

## Explain Code with the Visual Studio Code Integration

Use the OverflowAI Visual Studio Code Integration to explain, optimize, and debug code.

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This documentation is for **Stack Overflow Enterprise**. Free, Basic, and Business users can access their documentation [here](#). [Find your plan](#).

## Overview

*This module is included in the [OverflowAI](#) add-on. If you're ready to elevate and enhance your team's capabilities with [OverflowAI](#), reach out to our sales team today.*

The Explain Code module of the Stack Overflow for Microsoft Visual Studio Code (VSC) extension can help you understand small code snippets—or even entire blocks of code—directly in your IDE. Explain Code accesses data from the internet (including the vast repository of questions and answers at [www.stackoverflow.com](http://www.stackoverflow.com)) to provide explanations, insights, and solutions related to the code you're working on.

The Explain Code module leverages many technologies to give you the answers you need: code analysis, intelligent query generation, Stack Overflow's API, language processing, machine learning models, IDE integration, and more.

**NOTE:** Before you can use the OverflowAI Explain Code module, you must first install the Stack Overflow for Teams Visual Studio Code extension by following [these instructions](#). Your Stack Overflow site must also have [Unified Search](#) enabled.

## Use the Explain Code module

First, open your VSC project. Depending on your extension version and type of code you've selected, you may see **Explain** links above definitions, classes, functions, methods, and other large code structures.

```
2 import requests
3 URL = "https://support-teams.dev.stackenter
4 APIKEY = "js5d9k1kjWZFYX55dd1YcA("
5
6 Explain
7
8 def get_questions():
9     params = {
10         'page': 1,
11         'pagesize': 100
12     }
13     headers = {
```

To have the Stack Overflow VSC extension explain any of these blocks, click **Explain**.

You can also select a block of code for the extension to explain. After you select a block of code, look for a **yellow light bulb** button.

```
30
31 |
32 foreach ($files as $fn) {
33     # SCAN FOR PRODUCT, SET TO TRUE
34     $file_path_parts = explode('/', $fn);
35
36     if ($file_path_parts[0] == '.')
37         array_shift($file_path_parts); # D
38
39     $file_name = array_pop($file_path_parts);
40     $parts = explode('.', $file_name);
41     $file_suffix = array_pop($parts);
```

Click the **yellow light bulb** and select **Explain** from the "More Actions..." menu. You can also bring up the "More Actions..." menu by pressing CTRL-. or OPTION-. (period) on your keyboard. Finally, you can use VSC's command palette to access the Explain Code module. Select the code and right-click on it. Select **Command Palette**, then enter "ide-ext.explainCode".

## View the code explanation

After you start the code explanation process, the IDE extension searches Stack Overflow for relevant discussions, answers, and explanations related to the code. It then uses AI to generate a concise, accurate explanation of the code. You'll see the code explanation in VSC's left-hand column.

Sometimes you'll see the extension's comments after your source code block, as below.

< Back to home

```
$platform = 'intercom'; # B_B ON FRESHDESK IS HANDLED LATER, IN XML PRO
break;
case 'enterprise':
    $platform = 'freshdesk';
break;
case '!intercom':
```

Stack Overflow

This code processes a list of file names stored in an array called `$files`.

For each file name `$fn` in the `$files` array, the code performs the following steps:

1. It splits the file path into an array using the forward slash (`/`) as the delimiter. This is done using the `explode()` function, which takes the delimiter and the string as arguments. The resulting array is stored in the variable `$file_path_parts`.
2. It extracts the file name from the array by removing the last element, using the `array_pop()` function. The extracted file name is stored in the variable `$file_name`.

Other times you'll see the extension's comments inside the source code block, after the code.

How can I optimize the code snippet:

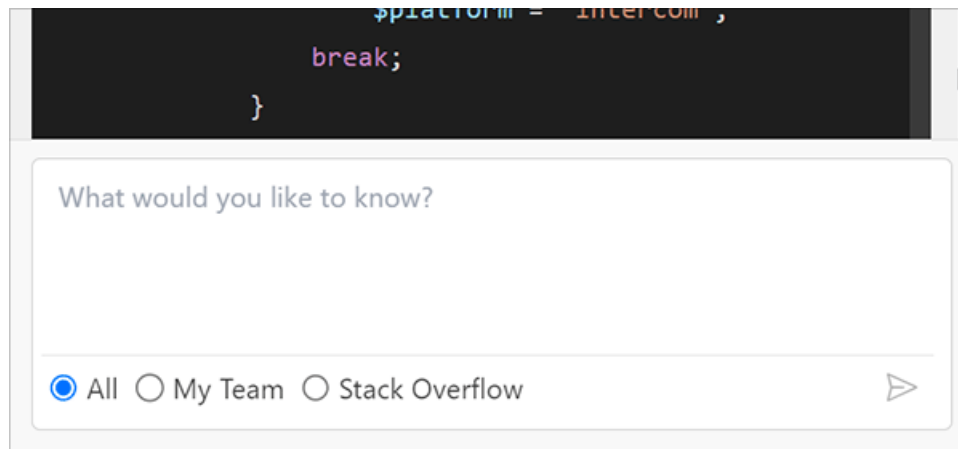
```
im.thumbnail(proof_size)
im.save(proof_path + proof_file, "JPEG", quality=proof_quality)
except OSError:
    print("ERROR: can't create thumbnail for", file)
count+=1
***
```

The code snippet can be optimized by saving the file extensions in a tuple and

Here's an optimized version of the code snippet:

```
python
extensions = ('.jpg', '.jpeg', '.tif', '.nef')
raw_files_set = set(raw_files)
proof_files_set = set(proof_files)
```

The Explain Code results area is a running transcript, allowing you to scroll back to view previous interactions with the AI. You can also enter additional questions and commands into the "What would you like to know?" box at the bottom of the transcript. Since the Explain Code function relies on data from the whole internet, be sure to leave the chat box's scope setting at **All** for any follow-up questions.



If the result of your AI search is an answer that will benefit your community, the Draft Article module makes it easy to create a new Stack Overflow for Teams article based on the conversation ([learn more](#)).

## When to use the Explain Code function

### Learning

If you're learning a new programming language or concept, use the Explain Code module on snippets of code to reinforce your understanding and provide explanations.

### Understanding a new library or framework

When you're integrating a new library or framework into your project and you're not sure how certain functions or methods work, use the Explain Code module to provide examples and explanations.

Example prompt: *Give me examples of the SymPy library in Python.*

### Optimization

When you're looking to optimize a piece of code for performance or efficiency, use the Explain Code module to provide insights into best practices and alternative approaches from other developers.

Example prompt: *Optimize this code.*

### Code review

If you come across a piece of code that seems unfamiliar or overly complex during a code review, use the Explain Code module to help you understand its purpose and functionality without interrupting the flow of your review.

### Debugging

If you encounter an error or unexpected behavior in your code, highlight the problematic code and use the Explain Code module to find similar issues and relevant solutions. You can also use the Stack Overflow Error Code Search module.

Example prompt: *Debug this code.*

**NOTE:** *While the Explain Code module can be a time-saver, carefully evaluate all suggestions and solutions to ensure they fit with your specific project requirements and coding standards.*

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If you need further support or have questions, contact your site administrator.