web application

Introduction

It's fair to say that apps have changed our lives. From shopping and leisure to work, a few aspects of our lives have been left completely unaffected by the app revolution. We're all very familiar with mobile apps as they've come to play such a prominent role in our everyday lives. But web apps are equally ubiquitous, and every bit as important.

Web apps include a plethora of online services and functions. These include some of the most commonly-used programmes around, including word processes and spreadsheets. Even something as straightforward as filling in a contact form on a website will involve the use of a web app. That's how common and important they are.

Before we cover anything else, we need to ensure we have a thorough understanding of what web apps are, what they do, and how they work. In this guide, we'll aim to shed some light on the matter. We'll start by explaining more about what a web application is, then we'll list some of

the key benefits they offer and discuss how they work. Then we'll touch on how to develop a web app, and elaborate on the agile software development model widely adopted in designing web apps.

Hopefully, by the time you've finished reading, you'll have a thorough understanding of what application programmes are and which ones might be best suited to your business. Clearly, web applications are put to an enormous variety of different uses. What is clear, however, is that they're increasingly vital to keeping businesses up and running.

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What is a web application?

A web application is a computer program that uses a web browser to perform a particular function. It is also called a web app. Web apps are present on many websites. A simple example is a contact form on a website.

A web application is a client-server program. It means that it has a client-side and a server-side. The term "client" here refers to the program the individual uses to run the application. It is part of the client-server environment, where many computers share information. For example, in the case of a database, the client is the program through which the user enters data. The server is the application that stores the information.

Businesses need to exchange information and conclude transactions with their target customers. The Internet can be an excellent and inexpensive channel for that purpose, providing that there is a way to capture and store all the necessary data and show results to users. Thanks to web applications, users can interact with the business using shopping carts or content management systems.

Web apps can be developed for many different reasons and used by companies or individuals. Individuals need it to facilitate their communication or purchase things online. Also, employees can collaborate on projects and work on shared documents with web applications. They can create reports, files, and share information from anywhere and with any device.

Web apps have evolved since their invention. One of the first applications, Perl, a popular server-side scripting language, was developed in 1987. That was before the Internet really became popular outside academic and technology circles. The first web applications were relatively simple and became more sophisticated in the late '90s. Today, they are part of the everyday lives of millions of Americans.

Benefits of web applications

A web application has many benefits, including:

- You don't need to install it on the hard drive, so it doesn't cause space limitations.

- It requires less support and maintenance from the business and lower technical requirements from the user's computer.

- A web application reduces costs for both the end-user and the business.

- Web applications are always up to date because updates are applied centrally.

- All users can access the same version so it eliminates any compatibility issues.

- You can access web applications anywhere with a web browser.

- As long as the browser is compatible, web applications can run on multiple platforms regardless of the operating system or device.

- Web applications discharge the developer of the responsibility of building a client that is compatible with a specific type of computer or a

particular operating system.

- Web applications reduce software piracy in subscription-based web applications.

What are some examples of web applications?

Examples of web applications include webmail, word processors and spreadsheets. Video and photo editing, file conversion, and file scanning are applications too. There are popular email programs like Yahoo and Gmail, and instant messaging services are web applications too.

Web applications allow team members to work together on the same document include Google Docs, Google Slides, Google Sheets and cloud storage. Online sharing of calendars is also a web application.

Web applications evolve to answer the increasing need for mobile web use. Developers create more and more mobile apps that connect to the Internet. An example of this evolution is the Dropbox app or Facebook app you can download and use on your phone or tablet. Other examples are shopping carts, online retail sales, online auctions, wikis and online banking.

Web apps are different than native apps. Native apps are applications developed for a particular platform or specific device. They require installation on that device. Some applications combine the two features. IT specialists call them hybrid applications. Hybrid apps work like web apps, but you install them on your device like a native app. Hybrid apps can also use device-specific resources to their advantage. Native applications can sometimes operate without an internet connection. Web apps and hybrid can't.

How does a web application work?

All you need to access a web app is an internet connection. You use a web browser like Safari, Mozilla Firefox or Google Chrome to connect to your app. There are three elements the web application requires to function: a web server to handle requests from the client, an application server to execute the tasks requested and a database to store the information.

Developers code web applications in two types of languages. A web application generally uses a combination of server-side script and client-side script to function. The server-side script deals with storing and retrieving the information and requires languages like Python or [Java](#). Developers program server-side to create scripts the web app will use. The client-side script

requires languages like **[JavaScript](#)**, **[Cascading Style Sheets (CSS)](#)** and HTML5. These languages rely on the browser to execute the program. They are browser-supported languages. The client-side script deals with the presentation of the information to the user.

Most web apps have short development cycles and can be created by small teams. Some of the apps require server-side processing. They are called "dynamic." Some don't need processing at the server-side and are static.

Here is how a web application works:

1. **The user creates a request to the web server over the Internet through the application's user interface.**

2. **The web server sends this request to the web application server.**

3. **The web application server executes the requested task, then generates the results of the required data.**

4. **The web application server sends those results back to the web server (requested information or processed data).**

5. **The web server carries the requested information to the client (tablet, mobile device or desktop).**

6. **The requested information appears on the user's display.**