

## WEBSITE DEVELOPMENT WITH NEW TECHNOLOGY

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**Abstract** - This research paper explores the various useful methods and techniques used in the creation of the website. We will take brief information about the website development process with a definition for each one. Next, we will talk about popular Web development platforms, frameworks, languages, and modern tools.

**Keywords:** Website, Development, Technology, Creative, Impressive, tools, AI, framework, programming language, IoT

### INTRODUCTION

Technology plays an important part in our everyday lives. It surrounds us in the simplest of places to perform ordinary tasks and to make way for great inventions. All of the web pages and apps we use to make our lives easier are created by Web Developers. However, the concept of Web Development is still not clear to all of us, so let's start there and learn more about what Web Development is all about. Developers create web pages and apps for either the Intranet, a private network, or the Internet as part of the web development process. Web development does not generally concentrate on the design of a website; rather it is primarily concerned with the programming and coding component, which is the key reason for the functioning of the website. It refers to the creation and maintenance of websites, including bits and pieces of concepts such as web design, web programming, web publishing, and database management. It also includes various types of web content creation tools and techniques, such as text editors for manually

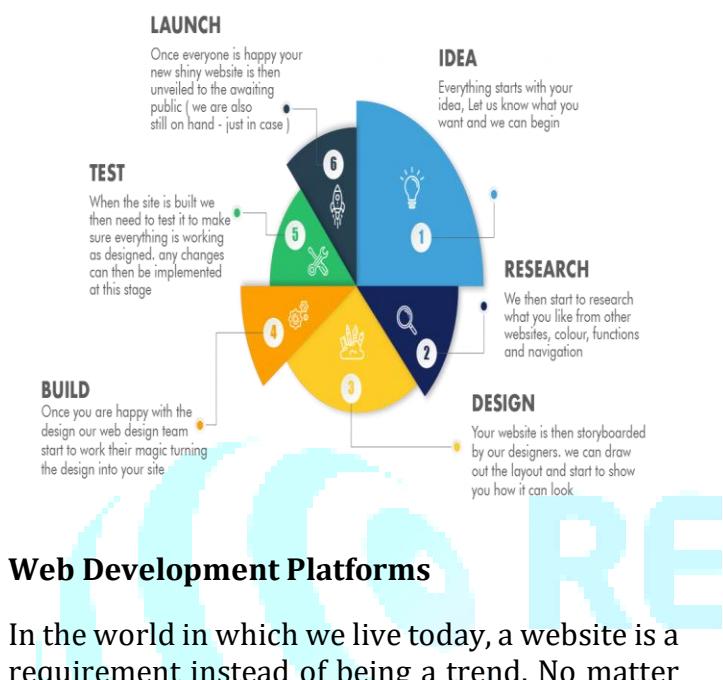
coding websites, Dreamweaver for web page production, blogging website update blogs, and more. From basic and easy websites to complex web applications and social media networks and from a wide variety of online shopping websites to content management systems (CMS), all the online tools and websites that we use on a daily basis are part of web growth. In addition, all of these tools and websites are developed by Web Developers.

### The creation of website

The construction of a website is like the building of a house. We ask an architect about plans and building permits before building a home. The specifications for website creation must all be included, such as designing, documentation, suitable server and languages of programming, etc. The most important thing for a website is to pick a programming language. Mostly web design using HTML and CSS. Features such as website formatting, page layout, graphics, multi-media, images, and multipage website functions should also be included for web design.

## **Website development Process:**

### **OUR WEB DEVELOPMENT PROCESS**



## **Web Development Platforms**

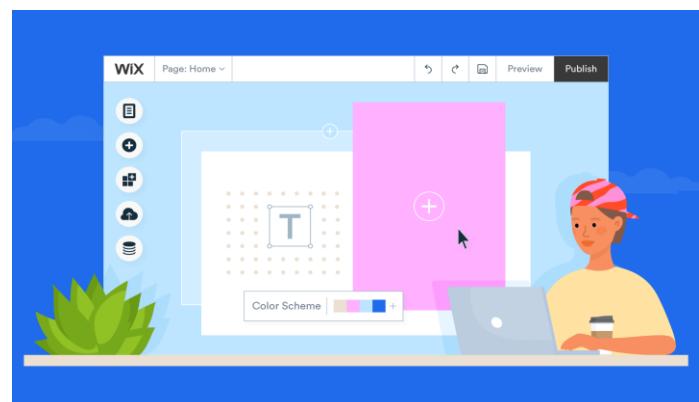
In the world in which we live today, a website is a requirement instead of being a trend. No matter how small or how large a company is, it is important to create a website and reach out to the crowd using online methods to thrive and prosper in this age of digitization. People are often constructing their own web pages these days to exchange data or their personal experience with others. Some of the most common platforms for website creation include:

- Wix
- Weebly
- Jimdo

### **Wix**

Wix is another common and incredible platform used frequently for web building. It enables you to choose from a wide variety of features and formats in a few clicks on the website. It is a user-friendly and self-service site for creating your blog, as well as online shops.

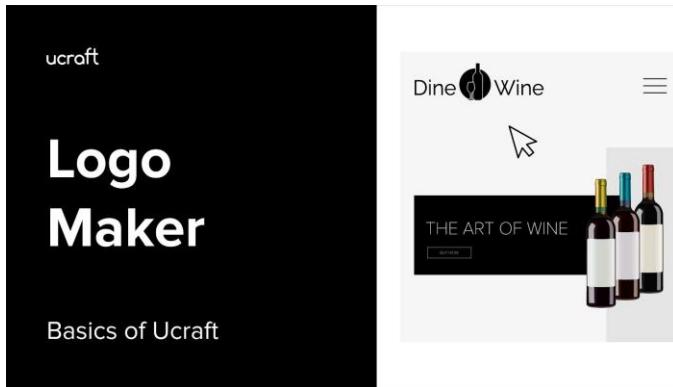
The drag and drop function help even new users to easily use this website. You can also pick a blank template in Wix and create your page from scratch. In addition, it also includes a free storage plan and restricted bandwidth. Also, depending on your requirements, you can opt for your Wix premium package.



### **Weebly**

Weebly is one of the strongest web development sites. The drag-and-drop feature helps users to create a web site that is well built. It contains also an app store that allows users to quickly add and upgrade new features to their websites.

Similar to Wix, it allows to easily transfer elements and if possible add different functions to the website. However, users can only add certain web page areas, such as the web picture and the main area of content, to these features. In addition, intermediate models can be modified a lot of times to get the ideal look at the website.

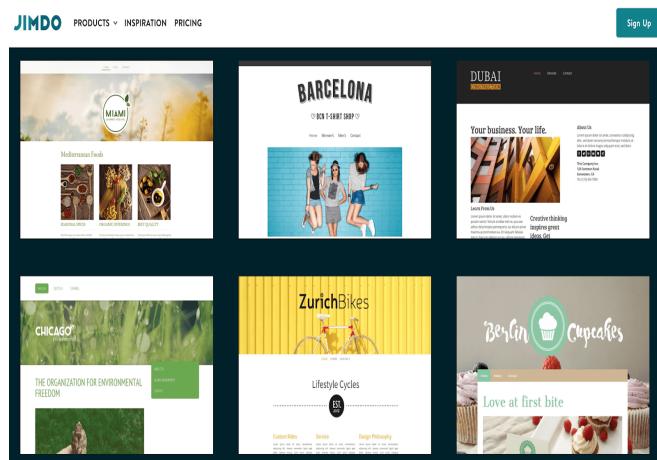


## **Jimdo**

In the list of trending Web Development platforms, Jimdo is another name. It helps you to build your website without hassles. This website builder platform is focused on models, which enable you to create attractive websites with little or no programming skills and knowledge. It helps all sorts of companies like the opportunity to e-commerce, portfolio options and more.

It provides a wide variety of options and functionality for new users. It's quick to edit colour, background or font by a few simple buttons and drags. These models allow you to build custom websites for your own use. To change the viewpoint of your website, while maintaining your job, you can change the templates.

We will now come across some of the popular and common tools used in Web Development.



## **Most Popular Web Development Tools**

There are numerous resources web developers can use to create functioning websites quickly and easily. They can create websites with friendly user interfaces that are usable. These tools. Some of the web development tools that are commonly used are:

- GitHub - provides hosting for software development and version control using Git.
- CodePen - is an online community for testing and showcasing user-created HTML, CSS and JavaScript code snippets
- Sketch - is a vector graphics editor for macOS
- Sublime Text - is a shareware cross-platform source code editor with a multiple application programming interface.
- Grunt - is a JavaScript task runner, a tool used to automatically perform frequent tasks
- Chrome DevTools - is a set of web developer tools built directly into the Google Chrome browser
- NPM - is a package manager for the JavaScript programming language

## **Web Development Frameworks**

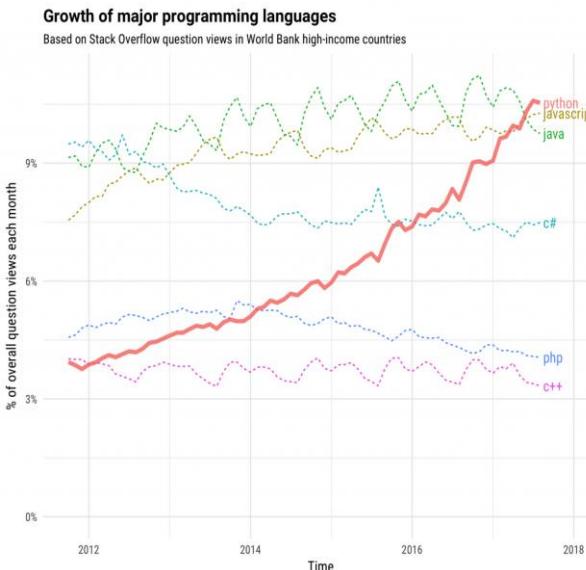
Developers build web development systems in order to promote the development and collaborating with different programs. Basically, these frames eliminate all repetitive and daunting activities involved in making a web page. The frameworks either do the tasks themselves or simplify the completion of these tasks by developers. Below are a few frameworks that Web Developers generally use:

- **Node.js:** A server-side JavaScript frame
- **Ruby on Rails:** A full-scale architecture developed with the aid of Ruby
- **Ionic:** A mobile framework
- **Django:** A full-scale architecture built in Python
- **Bootstrap:** CSS framework directed at responsive, mobile-first front-end web development.
- **Cordova/PhoneGap:** The mobile platform used to expose native Android and iOS APIs to use when writing JavaScript
- **WordPress:** A CMS built for PHP
- **.NET:** Comprehensive architecture developed by Microsoft
- **Foundation:** The UI system used to construct JavaScript/CSS/HTML
- **Angular.js, Backbone.js, and Ember.js:** Front-end JavaScript frameworks
- **Drupal:** A framework for CMS built using PHP

## **Web Development Languages**

Programming languages are used to interact with and teach other programs and computers. Developers can choose from a multitude of languages to do the same thing. Some of the following languages are listed:

- Python
- Java
- Ruby
- JavaScript
- Go
- PHP
- C++
- C#.



## **2 Layers of Web Development**



### **Frontend Web Development**

This method of web development helps transform data and usable data into a CSS, HTML and JavaScript graphical user interface, so that users can easily interact with the interface they are using. The website discusses the part that users can read and understand easily. We can interact with the front end of the web on our browser, for example. It comprises all things, including colors, texts, pictures, buttons, etc. that we can display and experience directly.

### **Backend Web Development**

The reverse aspect is the section users can't see or don't see on every website. This web site is the backbone. The users cannot see it but it is the website component that works. It enables developers to store and organize data and to

ensure that anything accessible on the front or customer sides works and operates properly. The backend segment communicates with the front of the website by sending and receiving information that is shown directly on the website. The browser will send the request to the backend (server-side) when users enter such data, fill out forms or buys something. This request will in turn send the data back as the web page frontend code to be able to understand, interpret and show.

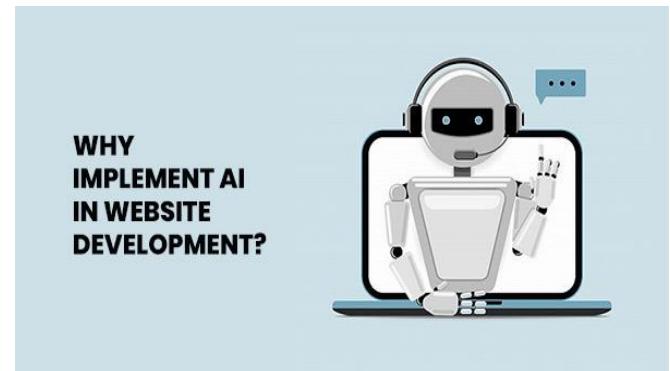
## Future Scope of Web Development



Technologies such as machine learning, artificial intelligence (AI), data science and more everyday needs and use will significantly help Web Development and increase Web developers' opportunities. Regardless of what shifts the future holds in specifications, web developers are still in demand. Web development provides some of the best and most promising professions for which you can choose from many employers.

Clever-Solution experts analyzed the existing trends, identified the most viable ones, and predicted the time anticipated for their implementation. Let's explore how web weaving will build more space, with new web creation trends and new trends that will soon catch or conquer.

## Artificial Intelligence



The future pattern of web space creation is AI. As a lot of progress and developments in the field of artificial intelligence have been made, it is justified. You can create your custom websites with the power of AI. Leading business corporations such as Google and Microsoft have introduced their AI technology for the public. The grid, which facilitates a simple process for web development and initiates content-based development, is one of the most recent AI implementations. There are no models or codes; all you need to do is provide instructions, and what you want will be laid out.

There are ADI resources that make it possible to equally automate the process of websites. Artificial Design Intelligence (ADI) is an essential component of a website that can create and provide personalized app options for developers. In the future, the way websites are produced will have a big effect.

## IoT

It's a technology that is developing at a faster pace than anticipated. IoT is a future technology that makes life easy and effective for us in management. Web developers are not directly linked to IoT, but will soon be involved in the creation of web applications that are needed for their operations for analysis and data. Few businesses have begun to use Application Programming Interfaces, which are used to connect with IoT by web developers. A connection between applications and physical devices that

would require versatile developers would be involved.

### **Virtual Reality**

The long-awaited dynamic that many believed will take the planet by storm, impacting everything in its course, is virtual reality. For a number of different purposes, augmented reality is intended to shape several different aspects of web design. VR is sculpting a web route which, in several fascinating new areas, is set to impact web architecture. Any MNCs and giants have already introduced augmented reality or online VRs, such as Google and Microsoft.

### **360-Degree Video**

The 360-degree video provides a dramatically improved user experience that contributes to website development and growth. It is guaranteed that the 360 degrees will attract more interest, thereby improving engagement with more views. As if he or she is actually there it enriches the user's experience. The video clips offer a 360-degree perspective of the spherical case, while the camera catches a view of all potential viewpoints for a smooth future experience. The ultimate goal is to include high-tech functionality for end-users.

### **Voice Command**

Another strategy to boost the user interface is voice feedback. In the creation of the website, voice search needs to be taken seriously. Web designers are now seeking to work out how to integrate this into their websites effectively. For those interested in digital marketing, they even ought to be able to record consumer interaction from voice searches. A third of internet users now believe voice searches are important and this pattern will continue to grow. That is why the future is influenced by web growth.

An instance of applying artificial intelligence. Before, this was not so impressive, but this technology only performed terribly. Items with high-quality voice feedback is incredibly pricey. Yet now it is one of the phenomena. Voice instructions are actively incorporated in many web and mobile apps.

### **Motion User Interface**

Motion architecture aims to make it appealing and intuitive for user interfaces. When used appropriately, by conveying a message about your brand, motion will lead your digital product user experience. You should match the animation with the tastes of your customers to add value and boost several facets of their interaction. The Motion UI is a SaaS library used in custom CSS. Web developers may also create attractive templates that allow unique transitions and animations to improve the appearance of the website and build excitement for users



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