

Tutor Portal Application Using Cloud Computing and Xampp.

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Abstract- *This project assesses students by conducting online objective tests. The tests would be highly customizable. This project will enable educational institutes to conduct test and have automated checking of answers based on the response by the candidates. The project allows faculties to create their own tests. It would enable educational institutes to perform tests, quiz and create feedback forms. It asks faculty to create his/her set of questions. Faculty then creates groups and adds related students into the groups. Further the tests are associated with specific groups so that only associated students can appear for the test. The result of the response would be available to the faculty of the question set. Further the result would also be mailed to the student. This project would be helpful for creating practice tests, say for educational institutes and as a feedback form. This is a web-based application project developed in PHP and MySQL Database. This simple project's main goal is to provide an online platform the individuals that both who are looking for and offering tutorial services. This allows the parents or persons to find a tutor for the specific field they desire. The application has a pleasant user interface with the help of Bootstrap Framework and AdminLte Template. This project consists of user-friendly features and functionalities.*

Indexed Terms- *web-based application, educational institutes, conducting online objective tests.*

I. INTRODUCTION

This venture surveys understudies by directing internet based objective tests. The tests would be profoundly adjustable. This undertaking will empower

instructive organizations to lead test and have mechanized checking of answers in view of the reaction by the up-and-comers.

The venture permits resources to make their own tests. It would empower instructive organizations to perform tests, test and make criticism structures. It requests that staff make his/her arrangement of inquiries. Staff then, at that point, makes gatherings and adds related understudies into the gatherings. Further the tests are related with explicit gatherings so that main related understudies can show up for the test. The aftereffect of the reaction would be accessible to the workforce of the inquiry set. Further the outcome would likewise be sent to the understudy. This task would be useful for making practice tests, say for instructive foundations and as a criticism structure. This is an electronic application project created in PHP and MySQL Database. This basic venture's fundamental objective is to give a web-based stage the people that both who are searching for and offering instructional exercise administrations. This permits the guardians or people to find a coach for the particular field they want. The application has a wonderful UI with the assistance of Bootstrap Framework and AdminLte Template. This undertaking comprises of easy to use highlights and functionalities.

This Online Tutor Portal Site is open to anybody. It comprises of Public Site, Tutors Site, and Management Site. The Tutor Site is the side of the framework where the people that offer instructional exercise administrations deal with their profiles to permit them apparent to the public site. The mentors can essentially enroll on the site. The framework expects them to refresh their own data so the administration can without much of a stretch check the

certifications of the coach. Coaches can likewise list the courses they are presenting for certain insights concerning the course and experience. On the public site, guests are not expected to sign in that frame of mind to peruse the rundown of checked clients. Guests can likewise see the guide's profile and rundown their course. They can likewise send requests to the guide about the course. The venture contains a Management or Admin Panel where the website the executives can deal with every one of the information on this web application. The said side requires the client to sign in with their enlisted certification to get close enough to the highlights and functionalities.

II. FEATURES

2.1 Tutor portal WEB APP: - Public-Side

- Login and Registration
- Home Page
 - Display the 'Welcome Content'
 - Tutors Page
 - Lists All Verified Tutors
 - Search Tutor
 - View Tutor Details
 - List the Tutor's Courses
 - Send Inquiries per Courses
- Read 'About Content'

Tutor-Side

- Home Page
 - Display the summary and images.
- Course Management
 - Add new Course
 - List All Courses
 - View Course Details
 - Edit/Update Course Details
 - Delete Course
- Inquiries Management
 - List All Inquiries
 - View/Read Inquiry Details
 - Delete Inquiry
- Update Profile Information
- Update Account Details/Credentials
- Login and Logout

Admin-Side

- Home Page
 - Display the summary and images.
- Course Management
 - Add new Course
 - List All Courses
 - View Course Details
 - Edit/Update Course Details
 - Delete Course
- Tutor Management
 - Create New Tutor
 - List All Tutors
 - View Tutor Details
 - Edit/Update Tutor Details
 - Delete Tutor
- User Management
 - Add New User
 - List All Users
 - View User Details
 - Edit User Details
 - Delete User Details
- Inquiries Management
 - List All Inquiries
 - View/Read Inquiry Details
 - Delete Inquiry
- Update System Information
- Update Account Details/Credentials
- Login and Logout

2.2 Examination WEB APP:

- Administrator Aspect
 1. Taking backup of the database
 2. Editing/Deleting/Creating the database.
 3. Adding or expelling faculty
 4. Changing the super password.
- Faculty Aspect
 1. Logging into the system.
 2. Sending invitations to specific student by mail
 3. Accepting registrations of candidates
 4. Adding the candidate to a group
 5. Create/Edit/Delete candidate groups
 6. Creating a test
 7. Posting questions in the above test
 8. Posting multiple options to respective question
 9. Marking correct answer within the given options
 10. Specifying to allow user defined answer
 11. Time limit of the test if any.

- Student Aspect:
 1. Requesting registration
 2. Logging into the system.
 3. Edit user information.
 4. Selecting the test.
 5. Appearing for the examination.
 6. Printing the result at the end of the examination.
 7. Changing password.
 8. Resetting of forgotten password
- Analysis
 1. Authenticating users based on username and password
 2. Keeping session track of user activity
 3. Recording candidates' responses to every question
 4. Checking whether the given response is correct or not
 5. Keeping history of test reports of all users

External Interface Requirements

Hardware Interfaces

Server-side hardware

- Hardware recommended by all the software needed.
- Communication hardware to serve client requests

Client-side hardware

- Hardware recommended by respective client's operating system and web browser.
- Communication hardware to communicate the server.

Software Interface

Server-side software

- Web server software, Apache, XAMPP
- Server-side scripting tools: PHP, HTML, CSS
- Database tools: mysql.
- Compatible operating system: ATOM

Assumption and Dependency

1. Username are valid email addresses of respective user
2. Administrator has the authority to add/delete faculty level accounts.
3. Faculty have the authority to approve/expel student

4. Faculty have the authority to change student's group

Non-Functional Requirements

- System should be able handle multiple users
- Database updating should follow transaction processing to avoid data inconsistency.

Database Requirements

Database fields for questions and respective options must be in Unicode format to handle non-English characters.

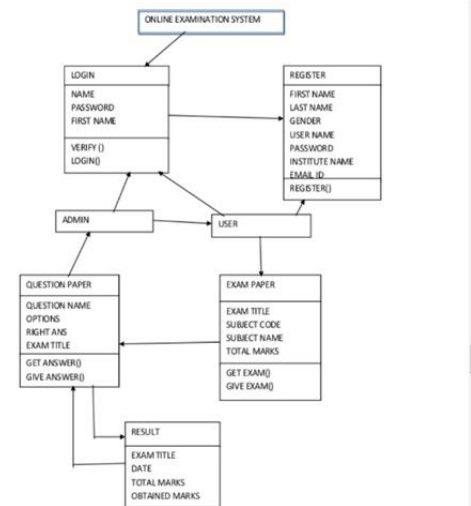


Fig.1 Class Diagram

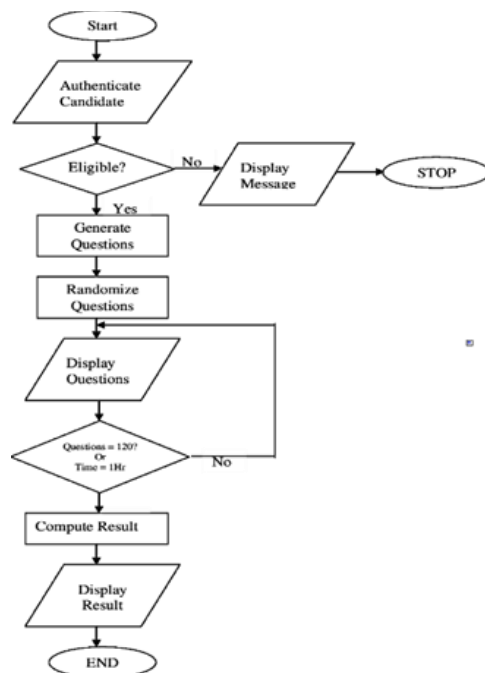


Fig.2. Flow Chart



Fig.3. user tutor login page.

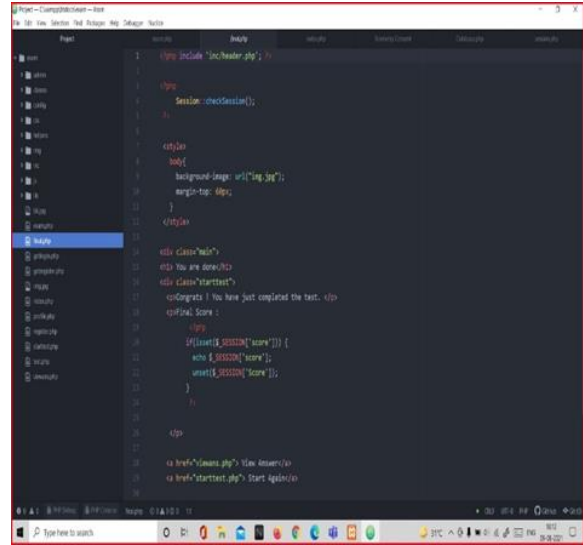


Fig.7. Code Snippet

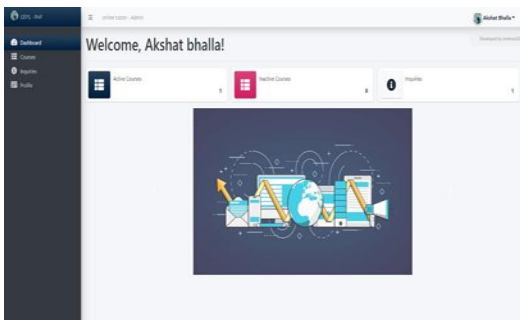


Fig.4. Admin Dashboard\

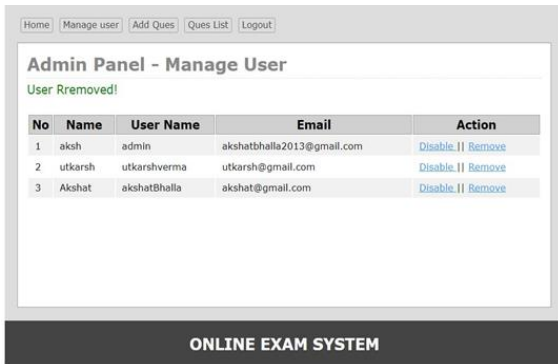


Fig.5. Admin Panel

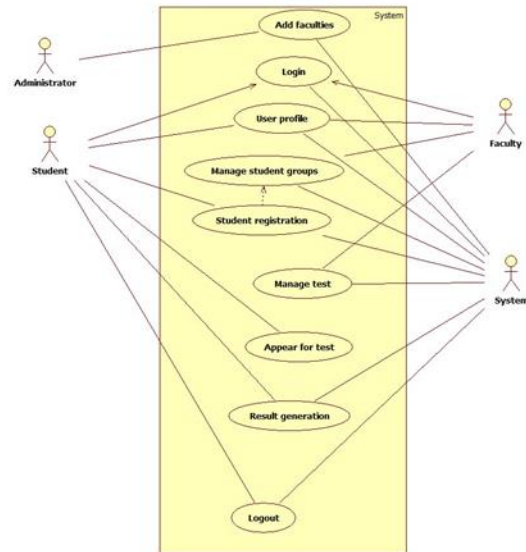


Fig.8 Use Case

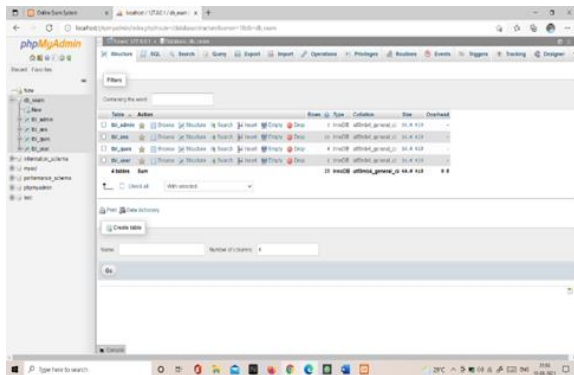


Fig.6. Database.

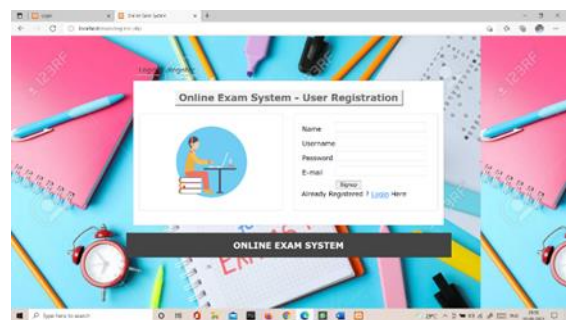


Fig.9 User Interface

III. DATABASE TABLE

1. tbl_admin:

adminId	Int ()
adminUsername	Varchar ()
adminPass	Varchar ()

Primary key: adminId

2. tbl_ques:

id	Int ()
quesNo	Int ()
ques	text

Primary key: id

3. tbl_ans:

id	Int ()
quesNo	Int ()
rightAns	Int ()
ans	text

Primary key: id

4. tbl_user:

userid	Int ()
name	Varchar ()
username	Varchar ()
password	Varchar ()
email	Varchar ()

Primary key: userid

Status: 0, 1

Test case For Log In:

Objective: - To check whether user name & Password valid or invalid.

Page: - Login Screen.

Test Data: - User=" admin" and Password ="123".

Steps	Excepted Data
Enter user name, password and press submit button	Should navigate to admin's page
Enter User name and press submit button.	Should Display message box 'please fill all the fields'
Enter password and press submit button	Should Display message box 'please fill all the fields'

Enter blank user name and blank password and press submit button.	Should display a message box 'please fill all the fields'
Enter wrong user and password.	Should display a message box 'Invalid ID or Password'

Test case For Navigation:

Objective: - To check whether different hyperlinks are working properly or not.

Page: - home page (default page).

Steps	Excepted Data
Click on Home page hyperlink menu	Should display home page
Click on new questionnaires hyperlink menu	Should display questionnaires details page
Click on quiz hyperlink menu	Should display quiz details page
Click on show result hyperlink menu	Should display result details page
Click on login hyperlink menu	Should display respective login page
Click on queries hyperlink menu	Should display queries details page
Click on feedback hyperlink menu	Should display feedback form page

IV. TECHNOLOGY USED

- PHP scripting for server-side scripting as it has a very strong support for XML and MySQL.
- Myphadminas database format: The database' performance requirements are not very high and the ability to have custom fields in case the quiz creator needs to add more than expected answer options. This is limited in any other database management system where we have to first specify the maximum number of fields.
- Apache as web server has a tight integration with PHP.
- XAMPP v3.3.0
- PHP
- MySQL Database
- HTML
- CSS

- JavaScript
- Ajax
- jQuery
- Bootstrap
- Font Awesome
- Admin LTE.

CONCLUSION

In this project we make an adequate environment for learning, testing, and assessing practicals related to parts of electrical engineering. The multiple technologies come together to create an environment for students or learners to learn test their learning related to electrical engineering. The pandemic has forced for the education to shift in virtual medium therefore this project is a great example of that.

FUTURE SCOPE

- Current framework gives just numerous decisions however single right response determination. Personnel might wish to give numerous decisions different choice reactions.
- In case questions or potentially addresses should be in designs, current framework has no arrangement.
- Unregistered clients can't answer test, they should have a place with some gathering. This is a downside in case the workforce maintains that anybody even unknown clients should answer the test.
- Top score could be shown on the landing page; however, this could be handily executed while programming the landing page.
- Security logs however not executed in this framework would be well accessible through the particular data set administration framework and web server programming.

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