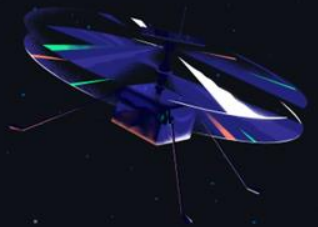




GitHub Copilot Training

C/C++ Focus

Andrew Scoppa



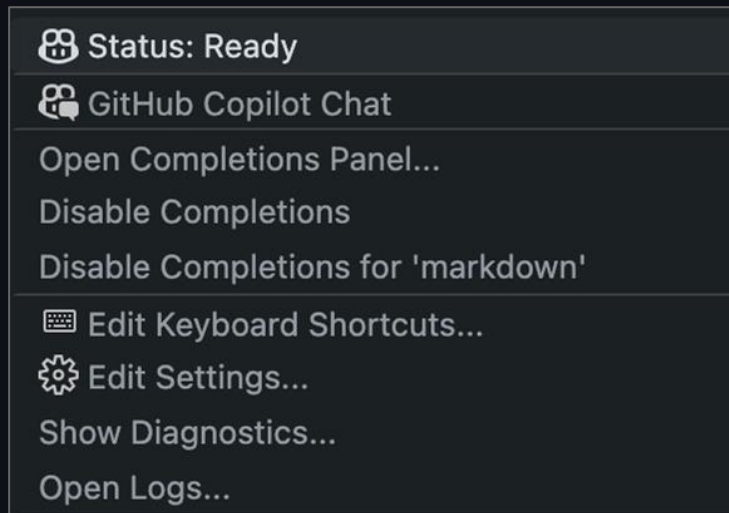


GitHub Copilot Fundamentals



VS Code Settings

Configuration Options



[Configuring GitHub Copilot in your environment](#)

Let's start with a high-level overview of GitHub Copilot

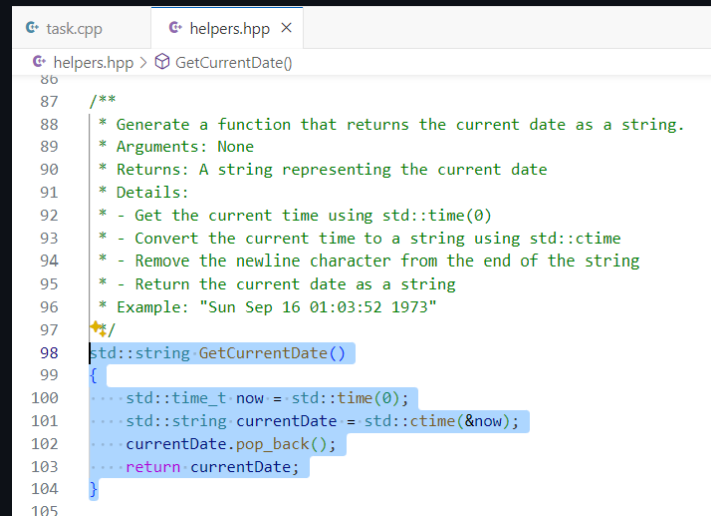
- GitHub Copilot is there to enhance daily work
 - Like a smart assistant or mentor by your side
- Draws context from text & code in open tabs
- Powered by OpenAI
 - Copilot uses a transformative model
 - Think of something like Google Translate
- Trained on large datasets to ensure accuracy
 - It even can help with HTML and markdown!
- Available as an extension to IDEs and editors



Providing Context

To help Copilot generate accurate suggestions:

- Add a top-level comment block describing the purpose of the file
- Provide detailed comment block for operations
- Have related content open in other tabs



```
task.cpp  helpers.hpp x
helpers.hpp > GetCurrentDate()
86
87 /**
88  * Generate a function that returns the current date as a string.
89  * Arguments: None
90  * Returns: A string representing the current date
91  * Details:
92  * - Get the current time using std::time(0)
93  * - Convert the current time to a string using std::ctime
94  * - Remove the newline character from the end of the string
95  * - Return the current date as a string
96  * Example: "Sun Sep 16 01:03:52 1973"
97  */
98 std::string GetCurrentDate()
99 {
100     std::time_t now = std::time(0);
101     std::string currentDate = std::ctime(&now);
102     currentDate.pop_back();
103     return currentDate;
104 }
105
```



Copilot vs Copilot Chat

Copilot

Direct Code Writing

Seamless IDE Integration

Solo Development

Copilot Chat

In-Depth Interactive Assistance

Learning & Teaching

Collaborative Scenarios



Data flow through the Copilot ecosystem



PII
Toxicity
Code classifier
Code quality
Duplicate detection



Demos



Thank you

