurs, because, our communication system is very easy and fast now. It helps us to do many works at the same time. If we on a page to work a task, but in this time we can do other many works by its help. It should be done such a way that attracts the users.

5.4 Testing Implementation

5.4.1 Testing

Testing is the most important thing in every project. It helps us to judge the quality of the application. If there found any problem, we have to solve this problem for better performance. In this project, we will implement an android based mobile application for traffic information

5.4.2 Unit Test

For better performance, we should test every single part of the website. It will confirm us about our website's well performance.

5.4.3 Unit Test Case

There are two points in Unit test case. One is database handler and another one is interface handler. There are some functions used in the website which will add, edit and delete the information data.

5.4.4 Implementation Test

If there is any important thing, then this is the one. It will help to make user expert, testing the system for giving better performance.

5.5 Test Result and Reports

It helps to ensure about any faults of the website. If there found any error when it is testing, the problem can be found and solve for better performance. It will confirm the application's accuracy. The report will give all the information about this.

CHAPTER 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

This project has come as many of us struggle for guideline on our journey of learning something new. When we started this project, we thought it won't be very much difficult. But when started to implement there were a lot of challenges.

We researched a lot about e-learning and existing platforms to gather a clear idea about the project. We also tried to analyze about the major interests of people.

We talked with several teachers, took some guidelines that helped us a lot to develop this platform. They encouraged a lot to do this project.

Despite everything we achieved, we faced many challenges to finish this project. After all it's an online based system so in real life people needs to follow the using rules otherwise it's goal will be failed.

It's an innovative idea. The opportunities that provided through this application is huge. We interact with too many regular passengers, listen their problems, try to understand the communication gap and come up with this application. Hope it will help them a lot

6.2 Scope of Further Development

There are a lot of fields where we can improve. We tried to make this platform as very user friendly. As there is a section of review, when the users will give feedback, we can understand about our lacking. Technology is always ungradable, day by day it will change. So, we need to change ourselves everyday.

1. We will try to make courses in all sectors.
2. We want to make this application more suitable, flexible, user friendly, keep update the users time to time.
3. We will bring a Bengali version of our website.
4. The transaction system will be updated according to the demand.

APPENDIX

Appendix A: Project Reflection

Appendix introduces us with the project's reflection. Any kinds of group research project are very challenging. We had a little chance for group work in University. But we have the opportunity to do many types of works with the group. It helps us to increase our live working activities which will help to shine in future. Time management is more important for any project or work. We had a chance to make an website which will help to easy the traffic system.

For every project planning, timing and hard work are very important. Proper plans will help to go in the highest stage of success. Everyone should be give much effort for getting a better success.

Appendix B: Related Diagrams

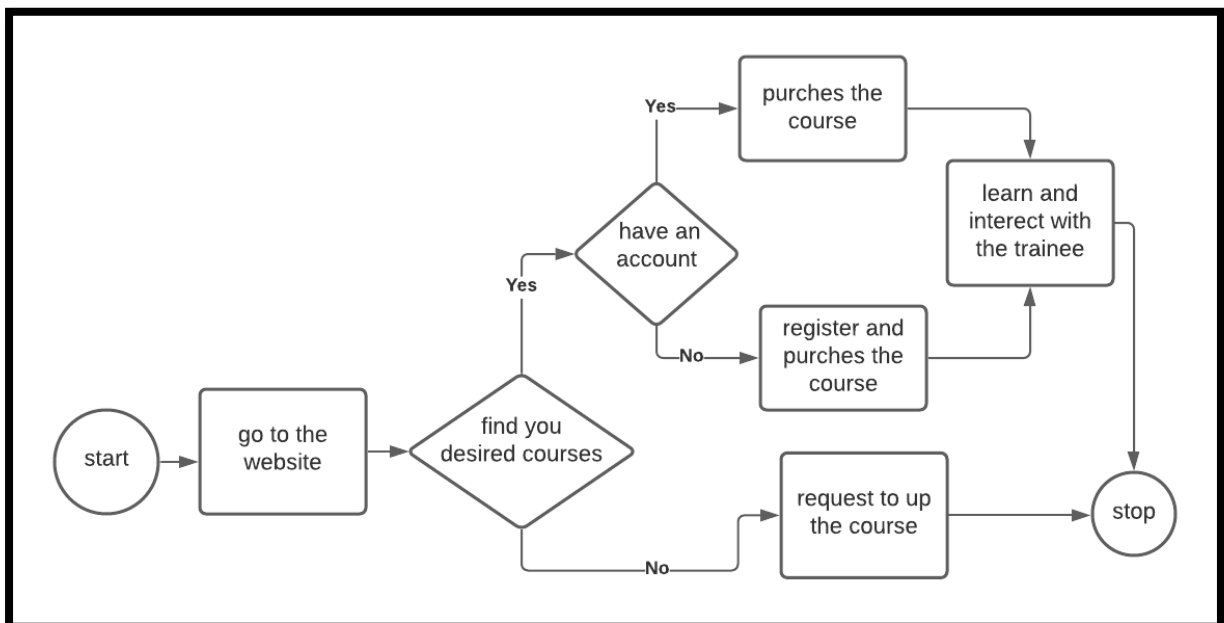


Fig 3.1: Business Process Modeling of AmateurLearning: an E-learning website

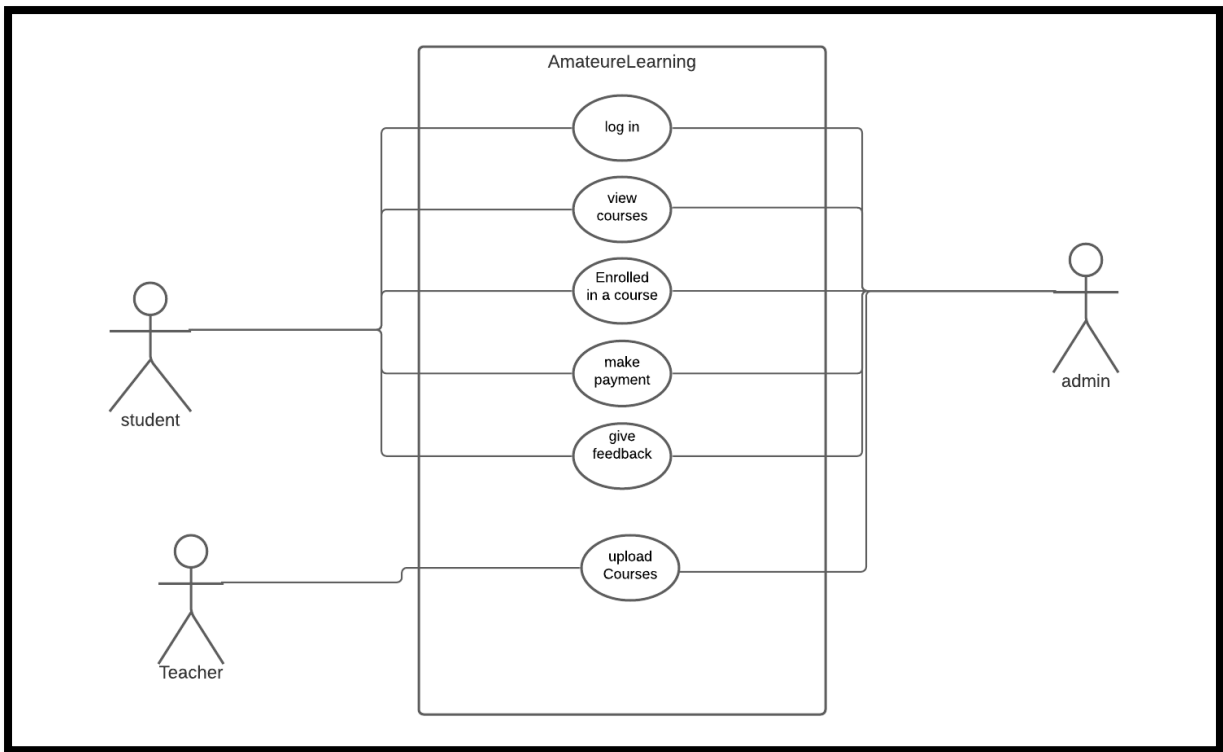


Fig 3.2: Use Case Modeling of AmateurLearning: an E-learning website

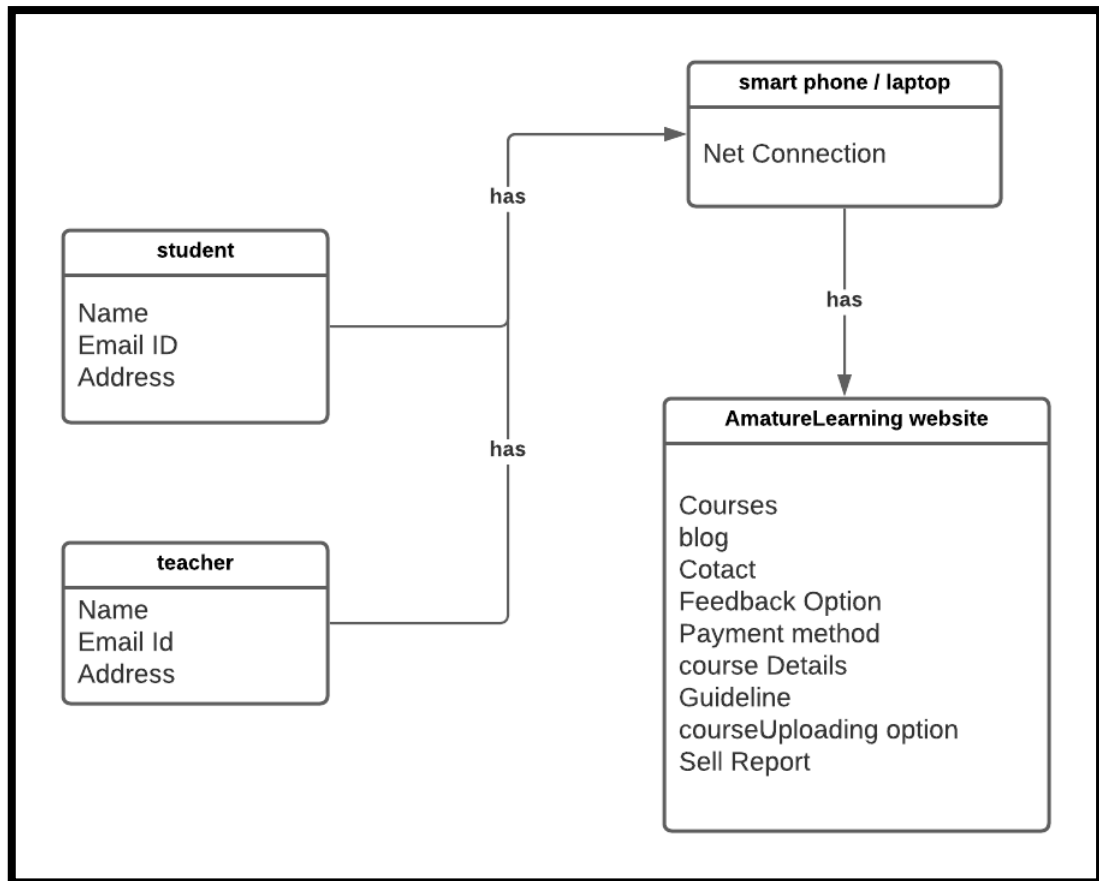


Fig 3.3: Logical Data Model of AmateurLearning: an E-learning website