

Web Based Material Feedback System for Industrial Applications

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Abstract: This paper presents a web based application for the online implementation which can be used for a campus or organization for proving it for usage by all the people means to use it at any moment and at any time from any place. The project server administrator views the details of faculty and students and maintain their database in an efficient and effective manner so that their maintenance will be easy. The services providing for administrator are approving the faculty and students, maintain the personal details of faculty and students, add/delete the courses, consign a announcement regarding the course, view the feedbacks. The services provided to the faculty are the faculty can view and update their personal details, upload the content for a course, conduct a test for the students, and places key and results of a test, view the discussion board and feedbacks and reply to the students. The services provided to the students are view and update their details, view the content of a course, add/view the discussion, gives feedback to the faculty. Whenever anything is modified by the users, then the modified data, about the person who updated is maintained in the database. By this we are providing security to the users.

I. **INTRODUCTION**

This project titled Online Course Portal for a Campus is a web based application for the online implementation which can be used for a campus or organization for proving it for usage by all the people means to use it at any moment and at any time from any place.

The services providing for administrator are approving the faculty and students, maintain the personal details of faculty and students, add/delete the courses, consign announcement regarding the course, and view the feedbacks.

The services provided to the faculty are the faculty can view and update their personal details, upload the content for a course, conduct a test for the students, and places key and results of a test, view the discussion board and feedbacks and reply to the students. The services provided to the students are view and update their details, view the content of a course, take a test and view the key and result of a exam, add/view the discussion, gives feedback to the faculty. Whenever anything is modified by the users, then the modified data, about the person who updated is maintained in the database. By this we are providing security to the users.

In the present course portal pre-registered usernames and passwords will be given to the faculty members. There is no on spot registration to the faculty



members. There is no proper self-assessment test in the current course portal. Discussion board plays a vital role in clarifying the doubts for students which was lacked in the current scenario. Faculty approval mechanism is lacking the current course portal. . In the existing system there is no chance to give the feedback to any faculty and there is no chance of viewing the feedback by the administrator.

In order to keep the portal always active there should be some announcements regarding new material or any test which is lacking in the present system.

II. SYSTEM ANALYSIS

System Analysis is the process of collecting and interpreting facts, disposing problem and use the information about the existing system, which is also called as system study.

a. System analysis is about understanding situation but not solving the problem.

b. System analysis is performed to determine whether it is feasible to design to determine the user requirements and to eliminate the weakness of the present system a general requirements are concerned.

- a) The new system should be cost effective.
- b) To improve productivity and service.
- c) To enhance the user interface.

d) To improve information presentation and durability.

e) To upgrade system reliability, availability, and flexibility.

f) To address human factors for better usage acceptance.

2.1 PROPOSED SYSTEM

In the proposed system faculty can register to the course portal at any time as there is no restriction in registration process. Here no pre-registered usernames and passwords will be given to the faculty as it was not constrained to certain number. Every registered faculty member can upload their own material. It makes the student to grab more content on a particular course.

In the developing system online self-assessment test will be provided by the faculty. Timer indicates that the test should be completed in limited time span. The system will automatically generates the random paper each time when the student takes the test and the faculty can view the test result.

The problem of discussion board was overcome in proposed system so that the students can easily clarify their doubts by direct interaction with faculty through discussions.

Faculty approval mechanism was the new idea that is going to implement in this proposed system to differentiate the faculty from students by comparing the registered faculty with faculty working in the organization.

The announcements make the portal active always. Latest updates in the portal help the users to know about the course management and the latest materials that were uploaded.

Feedback module helps the faculty to assess the usage of materials by the students. Administrator view the feedback given to all the faculty members and faculty can view their own feedback to any particular course.

Advantages of Proposed system:



- On spot registrations for the faculty.
- Online self-assessment test will be provided with timer.
- Discussion board is provided for students to clear their doubts.
- Faculty approval mechanism is the new feature added.
- Announcements are made to keep the portal always active.
- Feedback module is provided to assess the usage of material.

2.2 Scope of Project:

The proposed Online Course Portal for a Campus is expected to automate the process of registration to the portal, publishing the announcements and communication between the faculty and students of a campus. The process of Test Creation will also be automated. The registration and login records management will be automated and the process of learning courses is made easier using the system.

2.3 Assumptions:

- Only one Administrator for the portal
- Faculty can even register as student to learn courses.
- All the maintenance of the portal is done only by the administrator.
- Other than faculty of the campus are not allowed to access the portal.

2.4 Requirement Specification:

The requirement specification gives the detailed requirements for each individual working in the development of the new system & the functionalities required fulfilling the objective of the new system.

Developer responsibilities:

- i) Developing the system, this meets the SRS and solves all the requirements.
- ii) Demonstrating the system and installing the system at clients' location after the acceptance testing is successful.
- iii) Submitting the required user manual describing the system interfaces to work on it and also documents of system.
- iv) Conducting any user training that might be needed for using the system interfaces to work on it.
- v) Maintaining the system for a period of one year.
- III. DESIGN OF THE PROPOSED SYSTEM

System design is transition from a user oriented document to programmers or data base personnel. The design is a solution, how to approach to the creation of a new system. This is composed of several steps. It provides the understanding and procedural details necessary for implementing the system recommended in the feasibility study. Designing goes through logical and physical stages of development, logical design reviews the present physical system, prepare input and output specification, details of implementation plan and prepare a logical design walkthrough.

The database tables are designed by analyzing functions involved in the system and format of the fields is also designed. The fields in the database tables should define their role in the system. The unnecessary fields should be avoided because it affects the storage areas of the system. Then in the input and output screen design, the design should be made user friendly. The menu should be precise and compact.



3.1Software design:

In designing the software following principles are followed:

1. **Modularity and partitioning**: software is designed such that, each system should consists of hierarchy of modules and serve to partition into separate function.

2. **Coupling:** modules should have little dependence on other modules of a system.

3. **Cohesion:** modules should carry out in a single processing function.

4. **Shared use:** avoid duplication by allowing a single module be called by other that need the function it provides.

3.2 Module design:

- The major modules of the project are Administrator Module
- Faculty Module
- Student Module

3.3 Database design:

Registration Table

Name	Varchar	25	N		
Username	Varchar	25	N	Primary Key	
Password	Varchar	25	N		
Confirm pwd	Varchar	25	N		
MobileNumber	Varchar	15	Y		
DOB	Varchar	10	N		
College	Varchar	40	N		
Department	Varchar	50	N		
Qualification	Varchar	50	Y		
Semister	Varchar	10	N		
Address	Varchar	50	N		
Designation	Varchar	20	N		
Reg-id	Int	10	N	Unique-key	
Role	Varchar	45	N		
Fac-id	Varchar	45	Ν	Unique-key	

Table 3.3.1 gives the details about the person i.e name, username, password, confirm password, mobile number, date, college, department, qualification, semester, address, designation of user, reg-id, role, fac-id.

Course Registration Table:

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Cid	Int	11	Y	Primary key	
Cname	Varchar	45	N		
Username	Varchar	45	N		
Status	Varchar	45	N		

Table 3.3.2 is the course registration table which contains the details about Course-id, course-name, username and status.

Login Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Username	Varchar	45	N	Primary key	
Password	Varchar	45	N		
Role	Varchar	45	N		
Mail	Varchar	45	Y		

Table 3.3.3 is the login table that gives the details about the username, password, role and mail-id

Faculty_Courses Table



Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Course-id	Int	11	N		
Faculty_name	Varchar	45	N	Primarykey	

Table 3.3.4 is the faculty courses table that gives details about the course-id and faculty name.

Student_Courses Table

Column	Data type	Size	Nulls (y/n)	Constraints	Description
name					
Course-id	int	11	Ν	Primarykey	
User_name	Varchar	45	N	Primarykey	

Course Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Course id	Number	7	Ν	Primary key	
Cname	Varchar	45	N		
Description	Varchar	500	N		
Status	Varchar	45	N		
Date	Date	10	Ν		
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Table 3.3.6 is the course table that gives details about the course-id, course-name, description, status, date.

Reply Table

÷						
	Column	Data type	Size	Nulls (y/n)	Constraints	Description
	name					
	disid	Int	11	N		
	Course_id	Int	11	N		
	User name	Varchar	45	N		
	Topic	Varchar	100	N		
	Replymsg	Varchar	1000	N		
	Id	Int	11	Y	Primary key	

Table3.3.7 is the reply table that gives details about the description-id, course-id, username, topic, replymessage, Id.

Mail Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Rec	varchar	45	Y		
Send	Varchar	45	Y		
Sub	Varchar	45	N		
Message	Varchar	250	N		
Id	Int	11	N	Primary key	
Date	DATE		N		

Table 3.3.8 is the mail table that gives details about the receiver, sender, subject, message, id and date.

Announcements Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Announcement id	Int	11	Y	Primary key	
Course_id	Int	11	Ν	Foreign key	
Date	Date		Ν		
Description	Varchar	45	Ν		

Table 3.3.9 is the Announcement table that gives details about the Announcement-id, course-id, date and description.

Feedback Table

Column	Data type	Size	Nulls (y/n)	Constraints	Description
name					
Feedback id	me Int _{ta typ}	e 11 ₇ e	$Null \mathbf{Y}(y/n)$	Primary key)esc uiption
Username	Varchar	45	N	Primary key-	
Course id	d Int _{Int}	111	N	Foreign key	
Gradente	Varchar	45	N		
Suggestion	Varchar	100	N		

Table 3.3.10 is the Feedback table that gives details about the feedback-id, username, course-id, grade and suggestion.

Test Table



Column	Data type	Size	Nulls (y/n)	Constraints	Description
name					
Id test	Int	11	N	Primary key	
Question	Varchar	100	Ν		
Option1	Varchar	100	N		
Option2	Varchar	100	N		
Option3	Varchar	100	N		
Option4	Varchar	100	N		
				-	
Answer	Varchar	100	N		
Course id	Int	11	Y		

3.3.11 is the test table that gives details about the testid, questions ,options for the question, answer and course-id.

Campus Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Fac-id	Varchar	45	N	Primary key	
Fac_name	varchar	25	N		
Colz	Varchar	50	Ν		
Dept	Varchar	45	N		
Qual	Varchar	45	N		
Designation	Varchar	45	N		

Table 3.3.12 is the Campus table that gives details about the faculty-id, faculty- name, college, department, Qualification and Designation.

File Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
File-id	Int	11	N	Primary key	
Cname	varchar	45	N		
Filepath	Mediumtext	45	N		
Filename	Longtext	45	Ν		
Date	Dater	45	N		

Table 3.3.13 is the File table that gives details about the file-id, course-name, filepath, filename and date.

Test Result Table

Column name	Data type	Size	Nulls (y/n)	Constraints	Description
Id	integer	11	N	Primary key	
Username	varchar	45	N		
Course	varchar	45			
Score	integer	11	Ν		
Date	Date		Ν		

Table 3.3.14 is the Test Result table that gives details about the id, username, course, score for the test and date.

IV. RESULTS AND DISCUSSIONS

Index Page :

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Fig 4.1 is the index page in which any user can login by entering the username and password.

Faculty Registration Form:

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		Confirm Password			
		Date of Birth:	1984 ¥ JAN ¥ 1 ¥		
		College	Sai Aditya		
		Department	Computer Science		
		Qualification	MTECH W		
		Interested Subjects	JAVA SE Networkprogramming		
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Fig 4.2 is the Faculty Registration page which contains the form required to be filled by the faculty who wants to register.

Admin Home Page:



Fig 4.3 is the Administrator homepage which contains all the options to add faculty, create course, view registered faculty, compose mail, view feedbacks

Course Creation By Admin:

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Fig 4.4 is the course creation page where the admin can create a course by providing the course name and the course file.

View Feedback Page:



Fig:4.5 is the view feedback page where the admin can view the feedback given by the students to the faculty.

Publishing Announcements Page:

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Fig 4.6 is Publish Announcements Page where the admin can publish announcements by providing the course name and the message.

Faculty Home Page:

Available online: <u>https://edupediapublications.org/journals/index.php/IJR/</u>







Fig:4.7 is the Faculty Home Page which is displayed by entering the valid username and password in the index page. Mail

Course Registration Page :



Fig 4.9 is the Course Page where the faculty can view the available courses.

Mailing Page:



Fig4.10 is the Inbox Page where the faculty can view the mails and can reply.

Compose Mail Page

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<u>Compose Mail</u>		Subject				
		Message				
			SEND CANCEL			

Fig:4.8 is the Course registration page where the faculty can register to the course by clicking the register button beside the course.

Courses Page:



Fig:4.11 is the compose mail page where the faculty can mail by providing the subject ,message and mailid of the receiver.

Course (JAVA) Home Page For Faculty :



Fig;4.12 is the Course Home Page which contains the material of the particular course

Student Home Page:



Fig:4.13 is the Student HomePage which is displayed after entering the valid username and password by the student.

CONCLUSIONS AND FUTURE WORK

CONCLUSION:

The application, 'Online Course Portal for a Campus' has been developed as a web-based application so that students can get benefited as well as the organization as all the course materials can be available up to date for the students which also reduces the burden to the faculty in the organization.

The Course Portal is a custom web-based application that integrates campus- specific information, course details, activities etc, so that students are aware of latest things like latest announcements, materials updated from time to time and utilize privileges like internal mailing system, feedback system, discussion board to interact with different users.

FUTURE ENHANCEMENT:

The scope for future enhancements of our project is good. The main extension is to make the mode of creating test in a more flexible manner and to make the portal include not only single cse course but also all the other courses.

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