Open Education Resource: Website Creation on “Input-Output Organization” by Using WordPress

Work done as part of Two-Week AICTE approved on "**Pedagogy for Online and Blended Teaching-Learning Process**”

RC1341_002
Mr. Narasapuram Penchalaiah
Mr. KLNC Prakash
Mrs. C Suguna Devi

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We express our sincere thanks to **IIT-BOMBAYX Discussion forum staff** for their continuous support through valid responses to our queries.

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Finally, Not the least, our blessings to our II B.Tech Students of AITS-CSE for their participation in surveys and quizzes as planned, which is so helpful for creation of this OER.

1341_002

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Open Education Resource: Website creation by using Word press

Section - 1

A brief overview of the OER

The OER created by our team is on the topic “Input-Output Organization”. The open education resource is a collection of web pages. All the learning material is available on website: www.npenchalaiah.wordpress.com/oer/ and www.penchalaiah.gnomio.com
There are two parts of this OER: Course content (Documents). On the website, there are widgets like Contact Us and Books for reference.

All the learning material is organized in a way that is easily understandable to the students.

• OER is downloadable from: www.npenchalaiah.wordpress.com/oer/

or

https://npenchalaiah.wordpress.com/oer/

- The course contents (Quiz, assignment, multiple choice questions) is downloadable from www.penchalaiah.gnomio.com or https://penchalaiah.gnomio.com/ , **self-enrollment method is enabled** for this web site so anybody can access my material using their login credentials.

• Target audience: CSE Second Semester

• Tags: Peripheral Devices, Input-Output Devices, I/O Processing and Bus Interface.

• OER is developed in WordPress

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Learning Objectives associated with this OER

The main learning objective of OER is in depth knowledge of the Input-Output Organization. The website focuses on one particular topic (Input-Output Organization) which consists of elaborative documents and for self-evaluation there is a quiz with answers which consist of MCQ‟s, subjective questions, fill in the blanks, etc.
So, we have created a website which is a complete package on a particular topic (Input-Output Organization) with the aim of providing the maximum information from our side.

After using this OER, learner will be able to:

• Understand various types of Peripheral Devices

• Describe the various Input-Output Devices Types

• I/O processing Method and their interrupts

• Identify some types of control lines, data lines and address lines and their functioning capabilities.

• Understand the working of Bus interface.

• Understand the working and advantages of I/O Bus and Interface Module.

Target Audience

Our target students are CSE Second semester, who can do self-study by reading the documents, listening to the videos and then self-evaluate by the quiz given with the answers on the website.
The Teaching Faculty can also refer to the website for any information they need related to the data mining.

Tags or characterizing features of this OER : Input Devices, Output Devices, I/O processing, Bus, Interfaces
We have covered the following topics:

- Introduction
- Peripheral Devices
- Input and Output Devices
- I/O Processing
- Bus Interface

Above mentioned topics cover all the basic concepts of Input-Output Organization

Tools Used in OER Creation

• Content Management System (www.wordpress.com) for creating website

• MS Word for documentation purpose

• www.youtube.com for uploading videos

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Section - 2
Design Decisions

Content Decisions :

We have selected “Input- Output Organization” as domain. This concept is very useful for understanding the computer components and their working capability. Our target students are CSE Second semester. We have covered the following topics:

- Introduction
- Peripheral Devices
- Input and Output Devices
- I/O Processing
- Bus Interface

Above mentioned topics cover all the basic concepts of Input-Output Organization. For activity-based learning, we have provided the quiz for all the above mentioned topics.

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Pedagogy Decisions:

we have designed quiz for each concept. Activity based learning facilitate the concept clarity. All the videos can be used for out-class-activity.

Technology Design Decisions made

• For creating Content Management System (www.wordpress.com)
• MS Word for documentation purpose
• For creating Learner Management System www.gnomio.com

Section - 3
OER Description

Active OER

For checking the active OER in Gnomio moodle site

https://penchalaiah.gnomio.com/
or

www.penchalaiah.gnomio.com/

Self Enrollment is Activated

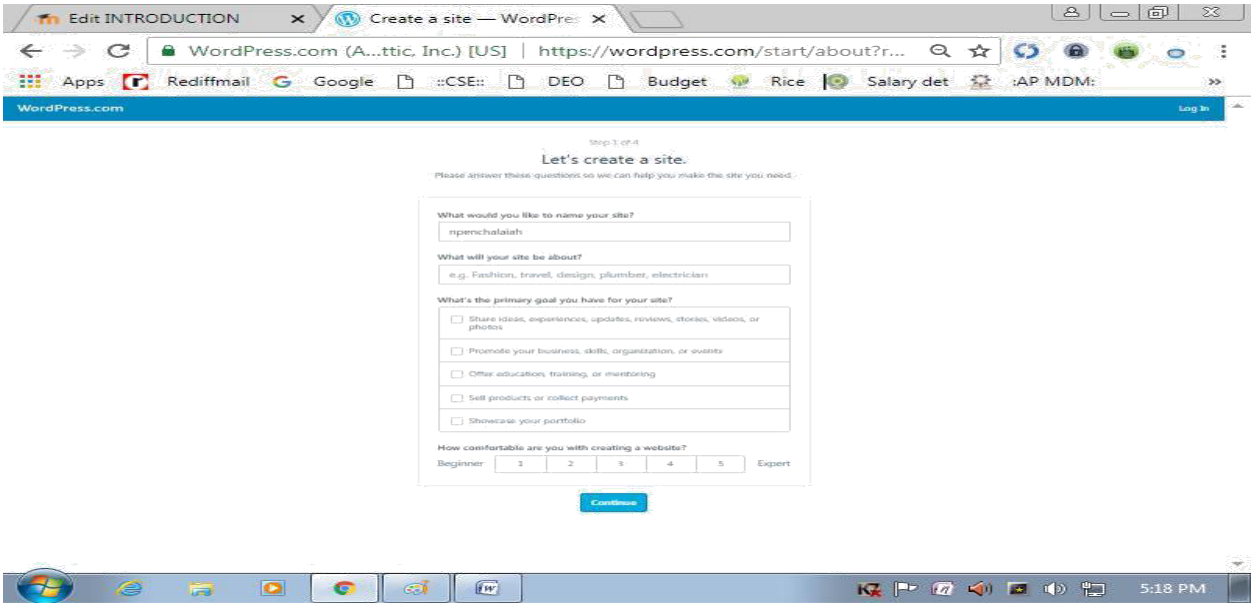
Username: peer
Password: Peer@1234

For checking the active OER document, you may access https://npenchalaiah.wordpress.com/oer/. From this website user can access all the content related to Input-Output Organization. This website contains various pages like Home, About, Content and Created by. In the content page there are further links of pages like documents, quiz and research papers related to Input-Output Organization. We have taken WordPress as Content Management System (CMS).

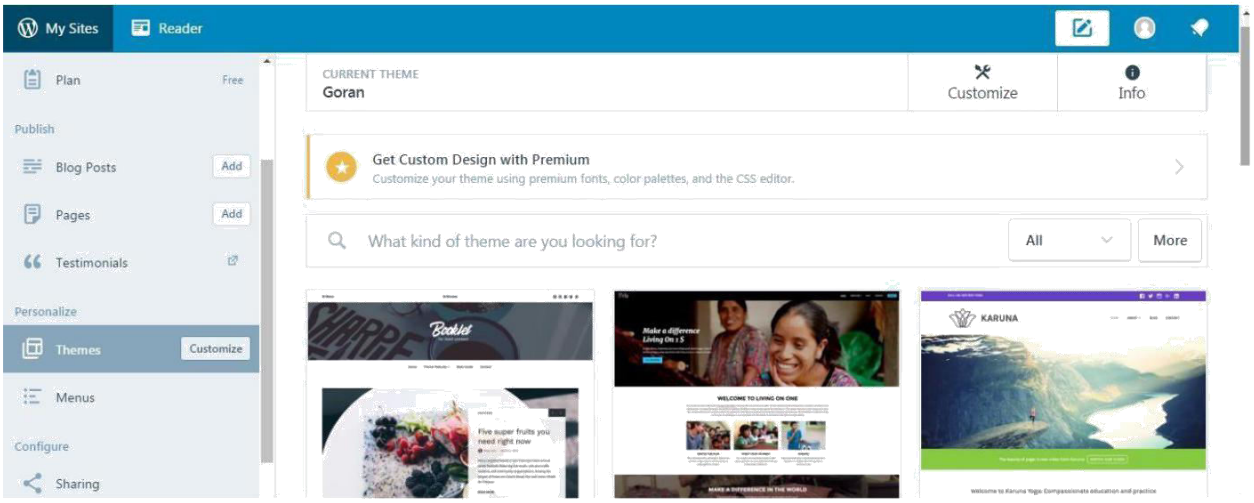
General Settings in WordPress

These screenshots shows the general settings of WordPress.

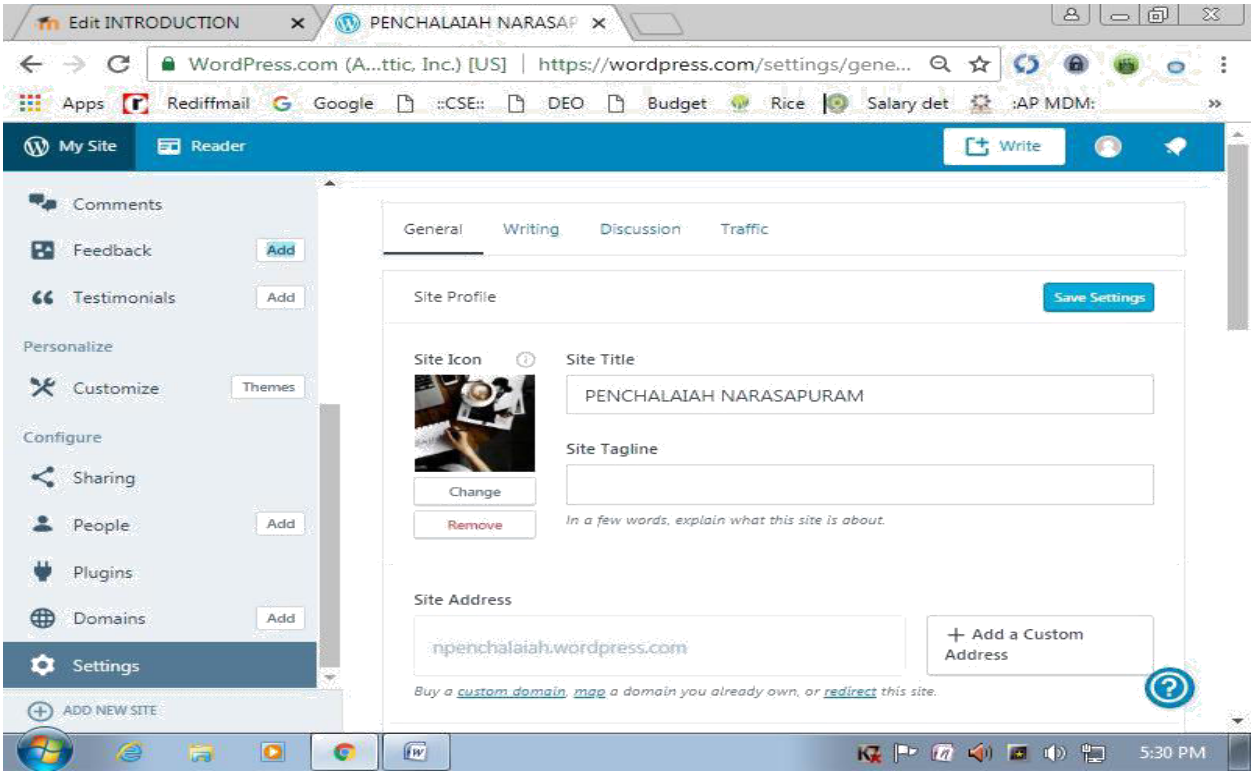
Screen Shot 1: This is the first screen to create a site in WordPress. After selecting the domain. The user has to register him/her with WordPress and create a login.

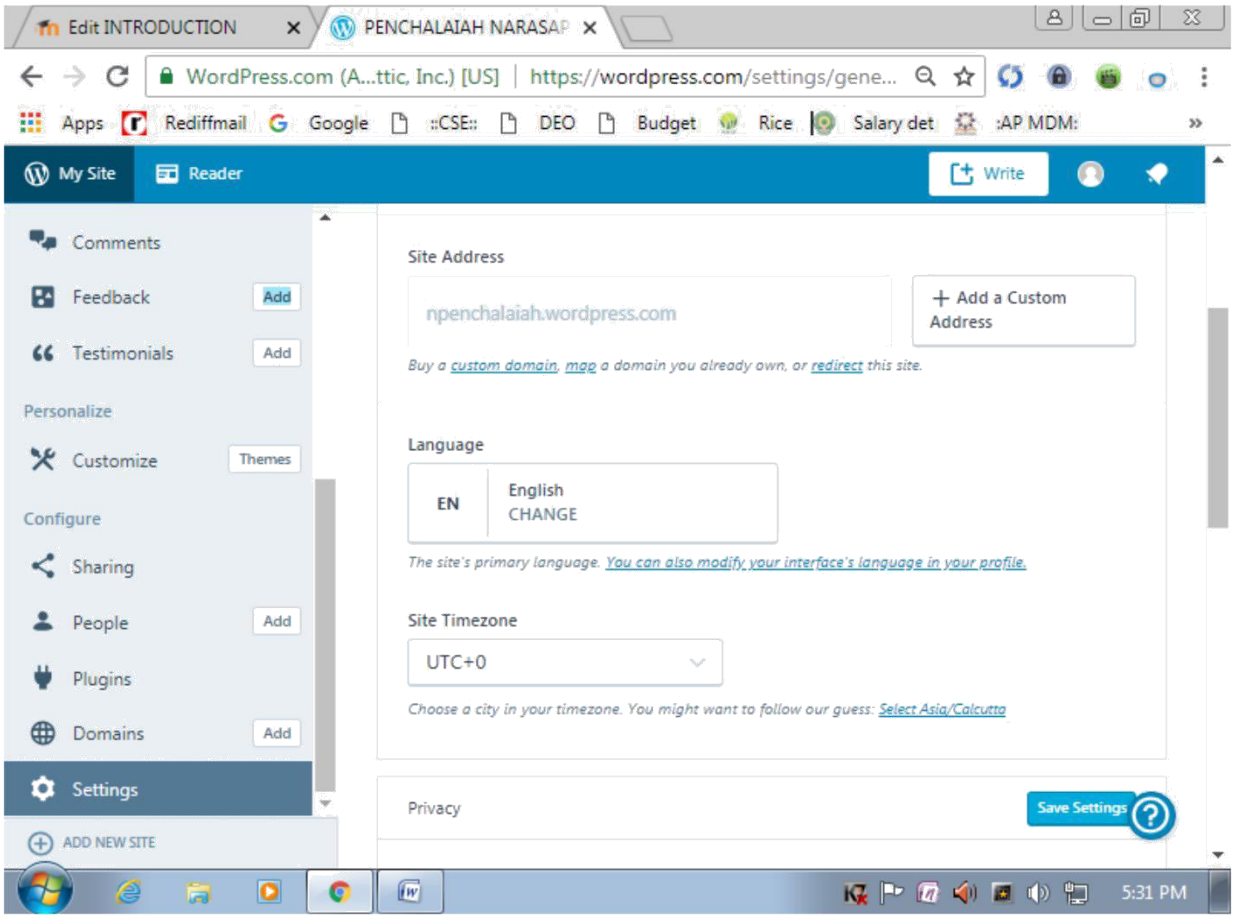


Screen Shot 2: After logged in the user has to select the theme of the web site. After selecting the theme user can customize his/her website.



Screen Shot 3 to 5: Screenshot 3 to 5 shows the general settings of the website. Like title of website, tagline, language, time, site address privacy etc.

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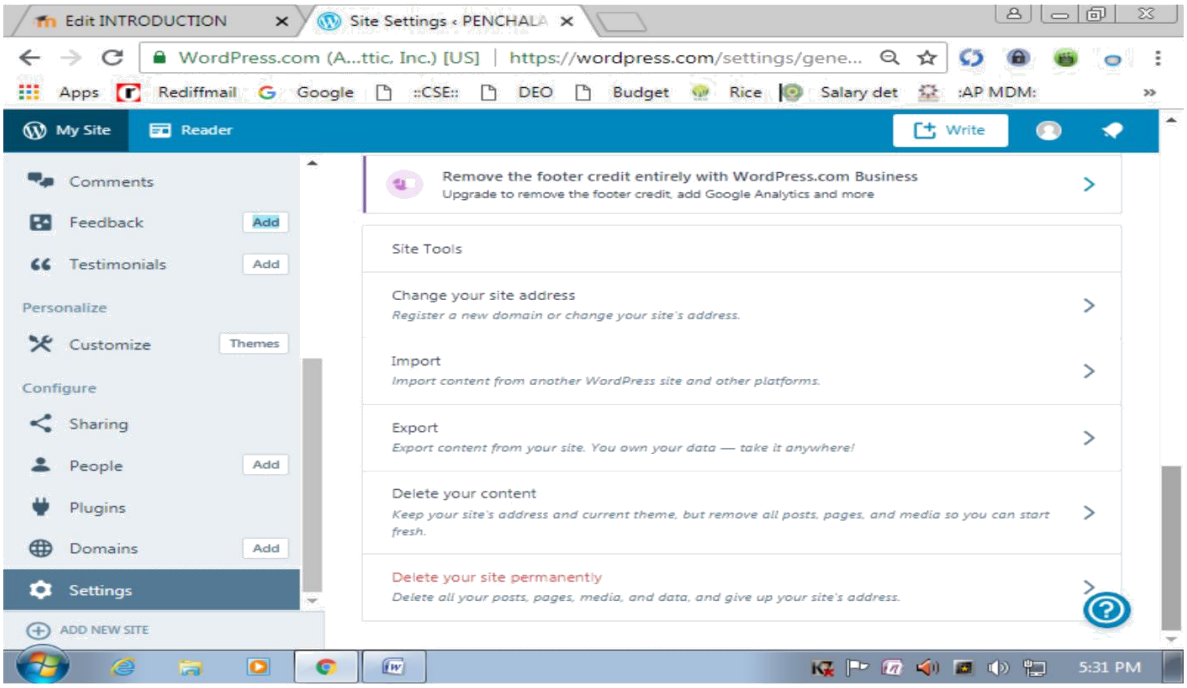
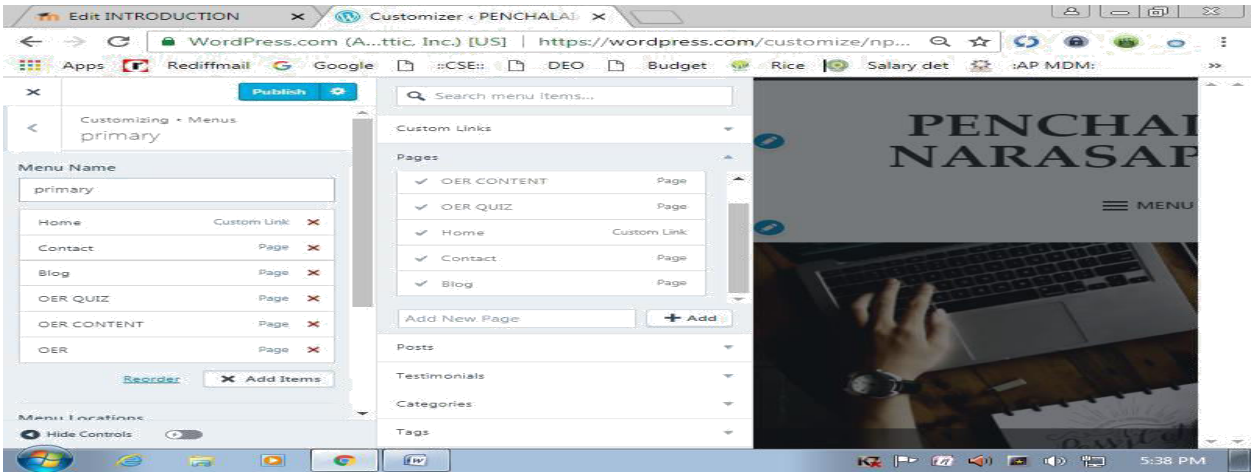
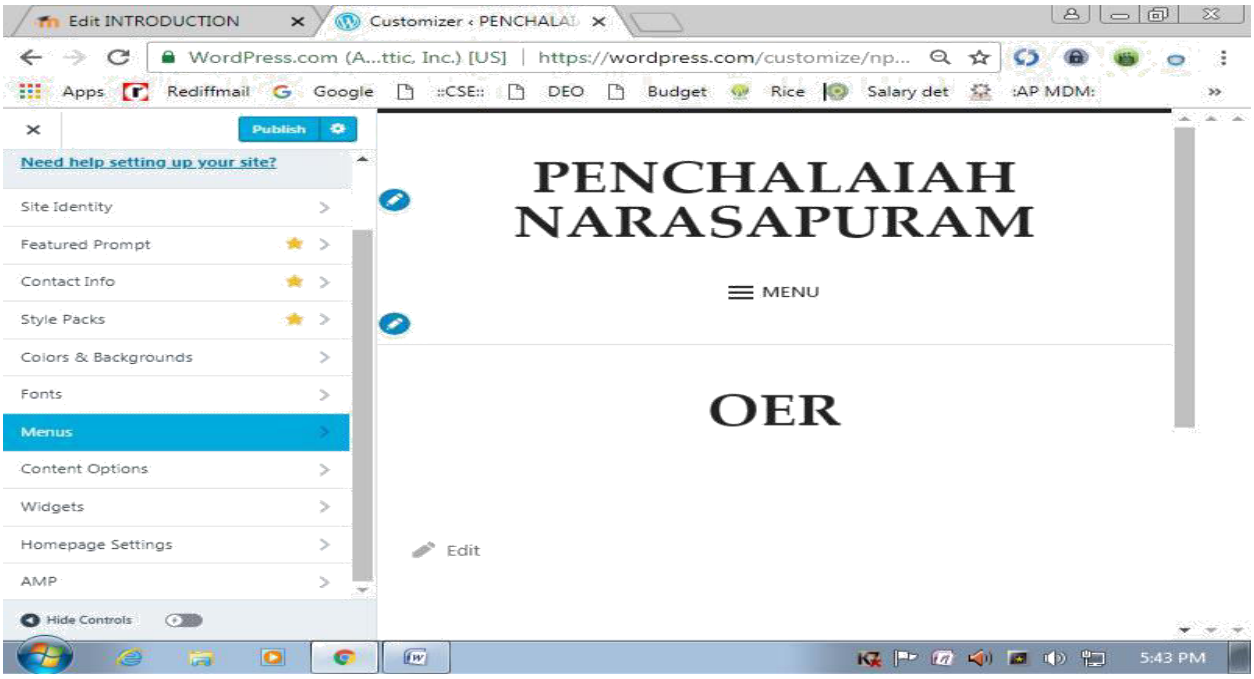
PENCHALAIAH NARASAP
WordPress.com (A...ttic, Inc.) [US] | https://wordpress.com/settings/gene...
Apps
Rediffmail
Google
::CSE::
DEO
Budget
Rice
Salary det
:AP MDM:
My Site
Reader
Write
Comments
Feedback
Add
Testimonials
Add
Personalize
Customize
Themes
Configure
Sharing
People
Add
Plugins
Domains
Add
Settings
ADD NEW SITE
Site Address
npenchalaiah.wordpress.com
+ Add a Custom Address
Buy a custom domain, map a domain you already own, or redirect this site.
Language
EN
English
CHANGE
The site's primary language. You can also modify your interface's language in your profile.
Site Timezone
UTC+0
Choose a city in your timezone. You might want to follow our guess: Select Asia/Calcutta
Privacy
Save Settings
5:31 PM



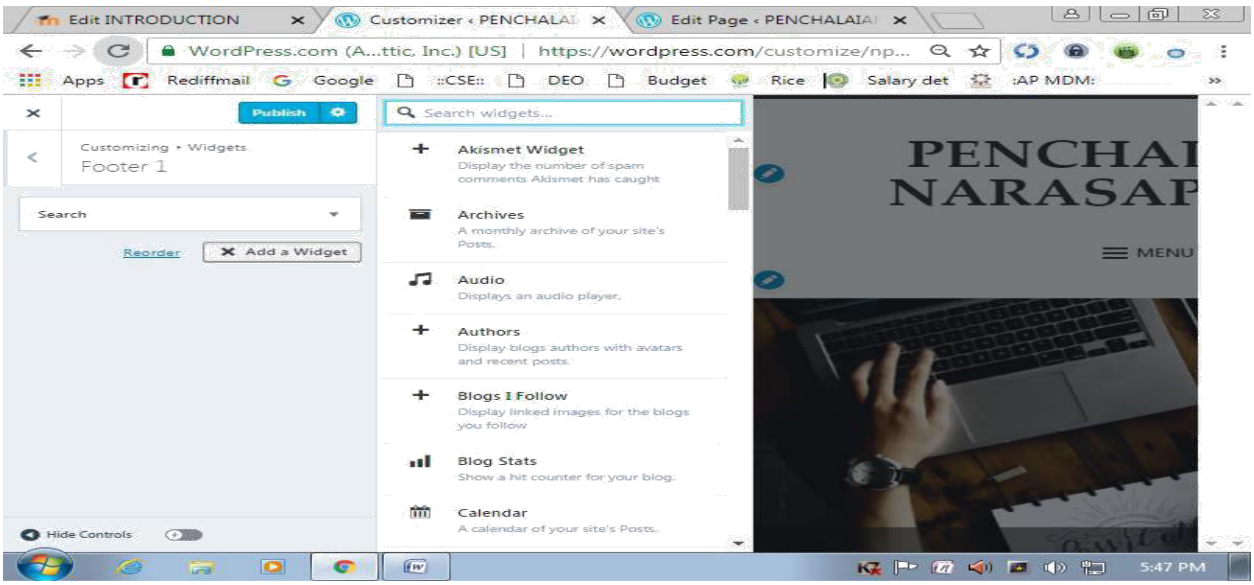
Screen Shot 6: This screenshot shows the menu hierarchy of the website. There are two levels of menus in the website. Top level has Home, About, Blog, Created By and Content. In second level content menu has further sub menus like presentations, videos, and quiz.



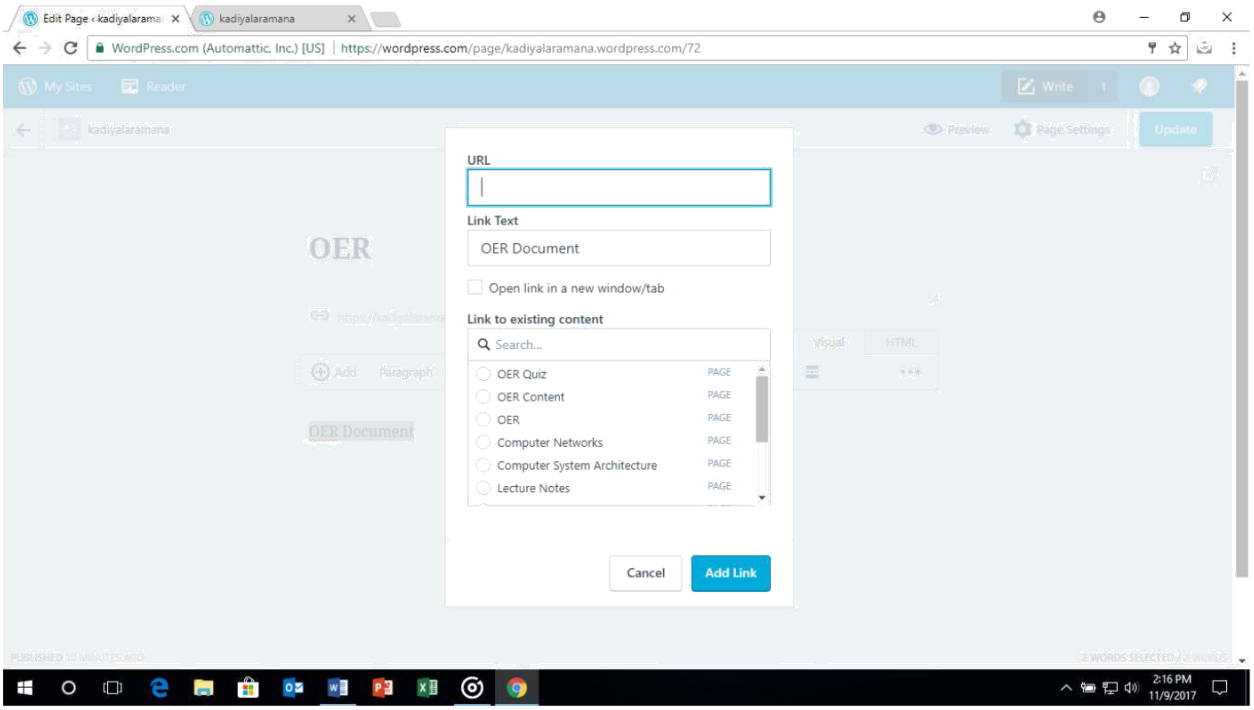
Screen Shot 7: This screenshot shows to customize each page these options are available like custom design, site identity, colors and background, header image, Menu, widget etc.



Screen Shot 8: This screenshots shows how to add widgets on the site. This shows how many widgets are available and can add it to the website.

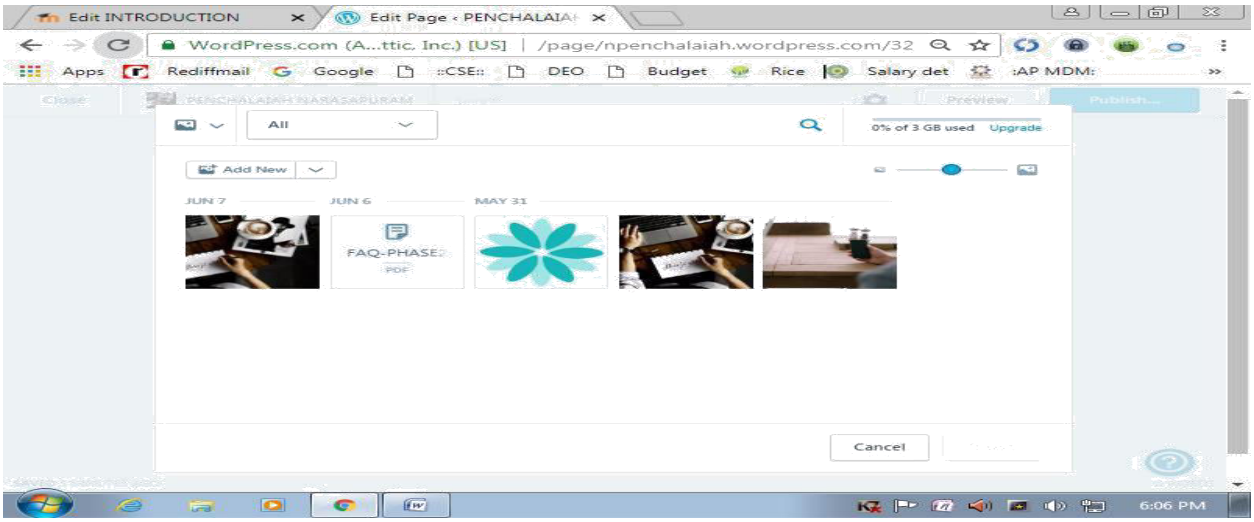


Screen Shot 9: This screen shot shows how we can create a link on the website. The 12th screenshot shows how to link the text with any URL

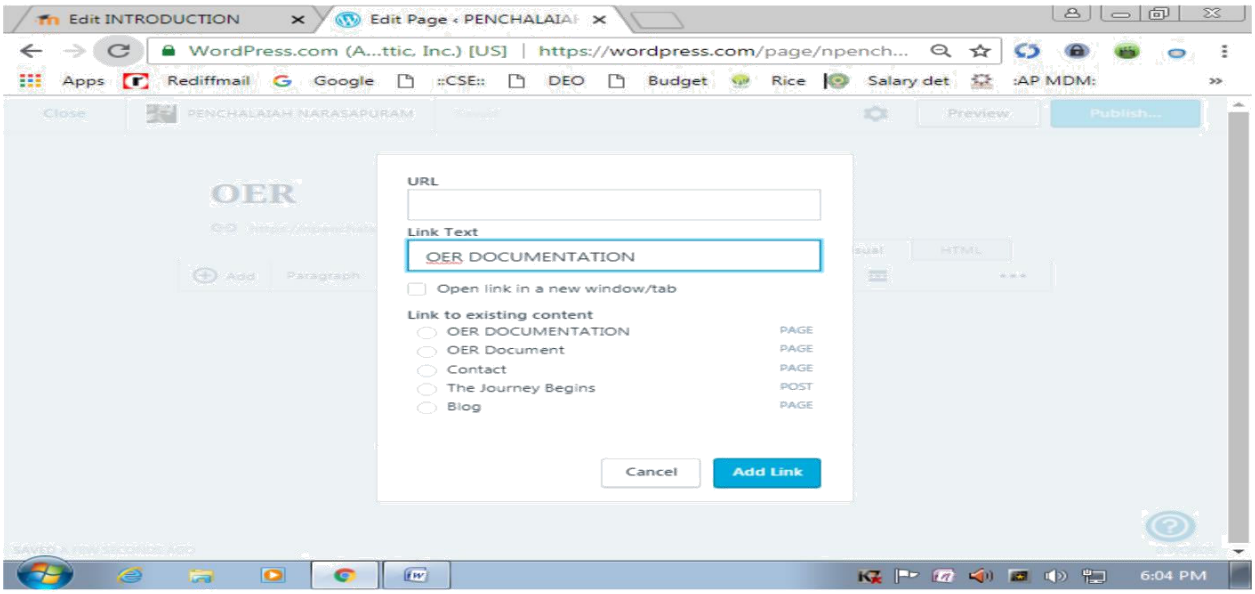


Screen Shot 10: These screen shots shows how we can attach media files like documents and URL to the website.

Attaching Documents to pages



Attaching Links of videos4

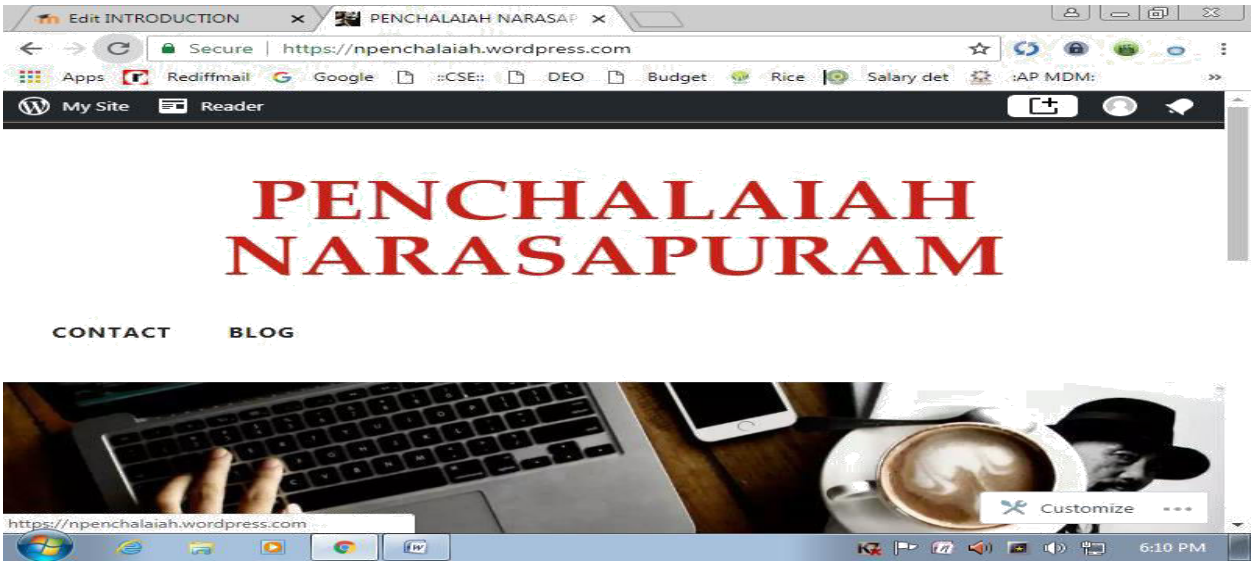


The above screenshots can help anyone to create the similar OER.

How to use this OER

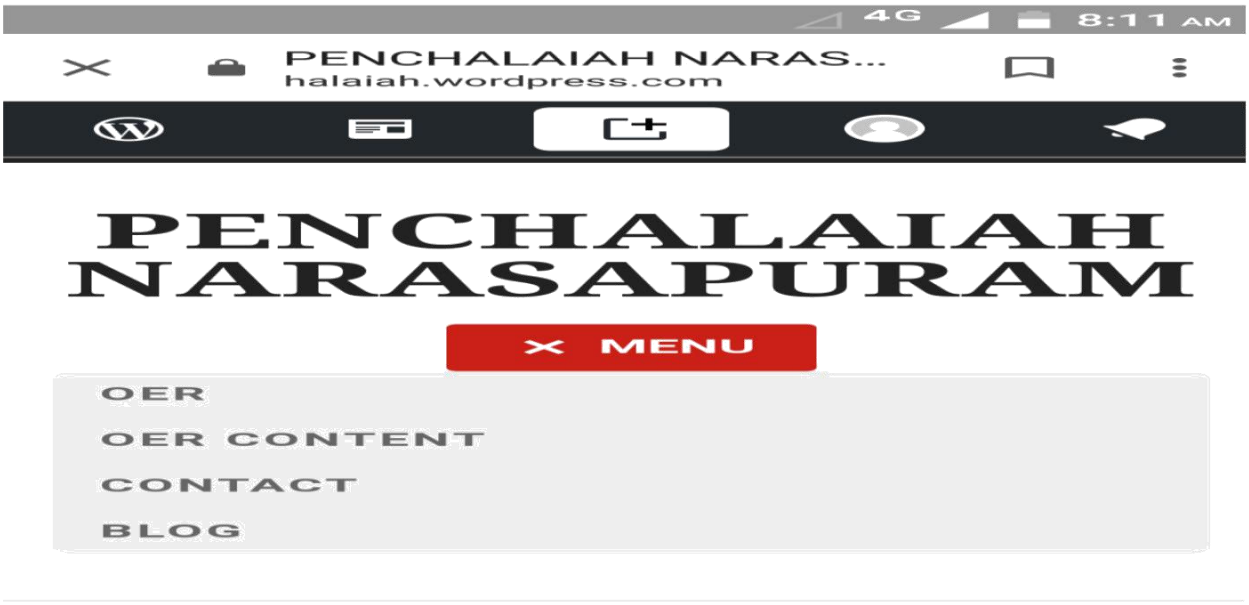
For accessing this OER visit http://npenchalaiah.wordpress.com/oer/. This URL opens the home page of the website.

Home Page



Content Page

This page will show the links to further pages like presentations, Videos, Quiz and references to Research papers.



Benefits for users

1. From this website the faculty members of the same domain will be benefited. They get the references of the topic in the form of research papers.

2. Students will get the resources in the form of documents to understand the concept more clearly.

3. Students can self-evaluate by solving the quiz which are available on the website.

Section - 4

Evaluating Effectiveness of OER

How this OER is effective?

To make OER effective we have included MS Word documents and Quiz. Quiz is helpful for determining the level of concept clarity. OER is developed in wordPress and our website is very user friendly.

Effectiveness of OER can be checked at two levels:

- Student Level
- Consumer Level

At the Student Level

On the basis of assignment submission based on OER and feedback of OER, we can check the effectiveness of OER.

Following are the methods which can be used for checking the effectiveness of OER:

- In case of website by tracking the number of viewers and feedback about website can be checked the effectiveness of OER created.
- In case of MS Word documents on website the number of downloads shows the effectiveness of OER.
- In case of quiz, by tracking the total number of attempts by different users we can check the effectiveness of OER.
- We can ask the student to submit their assignment within the given time limit and can check the uses and effectiveness with their marks they got on the basis of quiz.

At the Consumer Level

As a consumer of this OER we teachers want that our student learn and understand the concept. We can evaluate our OER on three main constructs.

Following are the methods which can be used for checking the effectiveness of OER:

• Also we can ask for the e-mail id of the users, get details of user and then send the questionnaire to them for feedback on the basis of course coverage, complexity.

• To make our OER more effective we can visit other similar OER available on Internet.

Construct	Question	Scale (1-5)
Ease of Use (Learning Material)	Whether all the learning material is easy to download or not?	1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree
Ease of Use (Web Site: www.npenchalaiah.wordpress.com/oer/)	Whether the website is user-friendly or not? Whether all the provided links are opening properly or not?	1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree
Concept Coverage	Whether all the learning material is sufficient for concept clarity and concept coverage?	1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree
Concept Complexity	Whether the format and language of Documents and quiz are easy to understand or not?	1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree

Section - 5

Consolidated Log of Team Work

The consolidated log of team work is as follows:

Activity	Team Member	Amount of Time	Additional Logs if any
Discussion	Mr. Narasapuram Penchalaiah	2hrs.	As all team members are working in the same Institute, so we have done lots of Face-to-Face interaction.
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		
Tool Exploration	Mr. Narasapuram Penchalaiah	15hrs.	
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		
OER Creation	Mr. Narasapuram Penchalaiah	20hrs.	
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		
OER Documentation	Mr. Narasapuram Penchalaiah	10hrs.	
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		
Individual Reflection (Diary Logging)	Mr. Narasapuram Penchalaiah	2hrs.	
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		
OER Evaluation	Mr. Narasapuram Penchalaiah	5hrs	
	Mr. KLNC Prakash		
	Mrs. C Suguna Devi		

Section - 6

Building a Community with OERs

Possible Sources for Community Building

Some of the viable sources for building a community are:

1. Teachers of the same Domain/ Area.

2. Researchers who are doing research on the same area.

3. Students who want to explore and want to start his/her research in the same domain.

Plans for Community Building

WordPress is an online, open source website creation tool written in PHP. It is probably the easiest and most powerful blogging and website Content Management System (CMS) in existence today. WordPress is an Open Source, which means there are hundreds of people all over the world working on it. In WordPress we can simply create a community of the same domain. In community we can share the latest researches, book reviews and create a blog on any topic related to same domain.

Section - 7
Building a Community of MOODLE (gnomio.com)

Plans for Community Building

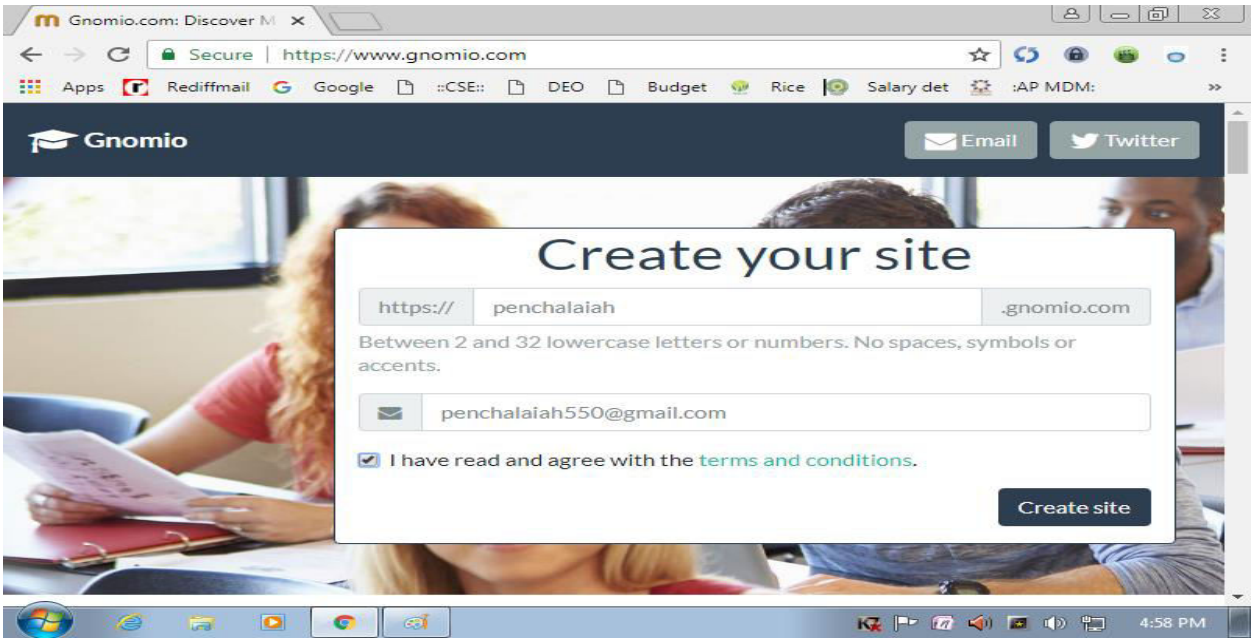
Gnomio is not a company. We are just a few Moodle fans offering free tools for the e-learning community. With us you can discover the most widely used open source learning tool, and create your own online learning community. In a few minutes you can have your virtual classroom active, with your own subdomain, secure HTTPS access throughout the site, complete administration privileges, without limitations on the number of courses, users or disk space and completely free.

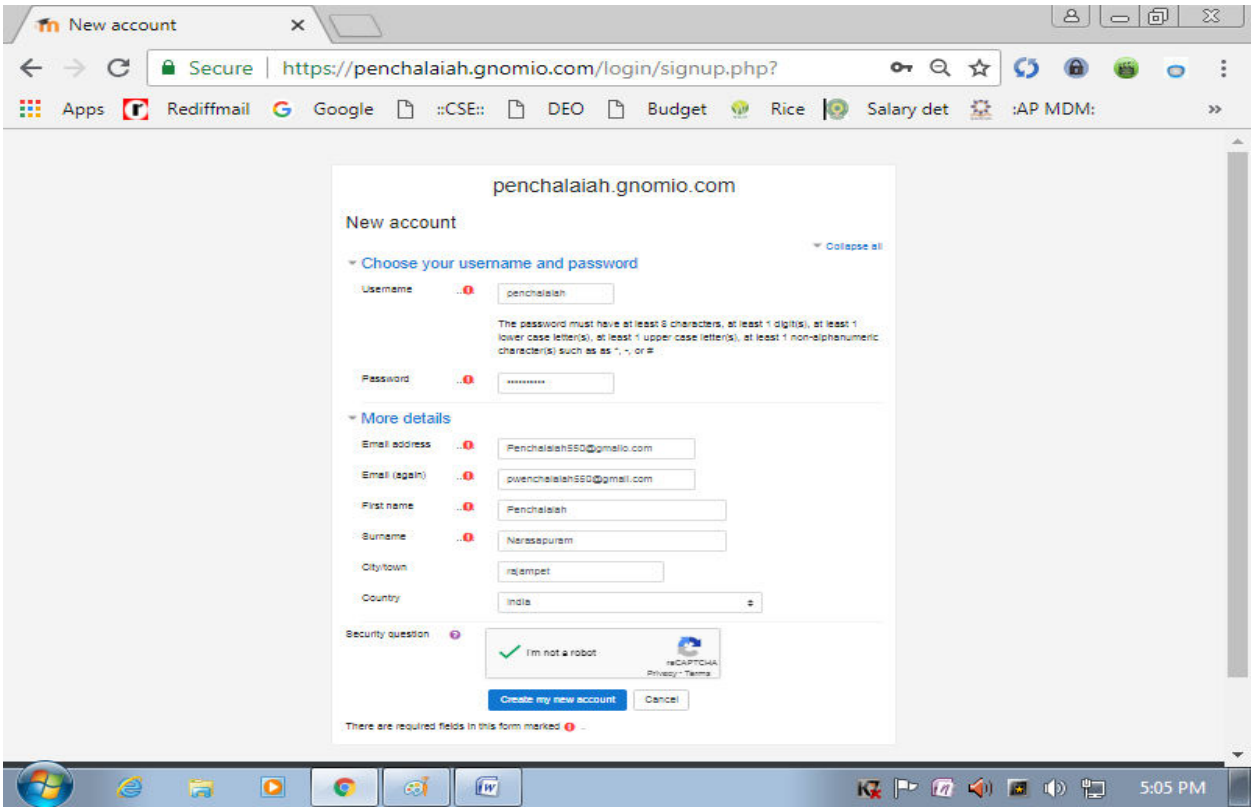
Create and Manage Activities in Moodle

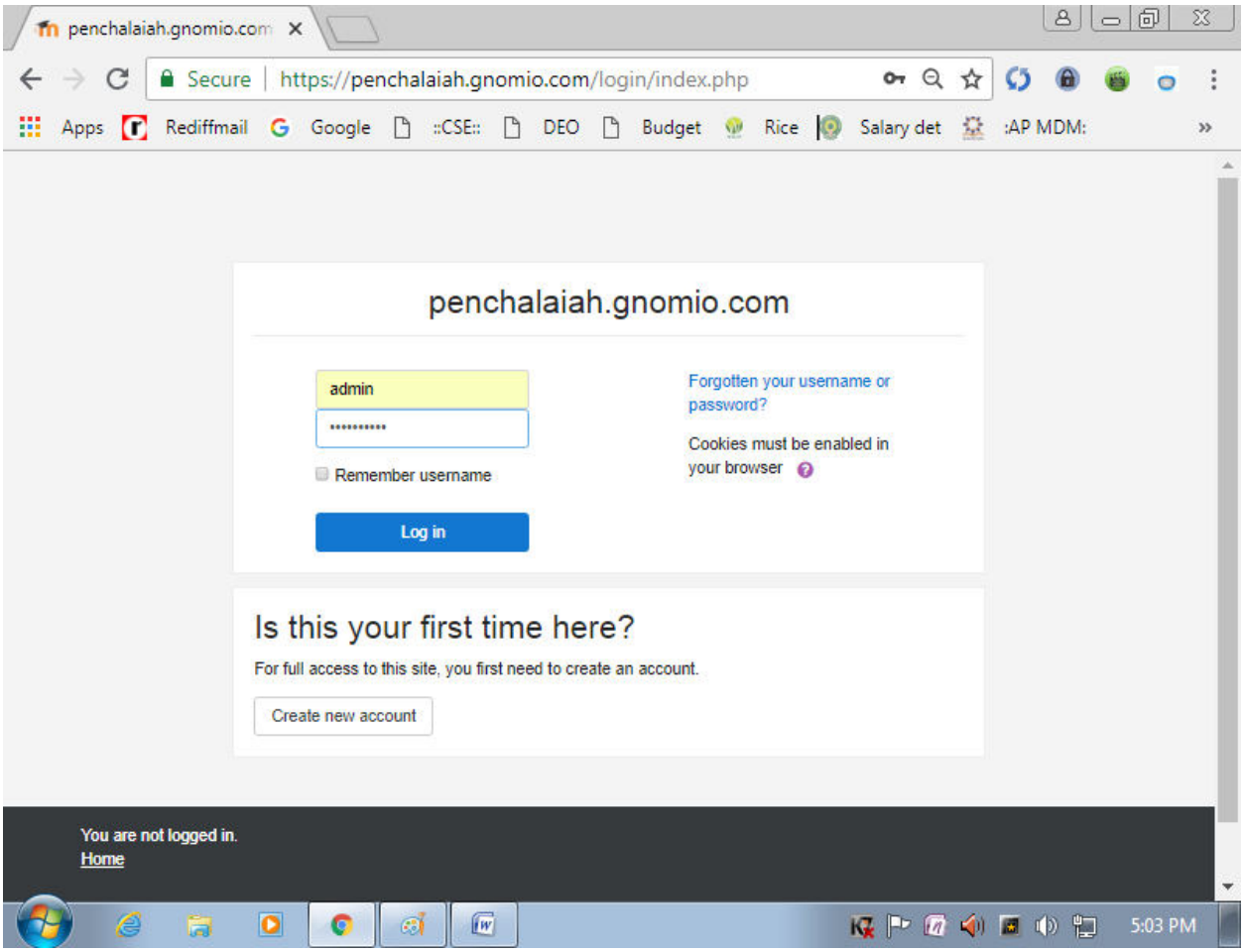
For getting the course documents using www.penchalaiah.gnomio.com

Overview:
An "activity" is an item of interactive content created using one of the numerous Moodle tools. For example, a chat session or an assignment.
An activity differs from a resource in that it requires some kind of student input to develop independent and active student learning. All forms of assessment within Moodle are "activities".
This page tells you how to create activities, how to organize your activities list, and how to access an activity for editing and how to delete an activity. It also lists the activities that are available for inclusion in your course.

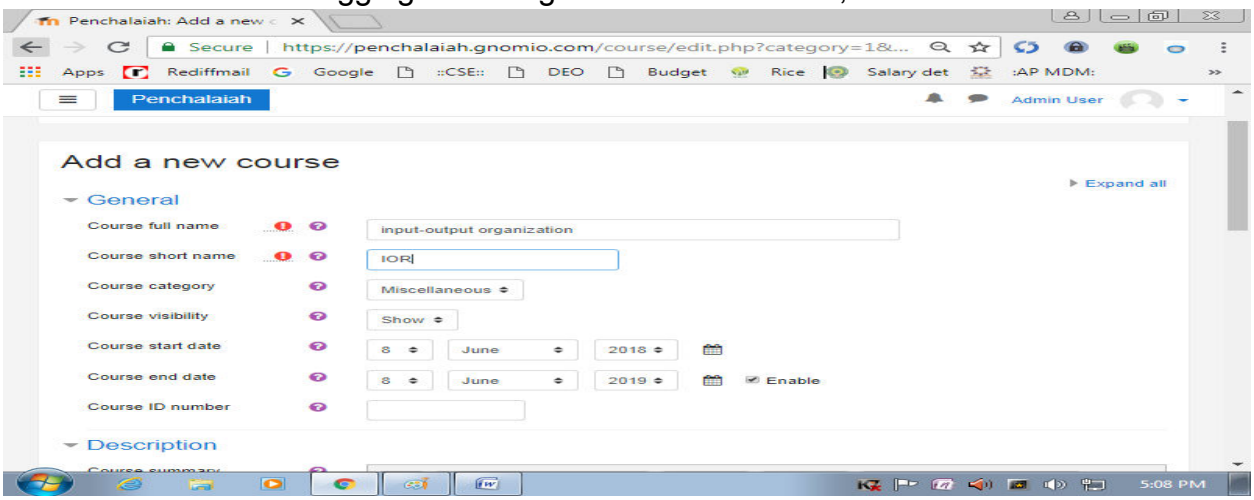
General Settings in gnomio.com
These screenshots shows the general settings of gnomio.com
Screen Shot 1: This is the first screen to create a site in gnomio.com. After creating the domain. The user has to register him/her with gnomio.com and create a login.

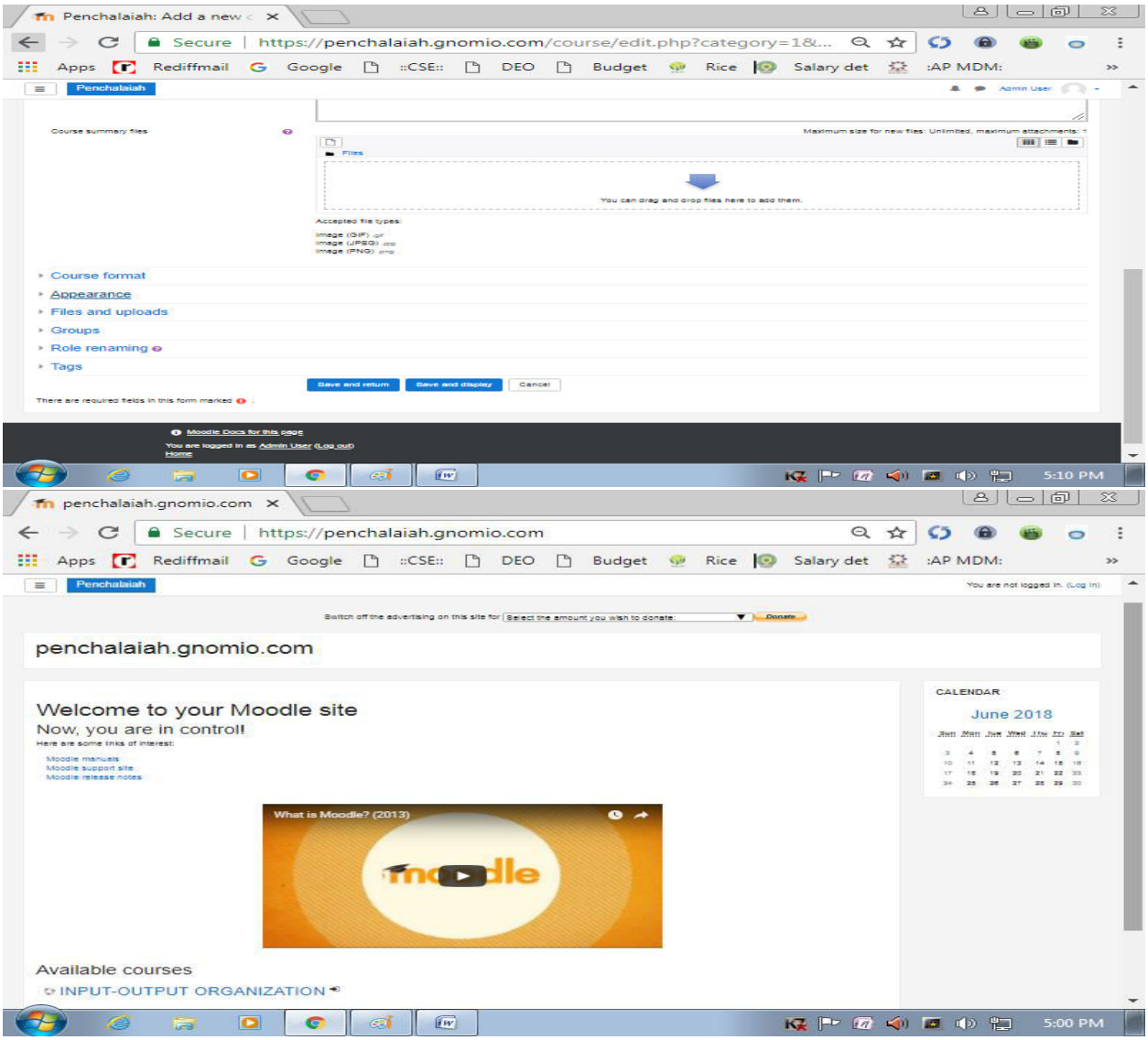



New account
Secure | https://penchalaiah.gnomio.com/login/signup.php?
Apps Rediffmail Google ::CSE:: DEO Budget Rice Salary det :AP MDM:
penchalaiah.gnomio.com
New account
Collapse all
Choose your username and password
Username
penchalaiah
The password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case letter(s), at least 1 non-alphanumeric character(s) such as as *, -, or #
Password
More details
Email address
Email (again)
First name
Penchalaiah
Surname
Narasapuram
City/town
Country
India
Security question
I'm not a robot
reCAPTCHA
Privacy - Terms
Create my new account
Cancel
There are required fields in this form marked
5:05 PM

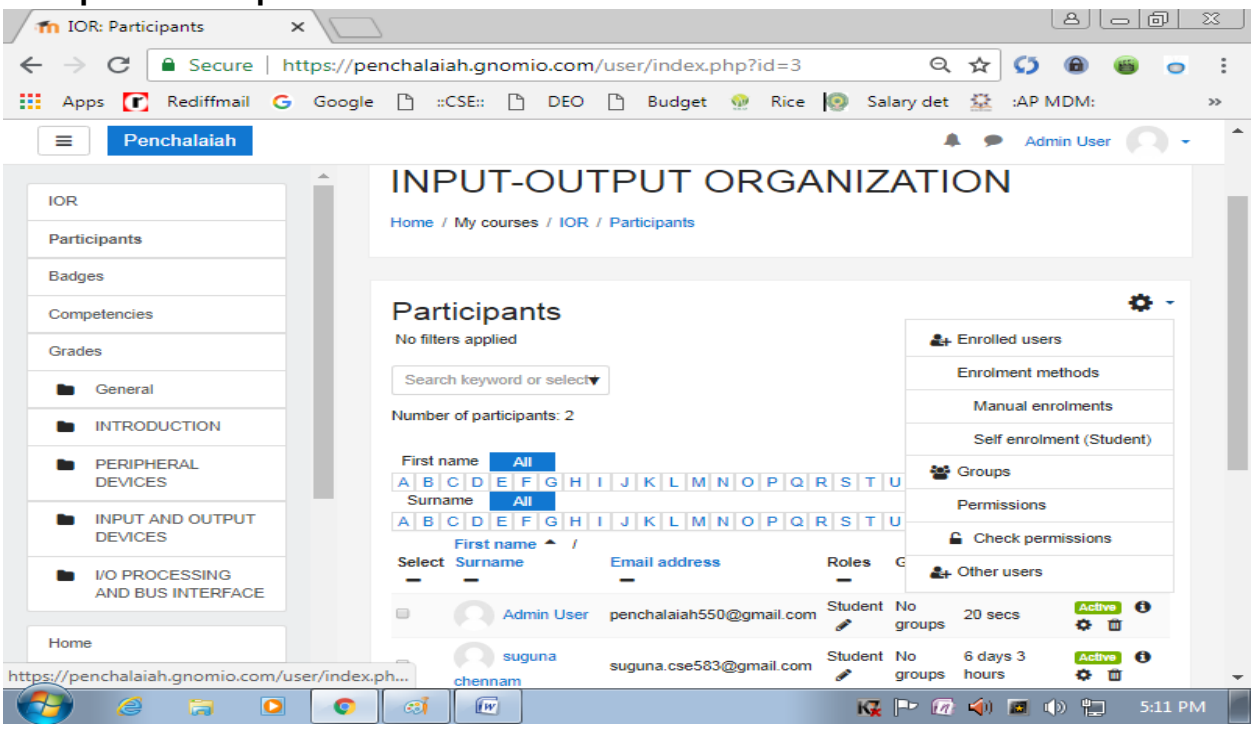

penchalaiah.gnomio.com
Secure | https://penchalaiah.gnomio.com/login/index.php
Apps Rediffmail Google ::CSE:: DEO Budget Rice Salary det :AP MDM:
penchalaiah.gnomio.com
admin
Remember username
Log in
Forgotten your username or password?
Cookies must be enabled in your browser
Is this your first time here?
For full access to this site, you first need to create an account.
Create new account
You are not logged in.
Home
5:03 PM

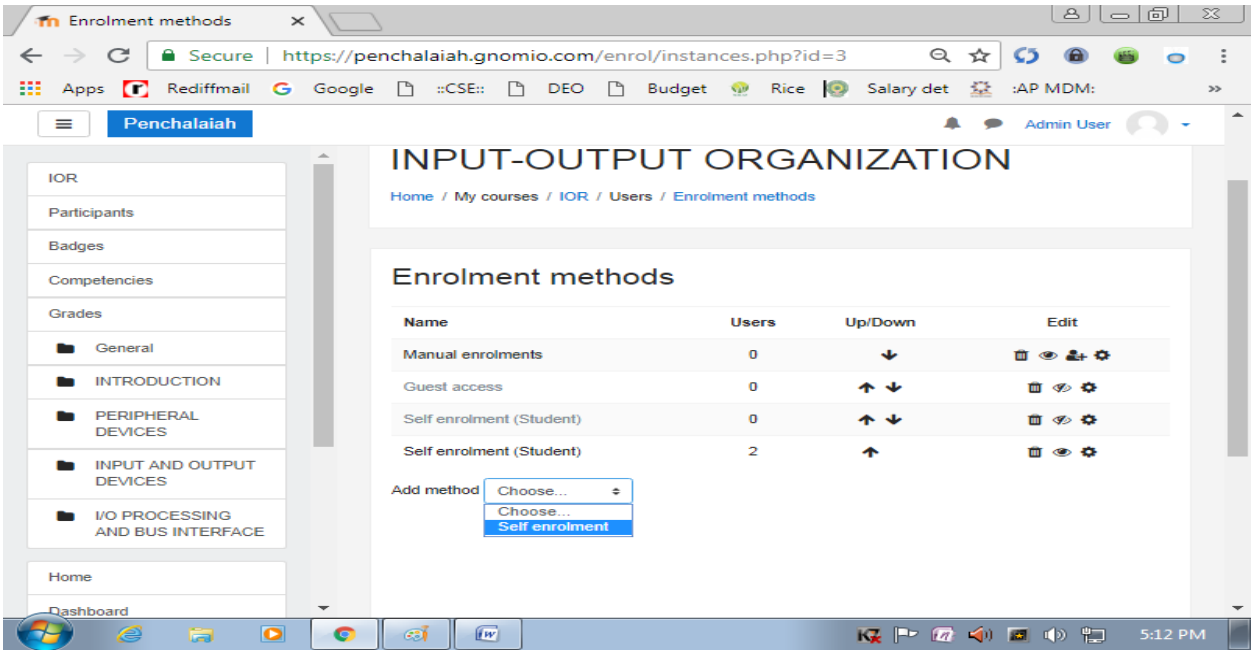
Screen Shot 2: After logging into the gnomio.com web site, Add new course details





Screen Shot 3: After adding the course details in the add new course option tab, provide the enrollment option for the participants. If anybody wants to access my web site material by using **the self-enrollment method**, by this method anybody can access the material and **do the quizzes, access the assignment questions and answer the multiple choice questions.**

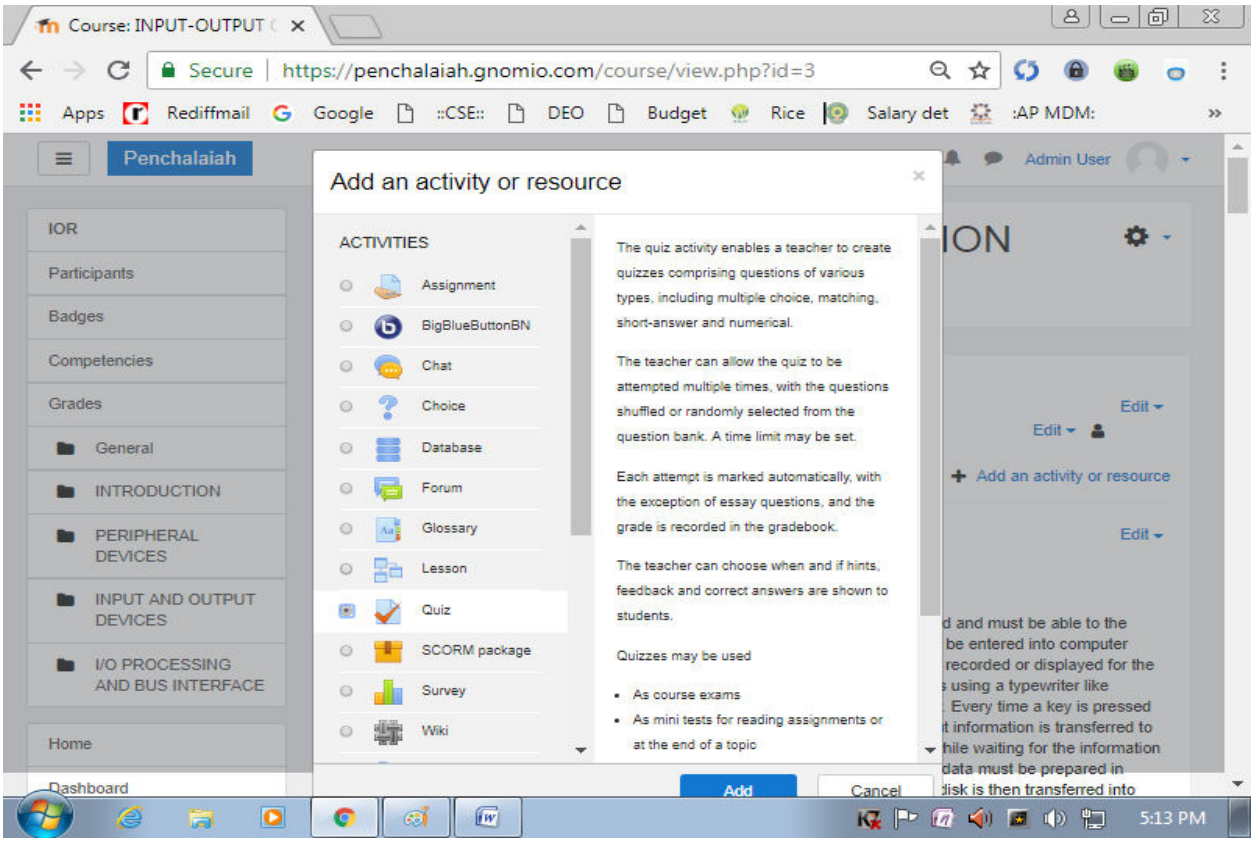




Screen Shot 4: Create an activity-

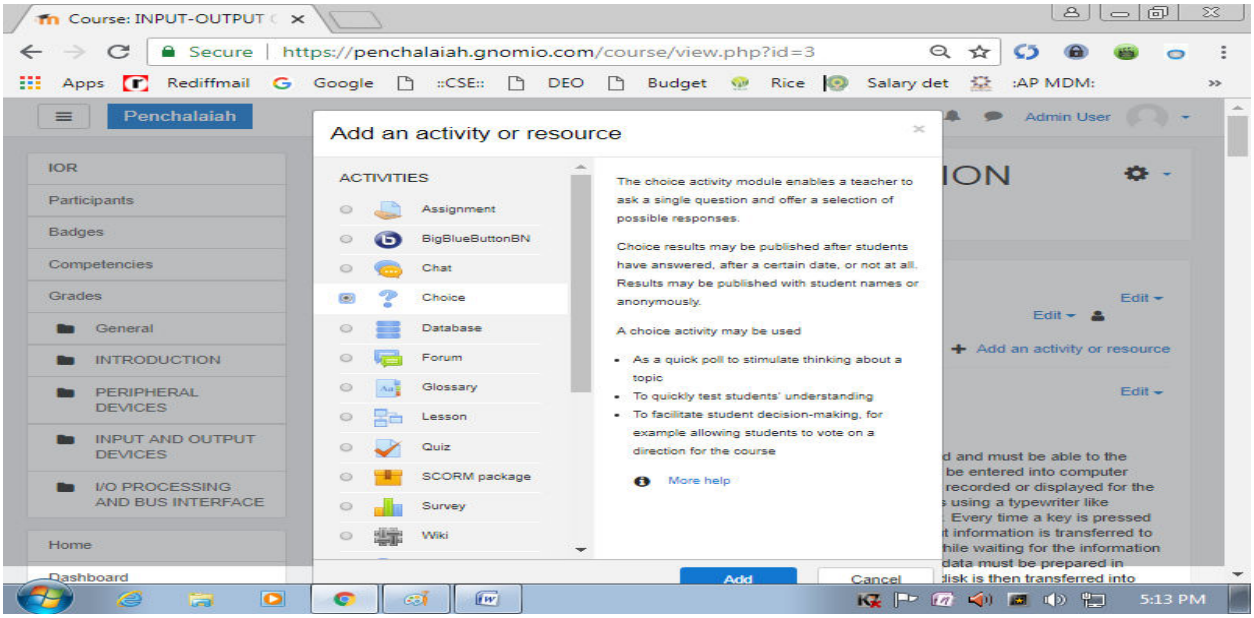
1. On the course home page, click Turn editing on at the top right.

2. On the course home page, in the appropriate section, click Add an activity or resource.

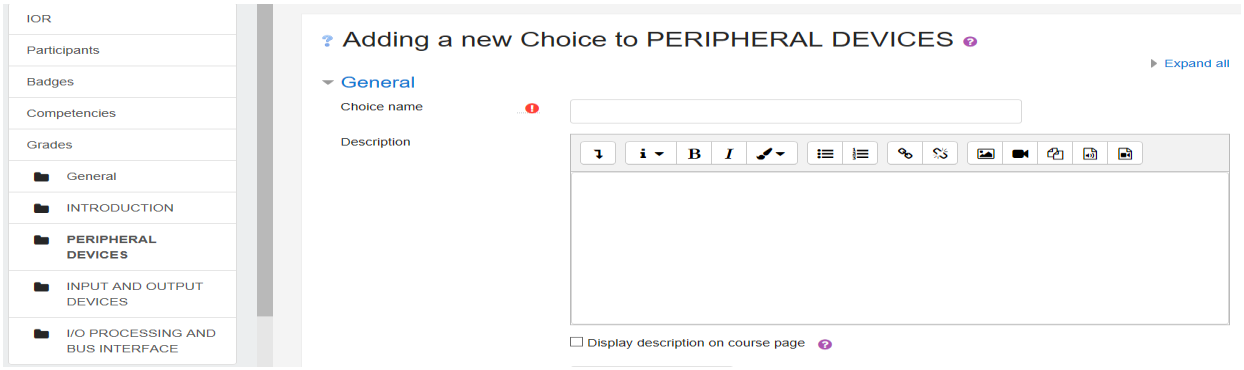


Screen Shot 5: In the *Add an activity or resource* window:

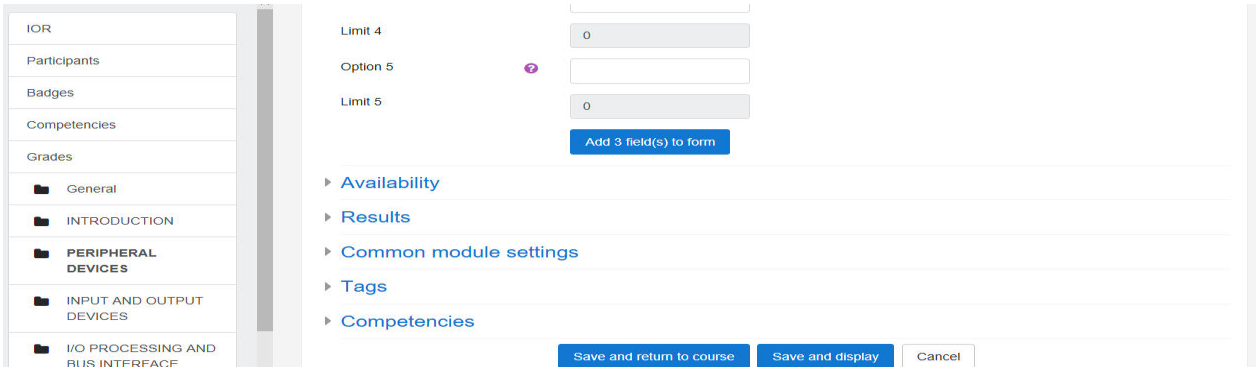
1. Select the activity you want. Information about your choice displays in the right-hand panel, and the **More help** link opens a pop-up of the relevant docs.moodle.org page, if one is available.
2. Click **Add**.



Screen Shot 6: *On the* Adding a new [chosen activity] *page, complete the mandatory fields and any additional fields that are appropriate to the activity. Note that for the following activities, you can opt (using the* ***Display description...*** *check box) to have the activity* ***Introduction text*** *display below the link on the course home page: Assignment, Chat, Choice, Database, Forum, Glossary, Quiz, SCORM package, Wiki, Workshop.*



Screen Shot 7: Click **Save and return to course** to view the new activity in the content list on the course home page, or **Save and display** to preview the activity.



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[2] Reference Book (for Document)[Offline]

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b. David A.Patterson, John L.Hennessy, "*Computer Organization and Design*", Morgan Kaufmaan Publications, 2nd Edition

For Documenting this OER Submission Example document provided byIITBOMBAYX is refered.
https://courses.iitbombayx.in/assets/courseware/v1/beccd6b4aa17576aef4b18986dffe750/asset-v1:IITBombayX+FDP201x+2018_T1+type@asset+block@OER_Submission_Example.pdf