TECHNICAL ERA: An Online Web Application

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Abstract: The web has significantly affected all parts of every one of our students. As our students depend increasingly on the web, the constancy of web applications has turned out to be progressively critical. To make these applications more tried and true, we will make a web application with respect to placement training. In general we have Indiabix and placement season are providing a wide range of both technical and aptitude questions in order to prepare a student for the placement. But somehow those questions are repeatedly asked are the standard questions are given. To improve this situation, in this paper, we propose a model of a web application. This structure utilizes the offline application capacity with all the questions are put away in the database and the questions will be refreshed progressively on a period premise with the assistance of the placement coordinator in the college. Every student can sign up and practice all the questions that are provided with respect to the subjects.

Keywords: JQuery, java script, database, dynamic webpage, mcq questions

1. Introduction

As of late, learning framework over the Internet winds up well known and beginning to be imperative, especially in an educational environment, for example, school or educational institutes. ELearning framework can be utilized as a full separation learning style in which, students can learn remotely and freely by taking practice and assets provided. Our main objective is to provide training to the students in order to meet the requirements of the industries. As IT industries are expecting a lot from the students we are providing the platform to prepare for the upcoming placements.

2. Existing System

HTML5 started in 2004 and is presently being done by W3C HTML WG and the WHATWG is a current improvement of HTML standard, an increase dialect that assembled a large portion of the web content. This standard has been advanced as a request of developing Internet clients and its applications and has been bolstered by most significant merchants of web programs. HTML5 is acquainted with giving a superior client encounter and better help for application programming interface and mixed media capacity. Right now, the detail is still in advance while some significant merchants had actualized a piece of its particular and it’s not been utilized by the significant number of the Technical sites.

The existing system consists of either offline access to the website or online quiz oriented access and the level of questions which we see in online websites is pretty high and it cannot be used for a fresher. In the present existing websites, there is a problem of redundancy where questions have been repeated for years. For example, if we consider Indiabix it consists of the same questions from the years without any change. When it comes to colleges Most of the students are given access to the placement portals only in the final year.

3. Proposed System

Here we proposed a system that gives access to all the students so that they will aware of the questions that are asking the companies during campus recruitment process. This system is purely on technical side questions along with explanation and answers. In our website, we are also providing the discussion forum which is useful to all the students in which they can discuss their queries with their friends and even also with the
respective subject staff. Dynamically the technical MCQ questions are also updated on time basis by the system administrator.

In these, we are also providing an explanation block beside the questions which provides the explanation about the questions. Some of the tutorial video links about the topic are given in the page itself so that students can make use of it during their preparations. These questions are updated by the university staff every time. Even the staff can create an assignment to the students if necessary so that the staff can identify the students on their performance basis.

3.1 Description of proposed system:

The complete website will be accessed only after login into the page. Hence login page should be created to make it more effective and good user interface. In the website, the entire signup and the login implementation is done by using the language JQuery in order to use the toggle function which makes the presentation good and simple. The entire user details will be stored in the database as shown in Figure 1.

![Fig 1 database storage](image1)

The password of the individual user will be stored in encrypted format for the security purpose. The login page is designed such a way that its user name should be the register number of the college such that there will be no possibility for a user to create multiple logins.

The Questions in the respective technical subjects will be uploaded by the Administrator. The questions will not be posted on the static page as it leads to the redundancy and there will be no chance to upload new questions. Hence we are introducing the new format of entering the questions which will be in the input format and these will be stored in the database as shown in Figure 2.

![Fig 2 Enrolling questions into database](image2)

The questions in the database will be retrieved by using PHP code and will be displayed continuously. When the administrator wants to delete a question in the database can simply enter the question number and submit. Which leads to deleting a question in the respective database for the entire database storage we are using the local host server XAMPP. The questions in the quiz are displayed one by one so that the user may not skip the question and the questions in the quiz are stored in the JAVASCRIPT array which will be useful for displaying one by one in a simple manner and final score will be calculated by writing the code in the JAVASCRIPT.
The video tutorials which will be useful for the placement purpose and understanding the concept of the respected Technical subjects will be posted along the questions on the website. These video tutorials will have the videos that are taught by the respective staff members in the college so that the students can clearly understand the concepts.

In this module, there is a unique way of uploading questions. When it comes to the other Technical websites all the questions are uploaded in the static page of HTML but in this website, the questions are uploaded in the database such that all the questions are retrieved at a time by using loop condition. Due to this, there is a very less chance of having repeating questions and is shown in Figure 3.

![Fig 3 Uploading questions into database](image)

4. **Module Description**

The languages that we used to develop the website are mentioned below

**FRONT END:** HTML, JAVASCRIPT, JQUERY & CSS

**BACK END:** PHP & MYSQL for database connections

The entire website is divided into 3 modules mainly login page, homepage, about page, contact page, department page.

4.1 **User Interface:**

The basic workflow of the website is shown below.

![Fig.4 Architecture of user interface](image)

The fig.4 illustrates the architecture for the login page and signup page. Signup page is to registering into the website before taking the questions. All the data is stored in a database for future use.
In the sign up page and login page we have used the jQuery toggle method as shown in Figure 5

\[
\text{\$("button")\}.click(function()
\{\n\$\text{\"p\"}.toggle();\});
\]

in order make the user interface attractive and easy for the users and the same is given in Figure 6.

### 4.2 Overview:

Overview of the website and the workflow is shown below

The Figure 7 illustrates the architecture for the department page where all the department modules exist. In each department we have a list of all the technical subjects where all the questions and the video tutorial links are present in it Like Figure 8.
4.3 Department Module:

It consists of several departments for example after selecting CSE Module. The following work flow will be done and the same will be done in other modules also

Fig. 9 Architecture of Subject list

The above Figure 9 illustrates the architecture for the MCQ questions which are asked repeatedly during the recruitment process by the companies.

4.4 Quiz Application:

The quiz application consists of several questions on various concepts and levels and after completing the quiz the respective score will be displayed. The quiz questions are prepared based on the current placement requirements.
5. Conclusion:

In this paper, we outlined a site for all the engineering students. It is exceptionally helpful for every one of the students for the most part amid the placements. The MCQ'S and quiz applications are exceptionally valuable to the students.

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