

# Generative AI Coding Assistants Market Size, Share & Trends Analysis Report By Function (Debugging & Error Detection, Code Explanation), By Deployment (Cloud, On-premises), By Application, By Region, And Segment Forecasts, 2024 - 2030

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## Abstracts

This report can be delivered to the clients within 3 Business Days

### Market Size & Trends

The global generative AI coding assistants market size was estimated at USD 18.6 million in 2023 and is projected to grow at a CAGR of 25.8% from 2024 to 2030. The growth of generative AI coding assistants is significantly reshaping the software development landscape, improving efficiency across various sectors. Companies implementing these tools are experiencing efficiency improvements as developers leverage AI to automate repetitive tasks, generate code snippets, and streamline documentation processes. This automation accelerates the coding cycle and allows developers to focus on higher-value tasks, leading to faster time-to-market for new functions.

Generative AI code assistants leverage sophisticated AI and machine learning techniques to support developers in their coding activities. Trained on extensive datasets from diverse code repositories, these assistants grasp programming languages, coding patterns, and syntax rules. By learning from this data, they offer intelligent suggestions and generate code snippets tailored to the developer's specific context and needs. When a developer engages with a generative AI code assistant, the assistant evaluates the coding context, including variables, functions, and libraries. It then offers suitable code completions, anticipates the next lines of code, and produces relevant snippets based on the developer's input. In addition, these assistants can suggest ways to optimize

code, refactor, and enhance performance.

## Global Generative AI Coding Assistants Market Report Segmentation

This report forecasts revenue growth at global, regional, and country levels and provides an analysis of the latest industry trends in each of the sub-segments from 2018 to 2030. For this study, Grand View Research has segmented the global generative AI coding assistants market report based on function, deployment, application and region:

By Function Outlook (Revenue, USD Million, 2018 - 2030)

Code Generation & Autocompletion

Debugging and Error Detection

Code Refactoring & Optimization

Code Explanation

Others

By Deployment Outlook (Revenue, USD Million, 2018 - 2030)

Cloud

On-premises

By Application Outlook (Revenue, USD Million, 2018 - 2030)

Individual Developers & Freelancers

Small and Medium-sized Enterprises (SMEs)

Large Enterprises

Educational Institutions & Students

Others

## Regional Outlook (Revenue, USD Million, 2018 - 2030)

North America

U.S.

Canada

Europe

Germany

UK

France

Asia Pacific

China

Japan

India

South Korea

Australia

Latin America

Brazil

Mexic

Middle East and Africa (MEA)

Kingdom of Saudi Arabia

UAE

South Africa

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