KAD Coaching Institute

Programming in Javascript Project

Abstract

Coaching classes have gained immense popularity in the metropolitan cities of India in recent times. There are classes catering to diverse needs in terms of different courses, varying timings and locations and course material requirements. The growing competition and increasing expectations from students across different schools of study in India, has given rise to a steady growth in coaching classes. Classes providing guidance on every course and field of study are now available to students with great facilities in terms of locations, timings and method of instruction based on their needs and wants.

In the post Covid world, everything has found a place in an online platform. The world of education is also spreading rapidly through the internet. In such a situation, we thought of creating a platform for students of all around the world to have access to classes from quality teachers through our Online Coaching Website.

Technologies used

- HTML
- CSS
- JavaScript
- PHP
- jQuery
- AJAX

HTML

HTML is a computer language devised to allow website creation. These websites can then be viewed by anyone else connected to the Internet. It is relatively **easy to learn**, with the basics being accessible to most people in one sitting; and quite **powerful** in what it allows you to create. It is constantly undergoing revision and evolution to meet the demands and requirements of the growing Internet audience under the direction of the **W3C**, the organisation charged with designing and maintaining the language.

The definition of HTML is **HyperText Markup Language**.

- *HyperText* is the method by which you move around on the web — by clicking on special text called **hyperlinks** which bring you to the next page. The fact that it is *hyper* just means it is not linear — i.e. you can go to any place on the Internet whenever you want by clicking on links — there is no set order to do things in.
- *Markup* is what **HTML tags** do to the text inside them. They mark it as a certain type of text (*italicised* text, for example).
- HTML is a *Language*, as it has code-words and syntax like any other language.

CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs,variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Advantages of CSS

- CSS saves time
- Pages load faster
- Easy maintenance
- Superior styles to HTML
- Multiple Device Compatibility
- Global web standards

JavaScript

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

JavaScript was first known as LiveScript, but Netscape changed its name to JavaScript, possibly because of the excitement being generated by Java. JavaScript made its first appearance in Netscape 2.0 in 1995 with the name LiveScript. The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other web browsers.

The ECMA-262 Specification defined a standard version of the core JavaScript language.

- JavaScript is a lightweight, interpreted programming language.
- Designed for creating network-centric applications.
- Complementary to and integrated with Java.
- Complementary to and integrated with HTML.
- Open and cross-platform

Advantages of JavaScript

- Less server interaction − You can validate user input before sending the page off to the server. This saves server traffic, which means less load on your server.
- Immediate feedback to the visitors − They don't have to wait for a page reload to see if they have forgotten to enter something.
- Increased interactivity − You can create interfaces that react when the user hovers over them with a mouse or activates them via the keyboard.
- Richer interfaces − You can use JavaScript to include such items as drag-and-drop components and sliders to give a Rich Interface to your site visitors.

Limitations of JavaScript

We cannot treat JavaScript as a full-fledged programming language. It lacks the following important features −

- Client-side JavaScript does not allow the reading or writing of files. This has been kept for security reason.
- JavaScript cannot be used for networking applications because there is no such support available.
- JavaScript doesn't have any multithreading or multiprocessor capabilities.

Once again, JavaScript is a lightweight, interpreted programming language that allows you to build interactivity into otherwise static HTML pages.

PHP

The PHP Hypertext Preprocessor (PHP) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications. This tutorial helps you to build your base with PHP.

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible.
- PHP Syntax is C-Like.

jQuery

jQuery is a fast and concise JavaScript Library created by John Resig in 2006 with a nice motto: Write less, do more. jQuery simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. jQuery is a JavaScript toolkit designed to simplify various tasks by writing less code. Here is the list of important core features supported by jQuery −
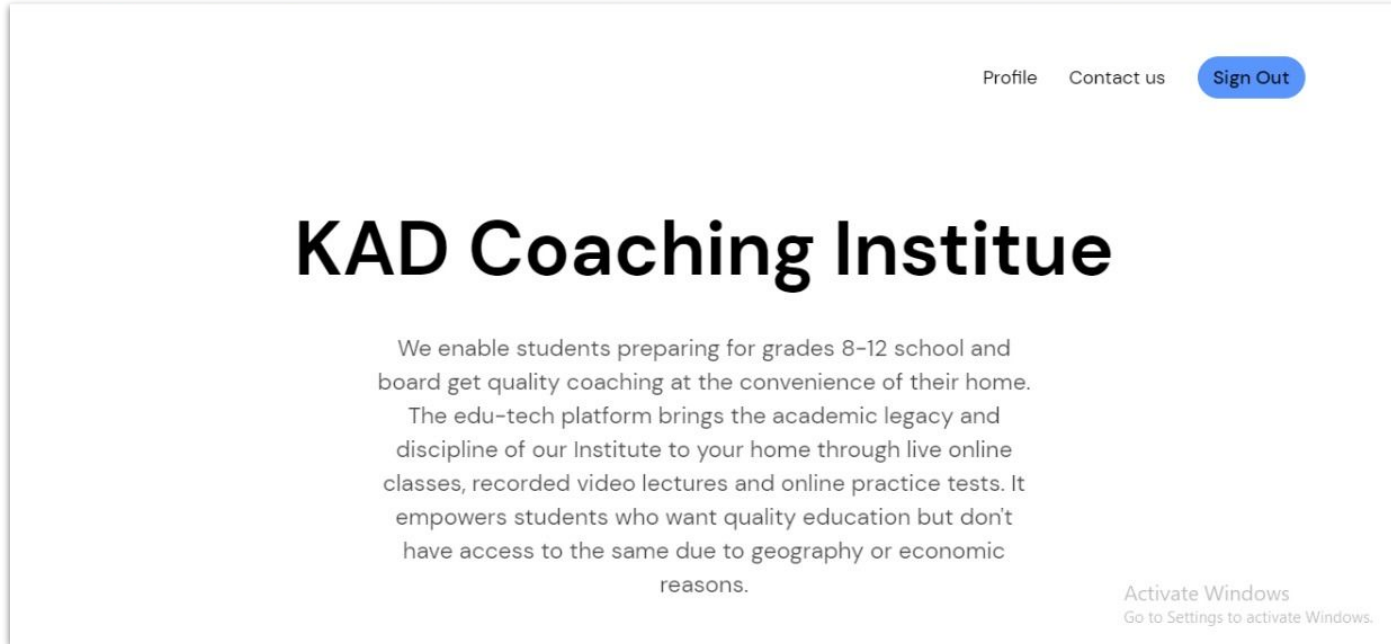
- DOM manipulation − The jQuery made it easy to select DOM elements, negotiate them and modifying their content by using cross-browser open source selector engine called Sizzle.
- Event handling − The jQuery offers an elegant way to capture a wide variety of events, such as a user clicking on a link, without the need to clutter the HTML code itself with event handlers.
- AJAX Support − The jQuery helps you a lot to develop a responsive and feature rich site using AJAX technology.
- Animations − The jQuery comes with plenty of built-in animation effects which you can use in your websites.
- Lightweight − The jQuery is very lightweight library - about 19KB in size (Minified and gzipped).
- Cross Browser Support − The jQuery has cross-browser support, and works well in IE 6.0+, FF 2.0+, Safari 3.0+, Chrome and Opera 9.0+
- Latest Technology − The jQuery supports CSS3 selectors and basic XPath syntax.

AJAX

AJAX stands for Asynchronous JavaScript and XML. AJAX is a new technique for creating better, faster, and more interactive web applications with the help of XML, HTML, CSS, and JavaScript.

- Ajax uses XHTML for content, CSS for presentation, along with Document Object Model and JavaScript for dynamic content display.
- Conventional web applications transmit information to and from the server using synchronous requests. It means you fill out a form, hit submit, and get directed to a new page with new information from the server.
- With AJAX, when you hit submit, JavaScript will make a request to the server, interpret the results, and update the current screen. In the purest sense, the user would never know that anything was even transmitted to the server.
- XML is commonly used as the format for receiving server data, although any format, including plain text, can be used.
- AJAX is a web browser technology independent of web server software.
- A user can continue to use the application while the client program requests information from the server in the background.
- Intuitive and natural user interaction. Clicking is not required, mouse movement is a sufficient event trigger.
- Data-driven as opposed to page-driven.

Our Website - KAD Coaching Institute

Home Page

We cover

Physics

Physics is the most fundamental, and least significant, of the sciences.

Chemistry

The beauty of Chemistry is that you can decide your own molecular world.

Mathematics

Maths is not about numbers, its about UNDERSTANDING.

About us page

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STUDENT, 12TH STANDARD

Feedback page

Pricing Plans

Start with free trial. Cancel at anytime.

Free	Bronze	Silver	Gold
Rs 0	Rs 5000	Rs 10000	Rs 20000
Get Started for Free	My Plan	Get Started	Get Started
1 week Trial	2 months Plan	4 months Plan	6 months Plan
	25 Live Sessions	50 Live Sessions	100 Live Sessions
Limited Practice Material	Unlimited Practice Material	Unlimited Practice Material	
		10 Tests	Unlimited Tests
			Personal Feedback

Subscription Plan page

GET STARTED

Get in Touch with Us

Your email   Send

About us page

New here ?

Sign up Now! Start your Learning Journey with us!

SIGN UP

Sign in

👤 Username

🔒 Password

LOGIN

Or Sign in with social platforms

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Sign in page

Sign up

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🔒 Confirm Password

SIGN UP

Or Sign up with social platforms
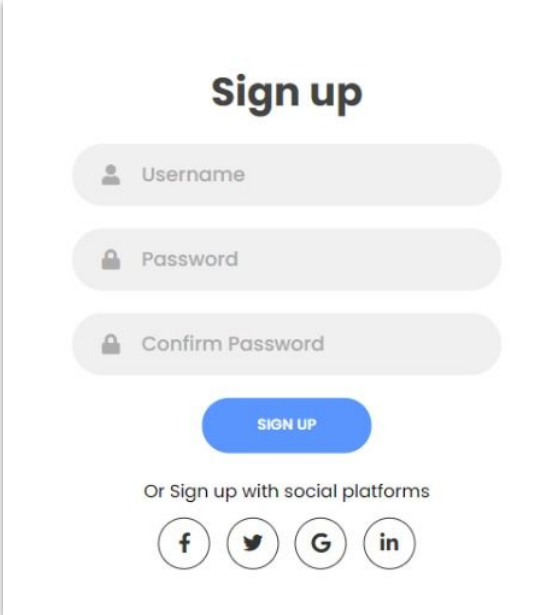
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Sign up page

One of us ?

Already have an account?

SIGN IN

Activate Windows
Go to Settings to activate Windows

UX Laws

1) **Hick's Law**

The time it takes to make a decision increases as the number of options increases.

As we can see, the sign-up page contains only the essential details in the form. Therefore, the time taken by user to fill this form decreases.

2) Fitts' Law

The time required to rapidly move to a target area is a function of the ratio between the distance to the target and the width of the target.

In this we can see that user can directly hit the "Get Started" button very efficiently and take the subscription with ease.

3) Jakob's Law

Users spend most of their time on other websites. This means that they prefer similar sites to the ones they frequent and are already familiar with.

Most of the coaching websites work in the way where they show about their class, what things they teach, their courses plan and contact page.

All these things were kept in mind while making the website. The signup and sign in page are kept as simple as possible to make it user-friendly.

Different Modules of our websites

Our website is a coaching site that focuses on students from 8 to class 12. It covers subjects such as Physics, Chemistry and Maths.

Talking about our web design. When you access our site the first that is our home pages contains our institute name and a short description about our coaching. From that page you either login or sign up.

Depending upon the person exist on our database or not. That person needs to either sign up or login.

After sign up or login the person will be directed to a course page that shows either he is a free or a paid user and which courses has he signed up for.

Other Modules

There are other modules in our page such as

We cover - It contains all the subject that our coaching offers

Previous Feedback - It contains feedback from the students who took the course in the past

Pricing plan - It contains all the different plans that our coaching offers and the student can sign up for.

Get in touch with us - Here, students can send any messages they want to the institute regarding any doubts they have.

Software used

- XAMPP Control Panel
- CodeIgniter
- Visual Studio Code

Future Enhancement

In future we could add other components in our site such as

Previous year question paper for student to practice.

A calendar where students could see the schedule of their classes.

A junior and senior interaction chat room.

Conclusion

This has been a challenging, exciting and edifying experience for us. We learnt different aspects of web development. We learnt about HTML, CSS, Javascript, jQuery and AJAX in an exciting way. We are thankful to Hariharan sir for giving us this opportunity.

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