LARGE SYSTEM OF 7 LAC DISTANCE LEARNING STUDENTS

Learning using Moodle
Opportunities and Challenges
Lack of Information about the background of the learners

• Faculties handling a course must have a background of the learners, to able to design a course material effectively

• The students should enroll with the information about their:-

• Educational qualifications
• Job experience
• Skill sets
Registration to a course

- Registration to a course in Moodle involves the following:
  1. Registration to the Moodle site
  2. Enrolment to the course
Types of registration

• When a large number of students are involved e-mail based self registration is preferred over manual registration.

• Challenges :-
• This method does not compel or validate the user to enter the required information necessary for the teacher to have knowledge about his background to mentor or engage him/her.
E-mail based self-registration

Study Materials for the Degree students

Course categories

- Computer Science (7)
- Information technology (1)
- Marketing

LOGIN

Username / email
indranisen2003

Password

Remember username

Create new account
Lost password?

Log in
The user profile is system defined
Creating custom user profile

- Front page settings
  - Turn editing on
  - Edit settings
- Users
- Filters
- Reports
- Backup
- Restore
- Question bank

- Site administration
  - Notifications
  - Registration
  - Advanced features
- Users
  - Accounts
    - Browse list of users
    - Bulk user actions
    - Add a new user
    - User default preferences
    - User profile fields
  - Cohorts
- Upload users
- Upload user pictures

Creating new profile fields
Enrolment No should be displayed on the signup page. The field should be unique and should not be locked. The data should be unique and should be displayed on the signup page.
Sign-up page

Study Materials for the Degree students

New account

Choose your username and password

Username

The password must have at least 3 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 *, -, or #

Password

More details

Email address

Email (again)

First name

Surname

City/town

Country

Other fields

Enrolment No

Displays enrolment_N_O
Types of enrolment

- Manual Enrolment
- Self enrolment
- Guest Access
Manual enrolments

Enroll users
Database Management System

Manual enrolments

Enrolled users

None

Add

Assign role
Student

Enrolment duration
Unlimited

Starting from
Today (13/07/17)

Remove

Not enrolled users (6)
- Manifesti Amin (mamish.amin88@gmail.com)
- Hetalkal Patel (hetalkal.hp@gmail.com)
- Pruthvi Prajapati (pruthvijprajapatii210@gmail.com)
- Anrutha sen (indrani_sen2003@yahoo.com)
- Anrite Sen (arunimesen234@gmail.com)
- Indrani Sen (indraniSen2003@gmail.com)
Select these users and add:

Enrolled users (3)
- Manisha Amin (manisha.amin98@gmail.com)
- Hetakshi Patel (hetakshi.ho@gmail.com)
- Pruthvi Prajapati (pruthviprajapati210@gmail.com)

Assign role:
- Student

Enrolment duration:
- Unlimited

Starting from:
- Today (13/07/17)

Not enrolled users (3)
- Anuradha Sen (indranisen2003@yahoo.com)
- Anurima Sen (anurimasen234@gmail.com)
- Indran Sen (indranisen2005@gmail.com)
Dispatch of course materials:

- There are challenges in delivering the course materials on time to the students some of whom are located in the remote areas of country.
- Currently the mechanism employed is
- Pickup personally from the contact center
- Courier to the specified address
ACCESSING COURSE MATERIALS IN MOODLE
Roles and permissions

- Site Administrator
- Teacher
- Student
Site Administrator

Create User

Assign roles

Teacher

Create Course

Enroll Students

Add Lesson/Quiz/Activity
Site Administrator

Create User

Assign roles

Student

Enrol Course

Appear for quiz/Submit Assignments
Adding Activity
Creating blogs for topics

Depth First Search
by Indrani Sen - Monday, 12 June 2017, 6:52 PM

Depth first search uses a stack to visit nodes. Thus it traverses the children of children before traversing the siblings of the root node.

The algorithm uses stack for traversal. It visits a node and inserts its child nodes into the stack. To visit the node, it pops the topmost node and again inserts its child nodes.

Tags: depth first search, data structures, algorithms, c program, computer science

Associated Course: DS

Breadth first Search
by Indrani Sen - Monday, 12 June 2017, 6:33 PM

It is a type of search operation which can be done with a directed as well as undirected graph to visit all the nodes during the traversal operation. The nodes of the graph in this traversal are visited level by level. All the child nodes of a parent node is traversed before visiting the child nodes of the children.
Study materials management

- The study materials should be prepared and be available for use to the students within specified time.
- The pending study materials for a specific program should be traced and allocated to the concerned teacher.
- The allocation and submission of study materials need to be monitored.
E-mail alert can be send to teachers using Reminder plugin
Calendar block

Study Materials for the Degree students

Calendar

Detailed month view for: All courses

December 2017

MONTHLY VIEW

NOVEMBER 2017

DECEMBER 2017

JANUARY 2018

Add event
Challenges

- Reminder plugin cannot be set to alert specific users.
- Task cannot be allotted to teachers by site administrator.
Lack of orientation among the students

- The principles of imparting education to distance learners are very different from face to face learning.
- The lack of engagement makes the learning process difficult.
Use of activities
1. What is distributed system?
2. What is the Use of distributed Computing?
Distributed Computing

Introduction to Distributed Computing

1. What is distributed system?
2. What is the use of distributed Computing?

Grading summary

| Participants | 0 |
| Submitted    | 0 |
| Needs grading | 0 |

Due date: Thursday, 20 July 2017, 12:00 AM
Time remaining: 6 days 8 hours
Preview question: DS_Q2

A linked list can be called a circular linked list if:-

Select one:
- a. The last node points to NULL. ☒
- b. The last node points to itself
- c. None of the above
- d. The last node points to the head.
- e. The last node points to the previous node

Your answer is incorrect.
The correct answer is: The last node points to the head.
Drag and Drop Questions

**stem**

**Question 1**
Not yet answered
Marked out of 1.00
Flag question
Edit question

A Table is also called ______ while a column is called ______ and a row is called ______ in Relational Database model.

- Domain
- Tuple
- Relation
- Key
- Primary key

**Question 2**
Not yet answered
Marked out of 1.00
Flag question
Edit question

A field of the Table which uniquely identifies a row of the Table is called ______ while when more than one fields is required to identify a row, they are called ______ keys.

The field which is used to link one table to another is called a ______ key.

- Super
- Foreign
- Primary
- Primary
- Composite

**Question 3**
Not yet answered
Marked out of 1.00
Flag question
Edit question

The full form of PLSQL is ______ ______ ______ ______ ______ ______ ______

- Systematic
- programming
- language
- Procedural
- structured
- query
- System
- List
Diverse enrolment profile

• The diverse enrolment profile with respect to age, cultural difference, domicile calls the need for Adaptive learning approach.
• Moodle facilitates the adaptive learning process through making of groups.
Creating separate Groups

- **Group mode**: Separate groups
- **Force group mode**: No
- **Default grouping**: None

**Role renaming**

**Tags**

[Save and display] [Cancel]
Creating separate groups in a course
Practical learning through Moodle

- Some courses like Computer Science involve attending practical sessions
- Challenges
  - Integrating with a compiler to enable running programs online
  - Security issues
Present scenario

• The online compiler can be embedded through a third party site.
The page module enables a teacher to create a web page resource using the text editor. A page can display text, images, sound, video, web links and embedded code, such as Google maps.

Advantages of using the page module rather than the file module include the resource being more accessible (for example to users of mobile devices) and easier to update.

For large amounts of content, it's recommended that a book is used rather than a page.

A page may be used:
- To present the terms and conditions of a course or a summary of the course syllabus
- To embed several videos or sound files together with some explanatory text

Add a Page
Distributed Computing

C Practical 1

```c
#include <stdio.h>

#define max 10

struct queue
{
    int front;
    int rear;
    int count;
    int item[max];
};

int isfull(struct queue q)
{
    if(q.rear == max-1)
    {
        printf("Queue overflow\n");
        return 1;
    }
    else
    {
        return 0;
    }
}
```
Moodle for Visual impaired

- Moodle has an accessibility block and ATBar can be used for increasing accessibility for visually impaired individuals.
- The ATBar and the accessibility block can be accessed in your page by installing the accessibility plugin.
Accessibility plugin

**Blocks: Accessibility**

block_accessibility

Maintained by Hitesh Ahuja

Provides options for changing text size and colour scheme. Settings can be saved to persist between sessions. Also integrates ATbar from Southampton University ECS.

Current versions

**2.2.4 (2017051700) Moodle 3.1**

Release date: Thursday, May 18, 2017, 6:38 AM

[Download]

[Learn more]

[code prechecks 91 | 203]
Adding the Accessibility block

• The block can be added to a specific page
Accessibility block

- It can be used to customize the view of the page according to the user’s convenience
- The block has the following functionalities
  - Increase/Decrease in font size
  - Zoom out/in
  - Apply color scheme
ATbar

• Atbar is an open source cross browser toolbar to enable the users to customize the way of interaction to their web page.
• Atbar increase accessibility of the website and offer the users a personalized Web experience.
Complex Linked List structures

1. Header nodes
2. Circularly-Linked List
3. Doubly Linked List
4. Insertion
5. Deletion

Introduction to trees

- Binary Trees
  - Traversals (breadth-first, depth-first)
  - Binary Search Trees

Graphs Terminology

1. Operations (Add vertex, Delete vertex, Add Edge, Delete Edge, Find Vertex)
2. Traverse Graph (Depth-First, Breadth-First)
3. Graph Storage Structures (Adjacency Matrix, Adjacency
ATbar

Dictionary

Text to speech

Color overlays

8. Remove node
9. Print List
Complex Linked List structures
2. Circularly-Linked List
3. Doubly Linked List
4. Insertion
5. Deletion
Introduction to trees
Important functions

• Read aloud the highlighted text.
• Changing the color scheme of the page
• Set a specific font size
• Use a dictionary to understand the meaning of a highlighted word
Meaning of Highlighted word

Dictionary definition for "binary"

1. Binary states are often represented as 1 and 0 in computer science.
2. Concerning logic whose subject matter concerns binary states.
3. Concerning numbers and calculations using the binary number system.
4. Having two equally important parts; related to something with two parts.
5. Two ingredients are combined in a 'binary' poison.
6. A 'binary' statistical distribution has only two categories.

Complex:
1. Health
2. Circumvention
3. Doctrine
4. Instruction
5. Definition

Introduction:
1. Binary
2. Traverse Graph (Depth-First, Breadth-First)
3. Bipartite
4. Complexity
5. Graphs

Graphs:
1. Bipartite:
   - Vertex, Add Edge, Delete Edge, Find Vertex
2. Traverse Graph (Depth-First, Breadth-First)
### Adding color overlay

#### Degreemoodle

**ATbar**
- Restore
- Question bank

**Site administration**

**LOGIN**

**ACCESSIBILITY**
- A-
- A
- A+
- R
- A
- A
- Launch ATbar

<p>| | | | | | | |</p>
<table>
<thead>
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</tbody>
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### Complex Linked List structures

1. Header nodes
2. Circularly-Linked List
3. Doubly Linked List
4. Insertion
5. Deletion

### Introduction to trees

1. Binary Trees
2. Traversals (breadth-first, depth-first)
3. Binary Search Trees

### Graphs Terminology

1. Operations (Add vertex, Delete Vertex, Add Edge, Delete Edge, Find Vertex)
2. Traverse Graph (Depth-First, Breadth-First)
3. Graph Storage Structures (Adjacency Matrix, Adjacency
Text to speech of highlighted text

1. Restore
2. Question bank
3. Administration
4. Search

Complex
1. Heat
2. Circulation
3. Donation
4. Insulin
5. Dehydration

Introduction
1. Binary Search Trees
2. Graphs Terminology
   1. Operations (Add vertex, Delete vertex, Add Edge, Delete Edge, Find Vertex)
   2. Traverse Graph (Depth First)

Text to Speech Options
Highlight text and select a voice
- Microsoft Anna - English (United States) en-US
- Google US English en-US
- Google UK English Female en-GB
- Google UK English Male en-GB
INCREASING READABILITY
Changing font size, line spacing

1. Header nodes
2. Circularly-Linked List
3. Doubly Linked List
4. Insertion
5. Deletion

Introduction to trees

1. Binary Trees
2. Traversals (breadth-first, depth-first)
3. Binary Search Trees

Graphs Terminology
1. Operations (Add vertex, Delete vertex, Add edge, Delete edge)
Making the screen friendly for screen reader

Degreemoodle

ATbar

Change colour settings
- Change Toolbar colour
- Change text and link colours
- Change page style

Complex
1. Heads
2. Circles
3. Digraphs
4. Inheritance
5. Deletion

Introduction to trees
1. Binary Trees
2. Traversals (breadth-first,
INTELLIGENT TYPING
Word prediction tool

Distributed Computing

Adding a new Assignment to Introduction to DS

General

Assignment name: Transpa

Description:

Ignore transparency transparent transparently

Keystrokes: esc to close, Ctrl + Alt + (1, 2, 3 etc)
Challenges

• Keyboard Shortcuts to use the tools are not available
• So they not very useful for completely blind students
Moodle for Learning Disability

Blocks: Dyslexic mod
block_dyslexic
Maintained by Éric Bugnet

This block allows you to change the default font of your Moodle site by a specific font for dyslexic people. OpenDyslexic (from http://opendyslexic.org/).

Current version

0.5 (2016051100)  Moodle 2.9. 3.0. 3.1
Release date: Wednesday, May 11, 2016, 10:21 PM

Download
Dysexlic Mod

- This block allow to change the default font of your Moodle site by a specific font for dyslexic people:
Dysexic font

Some dyslexic people have this impression: they can read, but need a lot of concentration because letters seem to move. This page allows to share this feeling...

Stop animation!

Wnrlkio

Dseyllic Mod book use Jascarpunt longecholy to chnage the site cllpsy uting CSS.
User cchoe is sirkced in cokoie.

Ræd mrc on Opnexeys/Dic font

Spirit for pgae aiaolmnn form: https://goen.guthib.io/pjgmanroimg/2106/00/03/dxixleya

Wah is dxyleisa?

From Wikipieda aclire → https://en.wikipoea.org/wiki/Dxixleya

Dxyelica, also kwen as ninedag dseodird, is chazaecerid by trolube with rinoag ulaterne to prlorbes with olveal ingcleelie. Dreieft polepe are aecltf to wynarg drgee. Pblmres may lundle duclfilliffs in speling wodrs, reaelg qulity. Wimilg words, "sunndol g out" wdors in the hæd, pniunnoong wodos wehn indeag aulod and wetasndindg what one reds. Cett tehe dceellis are fist tneoed at shool. Wheh sorneoce who pswerju could raed less their aility, it is kwen as aixela. The dceellis are inlabomy and peepo with this dceel hane an untrafeaed desire to ilean.

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Dxyelica is saprteu form racing duclfilliffs caused by insofett tinheace; or ether hrenag or vision poomers. Tinearnt lelons ainging theaerng mhtods to meet the pesom's nide. Wheh not cinning the yeuiningg prolemb, it may daesec the degee of somy/pems. Tineerats tiugng vision are not effctve. Dxyelica is the most comnon lanerning dabihty, aetinng 3–7 % of the pulepatiio; heoever, up to 20% my hae sme dore of somovm. Wile dixelica is mroe eefn discaonoid in men, it has been stueosed that it afcets men an wome alage.
THANK YOU