**AI Code Assistant**

**What is an AI Code Assistant?**

An AI code assistant is a software tool that uses artificial intelligence to help developers write code faster and more accurately. It does this either by generating code based on prompts or suggesting code for auto-completion as you write code in real time.  Here are just a few things AI code assistants can do:

* Integrate with popular code editors you use, like [**Visual Studio Code**](https://www.elegantthemes.com/blog/wordpress/vs-code-an-in-depth-review-for-wordpress-developers)
* Generate complete code snippets from prompts or code comments
* Auto-complete lines of code you are writing in real-time
* Detect errors, bugs, and security vulnerabilities with your code
* Help comment code so it is easy to refer back to

**Why Use an AI Code Assistant?**

Have you considered supercharging your coding experience with AI coding assistants? These powerful tools revolutionize productivity, enabling faster and more accurate code writing while freeing up time for creativity for the challenging solutions you are working on.

For example, using Amazon CodeWhisper in Visual Studio Code, you can simply write a comment describing the code you want to generate, and it will suggest the entire code snippet for you to use and edit as needed.

And once you start writing or editing the code, the code assistant will continuously suggest code to help you fill in the gaps.

But that’s just the start. They can act as vigilant guardians, catching errors early and saving you debugging headaches. Additionally, AI code assistants elevate code quality, offering expert guidance to write efficient, maintainable, and secure code. And they are one of the best learning tools for exploring languages you are not familiar with.

Using them creates efficiencies at every stage of development, no matter what type of project you are working on. Many of the best development teams have already switched to many of the solutions below.

**Best AI Coding Assistants**

1. **GitHub Copilot**

[**GitHub Copilot**](https://github.com/features/copilot) is one of the best AI coding assistants on the market to date. Designed to help developers craft high-quality code more efficiently, Copilot is driven by the OpenAI Codex language model, which is trained on natural language text and draws insights from a vast pool of public code. This smart tool can suggest entire lines of code, complete functions, write comments, and even assist in debugging and spotting potential security issues.

#### Key Features:

* Works with popular integrated development environments (IDEs)
* Offers Extensions for Visual Studio, Visual Studio Code, Visual Studio, Neovim, and JetBrains.
* Offers code suggestions or entire functions while writing code
* Cycle through multiple auto-complete suggestions with ease
* Helps to identify and fix code errors
* Finds potential security vulnerabilities in your code
* Writes informative comments for better code understanding

By offering more efficient code writing, learning new languages and frameworks, and quicker debugging, GitHub Copilot is set to transform coding practices. It’s an essential tool for developers looking to elevate their coding skills and efficiency. Simply [**install the Copilot extension**](https://docs.github.com/en/copilot/getting-started-with-github-copilot) for Visual Studio Code, sign in with your GitHub account, and let Copilot augment your coding experience.

1. **Amazon CodeWhisperer**

[**Amazon CodeWhisperer**](https://aws.amazon.com/codewhisperer/) is an innovative code generator powered by machine learning, designed to assist developers by offering real-time code recommendations directly within their IDE. It’s trained on a vast dataset of open-source code and can suggest anything from snippets to full functions based on comments and existing code.

The tool supports various programming languages and is compatible with several IDEs, including JetBrains IDEs, Visual Studio Code, AWS Cloud9, and more. CodeWhisperer boosts productivity by automating repetitive tasks and promotes the creation of precise and secure code by providing suggestions based on up-to-date industry standards. It’s a valuable resource for developers aiming to be more efficient, precise, and secure in their coding endeavors.

#### Key Features:

* Real-time code recommendations in various programming languages
* Compatibility with multiple IDEs
* Reference tracking and security scans
* Improvement of code accuracy and security through machine learning-powered suggestions

1. **Divi AI**

[**Divi AI**](https://www.elegantthemes.com/ai/) is the most advanced AI code writer for WordPress websites. While other solutions know how to code using vanilla HTML, CSS, JS (and more), Divi AI is intimately aware of Divi Modules so that it generates code that works perfectly with your website. It can automatically grab the proper selectors of your module and apply the exact CSS of your request to them.

Divi AI also works inside free-form Code Modules to create unique solutions based on only a plain-language prompt. This easily leverages not only CSS but also HTML and Javascript (JS) to create design elements that you don’t have a Divi module for.

#### Key Features:

* Unlimited code generation (plus content and images)
* Generate HTML and JS for Code Modules
* Improve Code quick features for lightning-fast optimizations
* Save code to Divi Cloud Code Snippets
* Module-level or page-level CSS

Divi already comes with the best visual building experience in all of WordPress. But with generative AI code, it is in a class of its own because it lets you customize any element on the page exactly how you want it. Even for those who are fluent with HTML and CSS, more output is well within grasp by leveraging quick actions to clean up your code, make it compatible with more technology, and more.

**Best For:**

This is for all WordPress users who want the most powerful theme plus a generative AI tool that does it all (website content, images, and code). Divi Theme is easily the most affordable theme for WordPress, considering what it brings to the table. Divi AI is uniquely positioned to replace at least one or two of your paid AI tools (since it does AI code, writing, and images), making it the most affordable AI tool for WordPress web designers.

1. **Tabnine**

[**Tabnine**](https://www.tabnine.com/) is an AI-driven coding assistant that boosts productivity by enabling developers to write code quickly and effectively. Compatible with numerous programming languages like Python, Java, JavaScript, PHP, Go, and Rust, TabNine uses a neural network to learn from a vast dataset of open-source code, facilitating accurate code completions even for complex coding situations.

Tabnine helps increase productivity and improves code quality by offering smart completion suggestions and identifying potential errors. It’s an essential tool for developers looking to save time, enhance code quality, and lessen costs.

#### Key Features:

* Intelligent code completions based on a massive dataset of open-source code
* Code linting feature to identify and suggest fixes for potential errors
* Code refactoring assistance to enhance readability, efficiency, and maintainability
* Automatic generation of code documentation for better understanding and collaboration

1. **Replit**

[**Replit**](https://replit.com/), an online coding platform, provides an interactive space for users to code, collaborate, and learn collectively. It’s known for its browser-based IDE that allows co-coding within documents and native hosting.

One of its standout features is [**Ghostwriter**](https://replit.com/site/ghostwriter), an AI-powered code assistant designed to streamline the coding process. Ghostwriter, trained on millions of lines of code, provides contextually relevant code suggestions, making it a valuable tool for programmers at any level. From auto-completing code to debugging, Ghostwriter can help speed up coding, improve code quality, and aid in learning new programming languages. Whether you’re a beginner or an experienced developer, Replit’s Ghostwriter can be a game-changer in your coding journey.

#### Key Features:

* Speed up coding with advanced in-line suggestions
* It spots mistakes and helps you correct them
* It enables you to learn how to code inside the document
* Explains and comments code