

# CUSTOMIZE MOODLE CERTIFICATE

## MINOR PROJECT REPORT

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR

THE AWARD OF THE DEGREE OF

**BACHELOR OF TECHNOLOGY**

Information Technology



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### **Abstract**

Customize Moodle Certificate” provides us a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using this project.

Throughout the project the focus has been on presenting information in an easy and intelligible manner. The project is very useful for professors who want to know about Student Information. The project provides facilities like profile creation of students thus reducing paperwork and automating the record generation process in an educational institution.

## ACKNOWLEDGEMENT

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# 1 Introduction

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## 1.1 Introduction to Project Page

The aim of this project is to study how we fetch the name, roll no, field and grades in Moodle . Moodle is an open source virtual learning environment that is also known as a course management system. This popularity and its use of open-source code have made it a starting point for in-house developments such as extensions or mobility modules , automatic correction of SQL exercises , and virtual mentoring .

In this project, we have to fetch the information of student in Moodle by using HTML, CSS, and php and other languages also. There are three main criteria that have led universities to use Moodle in their virtual campuses. First of all, its teaching flexibility, as it provides added value to the different teaching styles and may be adapted to the varied pedagogical approaches of different teachers. Secondly, it is a user-friendly application both for teachers and for students, which also makes allowance for the elimination of barriers to access. Finally, Moodle allows the integration of different tools, including management tools, which gives it technological flexibility.

## 1.2 Project Category

- Internet based
- Application or System Development
- System Administration

## 1.3 Objectives

1. To create a certificate from the Moodle activities I.e. Quiz, Feedback or questionnaires
2. Customizing the fields from the activities on the certificate.

## 1.4 Identification/Reorganization of Need

Integration of this kind of tools into a Learning Management System is an essential feature in order to improve students' performance.

- To provide a very simple development environment in order to smooth the learning curve to the students.
- To be independent of the programming language. To use a particular programming language it is only required that the appropriate compiler is installed which is not required in virtual programming lab environment by Moodle.

## 1.5 Unique Features of the System

1. Reading Materials: Reading materials could contain various lectures, reports, e-books and various other materials for the course. It also can be very useful in categorising the course materials in various categories. Courses can be grouped in a general way. After the course has been uploaded by the teacher it can again be changed removed or new content can be added to these courses or new courses can also be added accordingly. Also, the courses can be categorised under specific teachers so that specific teachers can make changes to specific courses only.
2. Conduction of Quizzes: Evaluation of the students through test and quizzes can also be included in the site through moodle and they come under the various activities provided by moodle. Various types of test including essay questions, short answer questions, and multiple choice questions can be introduced in the site. For each type of test or quizzes the teacher has to use the various types of format given on the site for conducting these tests and quizzes. viz. For essay questions the teacher can select that essay type questions from the field provided for creating the different types of questions. For Multiple choice questions, the multiple choice option can be selected and then the specific type of questions can be set accordingly.
3. Distribution, collection and evaluation of assignments: Under different activities one of the activities that can be organised by the teachers is distribution of assignments to the students. This can be done by selecting activities and the choosing assignments. Then, the teacher can create and inform the students about the assignment through the e-mail. After that the students can access the assignment through the site and then submit their assignment for the course. A student can submit his/her assignment as a file by uploading the file to the assignment submission. These assignments can then be collected by the site to the database and these can then be assessed by the teacher through the site. The teacher can also provide grades for the assignment for each student which is stored in the database along with the assignment submitted by each students.
4. Keeping track of Class Attendance: As moodle provides an online active participation of the course by the teacher, a class attendance can be kept for the students who have participate in the course. Since, each student have to log-in to the site and the through it attend the class, it can be easily used to keep track of the attendance of each student specifically.
5. Recording of Grades: Similar to keeping track of attendance of the students, the teacher can accumulate and keep track of the grades provided by him to each student through tests, quizzes and assignments by using the database of the site. As the graded and attendance of each student is stored by the site.

## 2 Requirement Analysis and System Specification

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### 2.1 Feasibility Study

The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new device and debugging old running device/system. All system is feasible if they are unlimited resources and in nite time. There are aspects in the feasibility study portion of the preliminary investigation:

#### 2.1.1 Technical Feasibility:-

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- Does the necessary technology exist to do what is suggested?
- Do the proposed equipment have the technical capacity to work properly?
- Are there technical guarantees of accuracy, reliability, ease of access and control?

#### 2.1.2 Operational Feasibility:-

Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following:

- Is there controlled efficiently?
- Will the system be used and work properly if it is being developed and implemented?
- Will there be any resistance from the user that will undetermined the possible application benefits.

#### 2.1.3 Economical Feasibility:-

In the economic feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

### 2.2 Facilities required for proposed work

**Minimum software required:-**

- Win 10 or Ubuntu 18.04
- Xampp
- Moodle
- Certificate Plugin



**Minimum hardware required:-**

- Processor: Intel® Core™ i5-7200U CPU @ 2.50GHz × 4
- Hard-disk: 2GB
- RAM: 512 MB

### 3 System Design

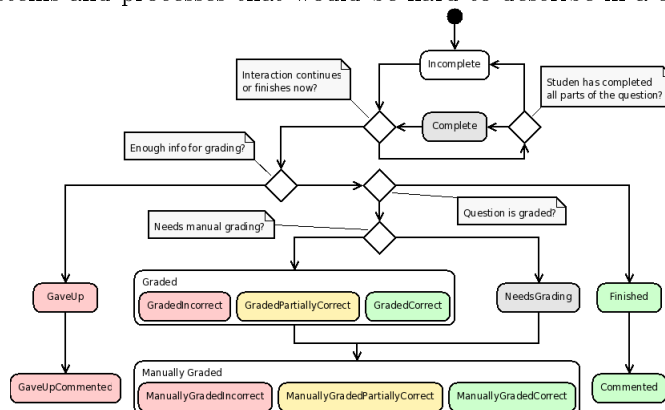
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#### 3.1 Software design:-

Design or system design is the fourth phase of the System Development Lifecycle which is basically a transformation of a system analysis. It is creative and challenging phase of SDLC. It is designed according to the logical design that how should it is automated, how should we use this, how should we design local area networking and how much technologies might be used in the system.

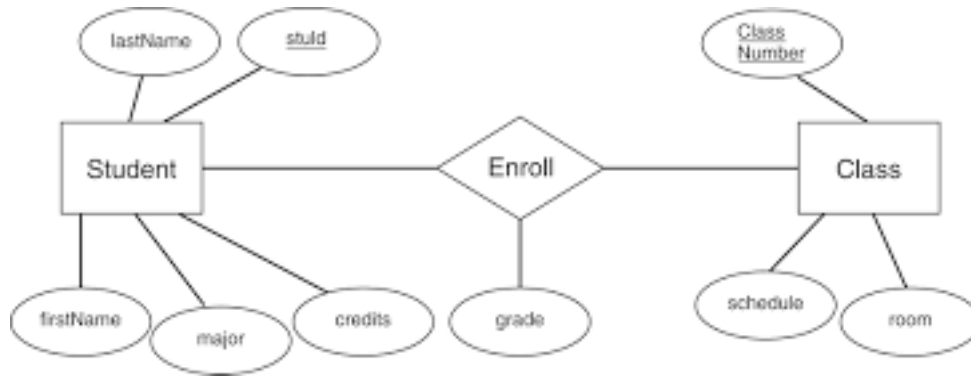
#### 3.2 Database Flow Diagram

A data flow diagram shows the way information flows through a process or system. It includes data inputs and outputs, data stores, and the various subprocesses the data moves through. DFDs are built using standardized symbols and notation to describe various entities and their relationships. Data flow diagrams visually represent systems and processes that would be hard to describe in a chunk of text.



#### 3.3 ER Diagram:-

In software engineering, an ER diagram is often an initial step in determining requirements for an information systems project. It's also later used to model a particular database or databases. ... Business information systems: The diagrams are used to design or analyze relational databases used in business processes. In software engineering, an ER diagram is often an initial step in determining requirements for an information systems project. It's also later used to model a particular database or databases.



### 3.4 Methodology

Moodle is an open source virtual learning environment that is also known as a course management system. As an open-web application that educators can use to create Web learning portals. In this the back-end code comprises HTML5, CSS, and php. All three types of code are contained in one .html file and can be run solely from this file. One of the advantages of HTML 5 is that it is not necessary to include different types of web languages in a single file

- 1) To increase the portability of the project by only needing to worry about one project file instead of three
- (2) Where in the project file, the change in coding languages is distinctly marked and therefore does not significantly reduce readability. Also, the ability to put more than one web language in a single file is an example of an RIA (Rich Internet Application).

## 4 Implementaion

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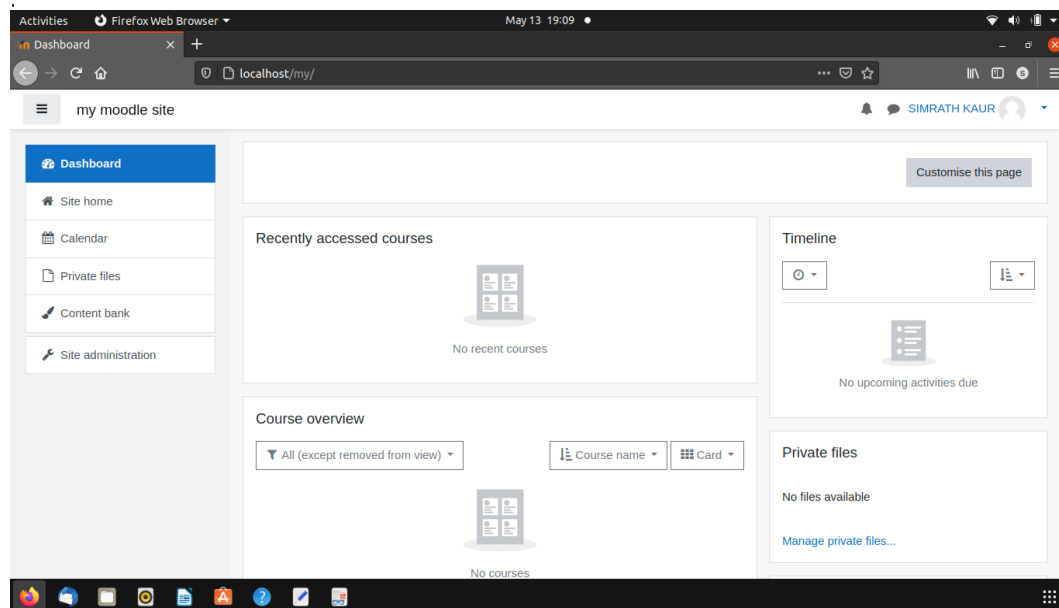
### 4.1 Setting up moodle

One can set up moodle by following steps:

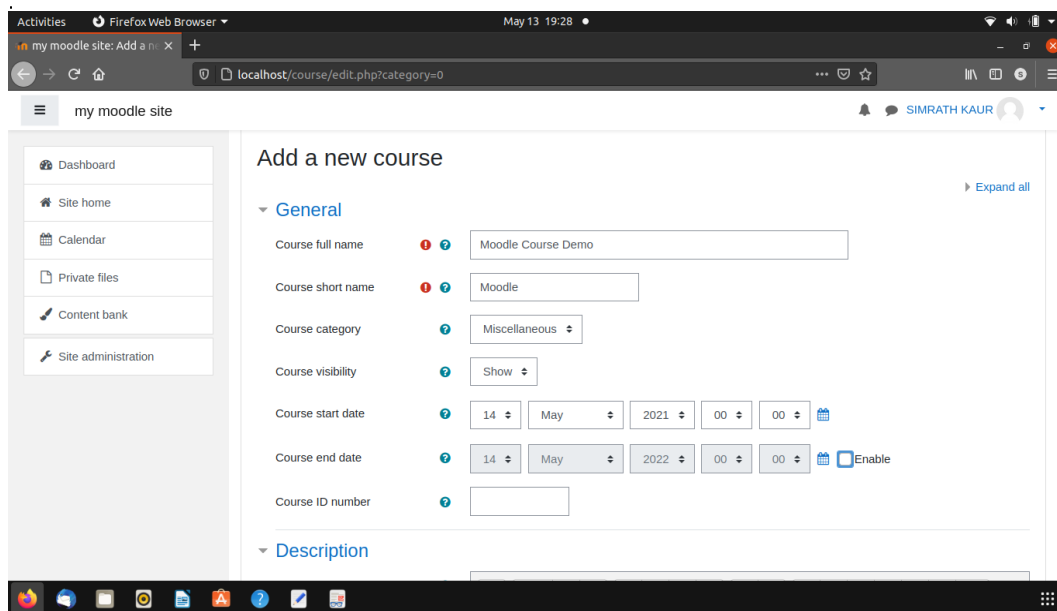
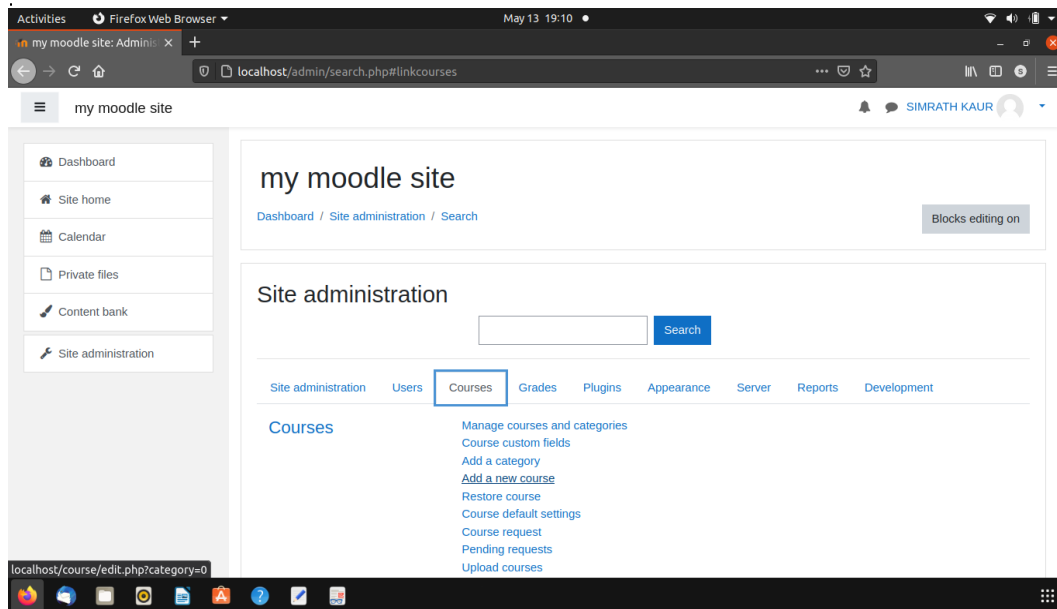
1. Plan System Capacity.
2. Install Database Server.
3. Install Web Server.
4. Install PHP.
5. Download Moodle Copy Files into Place.
6. Create Moodle Data Directory
7. Secure Database
8. Begin Moodle Install
9. Setup Backups.

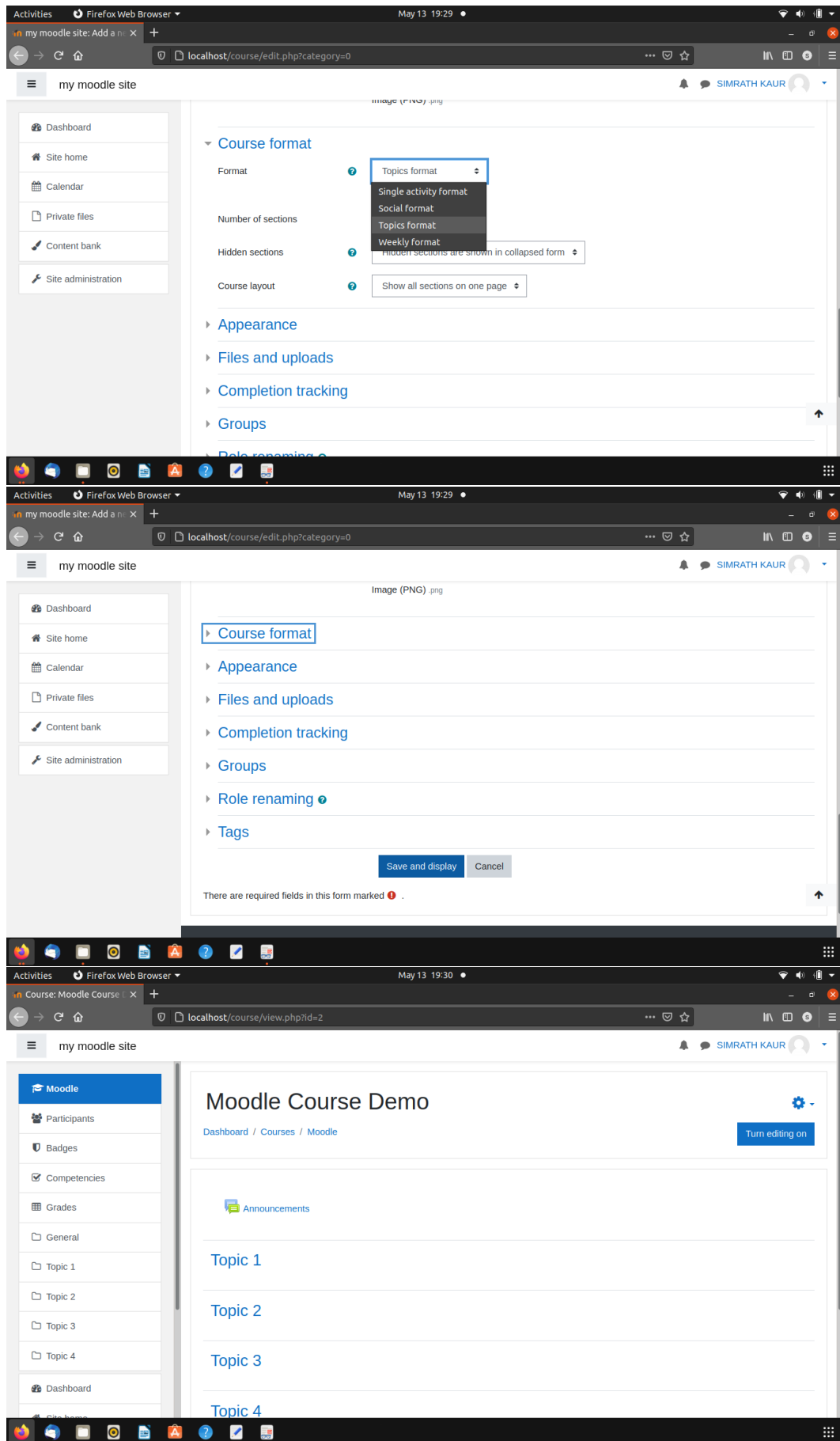
### 4.2 Creating certificate

1. Dashboard at intial:

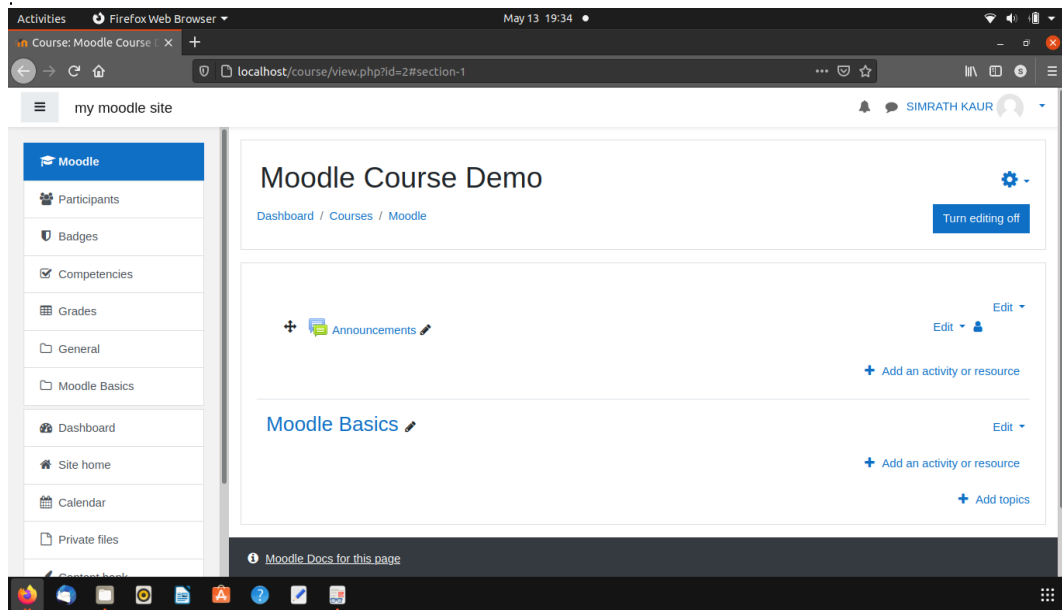
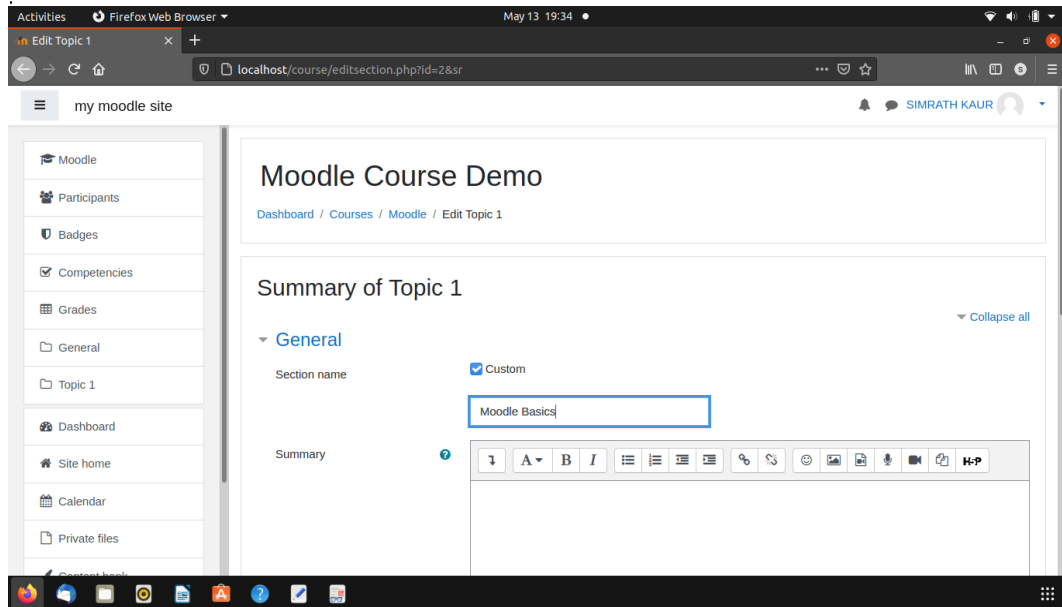


## 2. Creating course:





### 3. Creating Topic



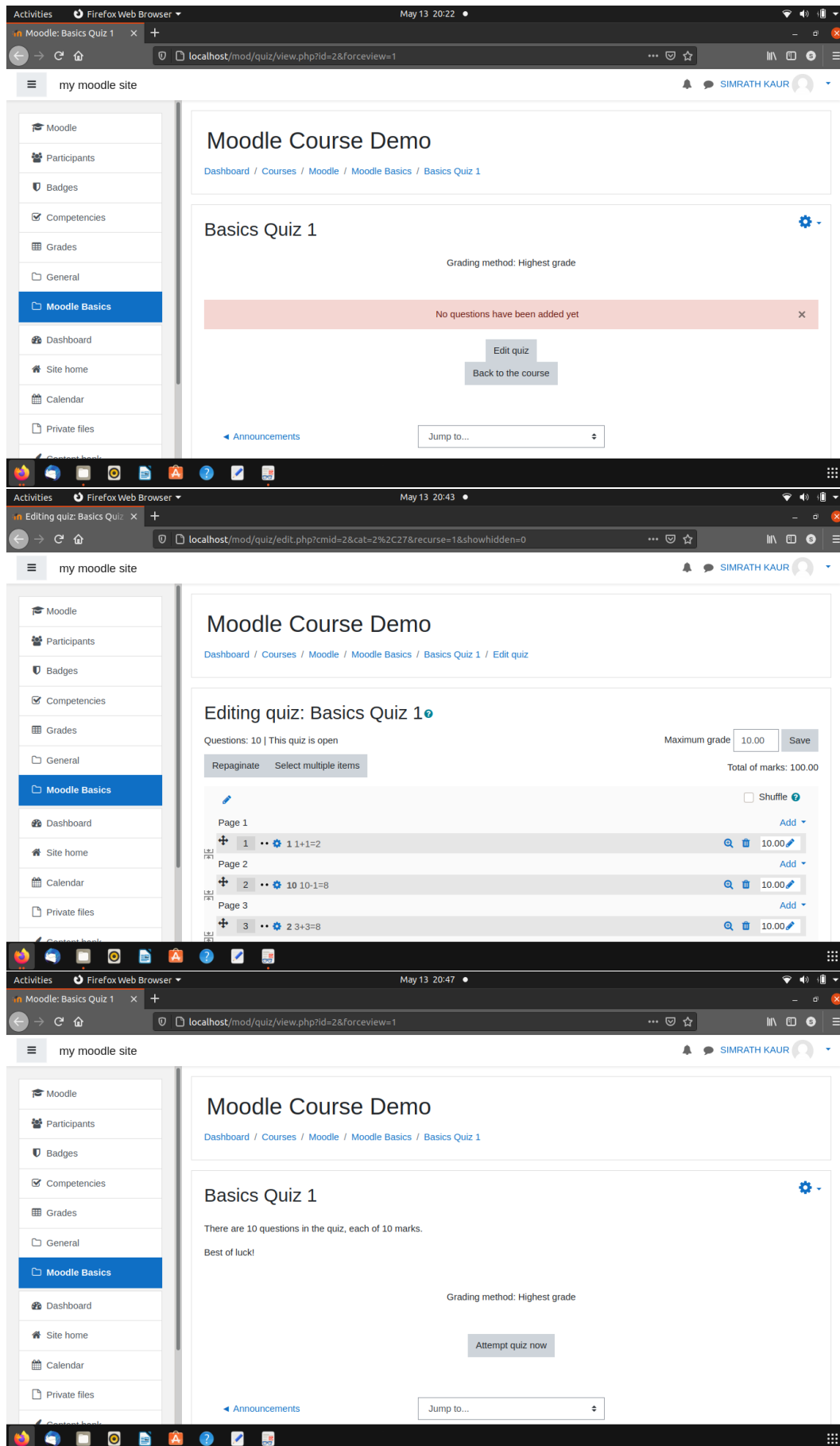
#### 4. Creating Quiz

The image consists of two screenshots from a Firefox web browser, showing the Moodle interface for creating a new quiz.

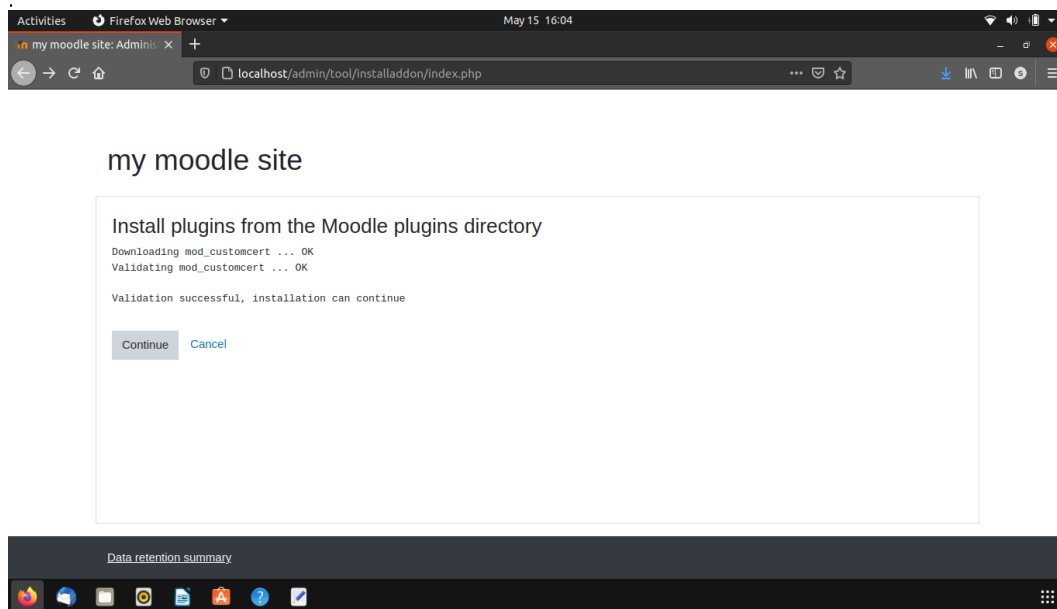
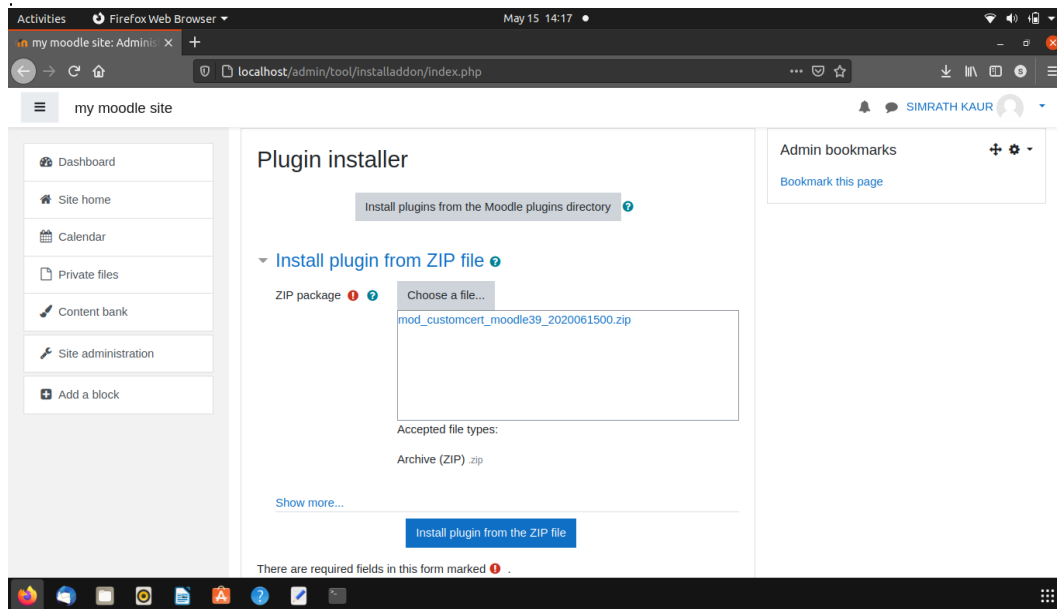
**Top Screenshot:** The browser address bar shows `localhost/course/view.php?id=Z#section-1`. The page title is "my moodle site". The left sidebar shows the course structure: Moodle, Participants, Badges, Competencies, Grades, General, Moodle Basics, Dashboard, Site home, Calendar, and Private files. The main content area displays a grid of activities and resources. The "Quiz" activity is highlighted. The right sidebar shows the user "SIMRATH KAUR" and a "Turn editing off" button.

**Bottom Screenshot:** The browser address bar shows `localhost/course/modedit.php?add=quiz&type=&course=Z&section=1&return=D&sr=0`. The page title is "my moodle site". The left sidebar is the same as the top screenshot. The main content area is titled "Adding a new Quiz to Moodle Basics". The "General" section is expanded, showing the "Name" field with the text "Basics Quiz 1" and the "Description" field. The "Timing" section is also visible.





## 5. Installing plugin



## 6. Making Certificate

The first screenshot shows the 'Moodle Course Demo' interface. The left sidebar contains a menu with options: Moodle, Participants, Badges, Competencies, Grades, General, Moodle Basics (selected), Dashboard, Site home, Calendar, and Private files. The main content area is titled 'Moodle Course Demo' and shows the 'Certification of completion' settings. The settings include: Name (Certification of completion), Width (210), Height (297), Left margin (0), and Right margin (0). There are buttons for 'Background image' and 'Add element'.

The second screenshot shows the 'Add element' dialog box. The 'Element name' is 'Background image'. The 'Image' field shows 'No image'. The 'Upload image' section has a file manager interface with a 'Files' list containing a file named 'CERTIFICAT...'. Below the file manager, it states 'Accepted file types: Image files .ai .bmp .dtdraw .gif .ico .jpe .jpeg .jpg .pct .pic .png .svg .svgz .tif .tiff'. There are 'Save changes' and 'Cancel' buttons at the bottom.

## 7. Template of certification

The screenshot shows a certificate template for 'Guru Nanak Dev Engineering College, Ludhiana'. The certificate is titled 'CERTIFICATION OF COMPLETION' and contains the following text: 'This is to certify that', 'has completed the quiz', 'On', 'with the grade', 'Teacher's name:', and 'Verify at:'. The certificate is framed by a yellow border and has a background image of a building. The top left corner features the college's logo and name in both English and Punjabi. The top right corner features a banner for the college. The bottom left corner features a banner for the college's accreditation by AICTE, ISO 9001:2015, and NAAC.

## 8. Attempting Quiz

The image displays two screenshots of a Moodle quiz attempt interface, showing the progression from the quiz summary to the final question and completion options.

**Top Screenshot: Quiz Summary and Question 1**

The interface shows the Moodle Course Demo page. The left sidebar contains navigation links: Moodle, Participants, Badges, Competencies, Grades, General, Moodle Basics (selected), Dashboard, Site home, Calendar, and Private files. The main content area displays the quiz summary for "Basics Quiz 1":

Started on	Saturday, 15 May 2021, 1:14 PM
State	Finished
Completed on	Saturday, 15 May 2021, 1:15 PM
Time taken	56 secs
Marks	90.00/100.00
Grade	9.00 out of 10.00 (90%)

Below the summary, the first question is displayed:

Question 1  
Correct  
Mark 10.00 out of 10.00  
Flag question

The question text is "1+1=2". The user has selected "True", which is marked as correct.

**Right Sidebar: Quiz navigation**

Hey here is your Quiz!

Progress indicators for questions 1 through 10 are shown. Questions 1-6 are green, 7 is red, and 8-10 are green. A "Show one page at a time" link and a "Finish review" link are present.

**Bottom Screenshot: Question 10 and Completion Options**

The interface shows the tenth question:

Question 10  
Correct  
Mark 10.00 out of 10.00  
Flag question

The question text is "9+1=10". The user has selected "True", which is marked as correct.

Below the question, a message states: "The correct answer is 'True'."

Navigation links include "Announcements", "Jump to..." (with a dropdown arrow), and "Certification of completion".

At the bottom, a dark bar displays the user's login information: "You are logged in as SIMRATH KAUR: Student (Return to my normal role)". Below this, links for "Moodle" and "Data retention summary" are visible.

## 9. Without Customization:



## 10. With Customization:



## 5 Conclusion

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Theoretical knowledge without proper practical knowledge is waste. Making a project doesn't just help in clearing the concepts but also eradicate the problem in implementations. This project helped us to learn about designing and procedure of "Moodle Certificate". This With the help of various links and tools, we have been able to analyse. We have been successful in our attempt to take care of the needs of the administrator. At last we must say that the project can be implemented by anybody using this report as record.

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