

F-11 - GitHub Copilot Chat in GitHub.com

SUMMARY

In this lesson, we explored the integration of **GitHub Copilot Chat** on GitHub.com. Unlike its application within various IDEs like VS Code, GitHub Copilot also offers powerful conversational features on the GitHub platform. By engaging with Copilot directly on GitHub.com, we can enhance our development workflow with assistive or immersive modes. Assistive mode allows us to use a chat box for interaction, while immersive mode utilizes the full screen to focus solely on Copilot.

To begin using Copilot, we access the Copilot button displayed on each GitHub page. We demonstrated how to ask targeted questions related to specific repositories, such as "How are the crypto prices retrieved?" in a Crypto Prices repository. Copilot analyzes the repository content to provide answers, making it invaluable for handling large code bases by finding specific data without manual searches.

Additionally, Copilot Chat allows referencing code from different repositories via an attach icon, letting us query across multiple code bases. This feature extends to broader programming support similar to ChatGPT, making Copilot versatile for both context-specific and general coding questions.

Furthermore, we touched upon integrating extensions into Copilot Chat to enhance its capabilities. Extensions like Stack Overflow and diagramming tools can be added to directly access external resources within GitHub Copilot Chat, facilitating a seamless development experience.

WHAT WE LEARNED

- Enabling GitHub Copilot Chat on GitHub.com
- Differentiating between assistive and immersive modes
- Asking context-specific questions within repositories
- Using the attach icon for cross-repository queries
- Utilizing Copilot Chat similarly to ChatGPT for coding questions
- Introducing extensions to enhance Copilot functionality

HOW WE CAN APPLY IT

- **Large Codebase Navigation:** Efficiently querying massive code bases without manually sifting through each file.

- **Cross-Repository Queries:** Accessing and referencing multiple repositories simultaneously for comprehensive analysis.
- **General Coding Assistance:** Leveraging Copilot Chat for general programming inquiries or debugging.
- **Customizable Workflow:** Integrating extensions to tailor Copilot Chat functions for specific development needs.

TIPS AND TRICKS

- **Use the Attach Icon:** Use the attach icon to refer to repositories not currently open for broader support.
- **Leverage Extensions:** Enhance Copilot's capabilities by adding relevant extensions such as Stack Overflow.
- **Assistive Mode for Quick Tasks:** Use assistive mode for quick questions without disrupting your main workflow.
- **Immersive Mode for Focused Work:** Use immersive mode when you want to concentrate solely on Copilot's analysis.

EXAMPLES

Here's an example of how to retrieve information from a repository using GitHub Copilot Chat:

```
# Assume we want to find out which API a function is using in a file named apt.py

# In the Copilot chat, ask:
"How are the crypto prices retrieved? What API is being used?"

# Copilot provides:
"The crypto prices in this repository are retrieved using the CoinGecko API. Specifically, the apt.py file contains a function, fetch_crypto_prices, that makes a GET request to the CoinGecko API endpoint."
```

Example of utilizing extensions:

```
# Integrate Stack Overflow into Copilot Chat
# Ask complex coding questions directly from your GitHub interface
# This eliminates the need to switch context and open new browsers
```

By using GitHub Copilot Chat at GitHub.com, developers gain an advanced tool for streamlining code inspection, enhancing productivity, and harnessing powerful AI to solve queries efficiently.