

1.2 Visual Studio Code




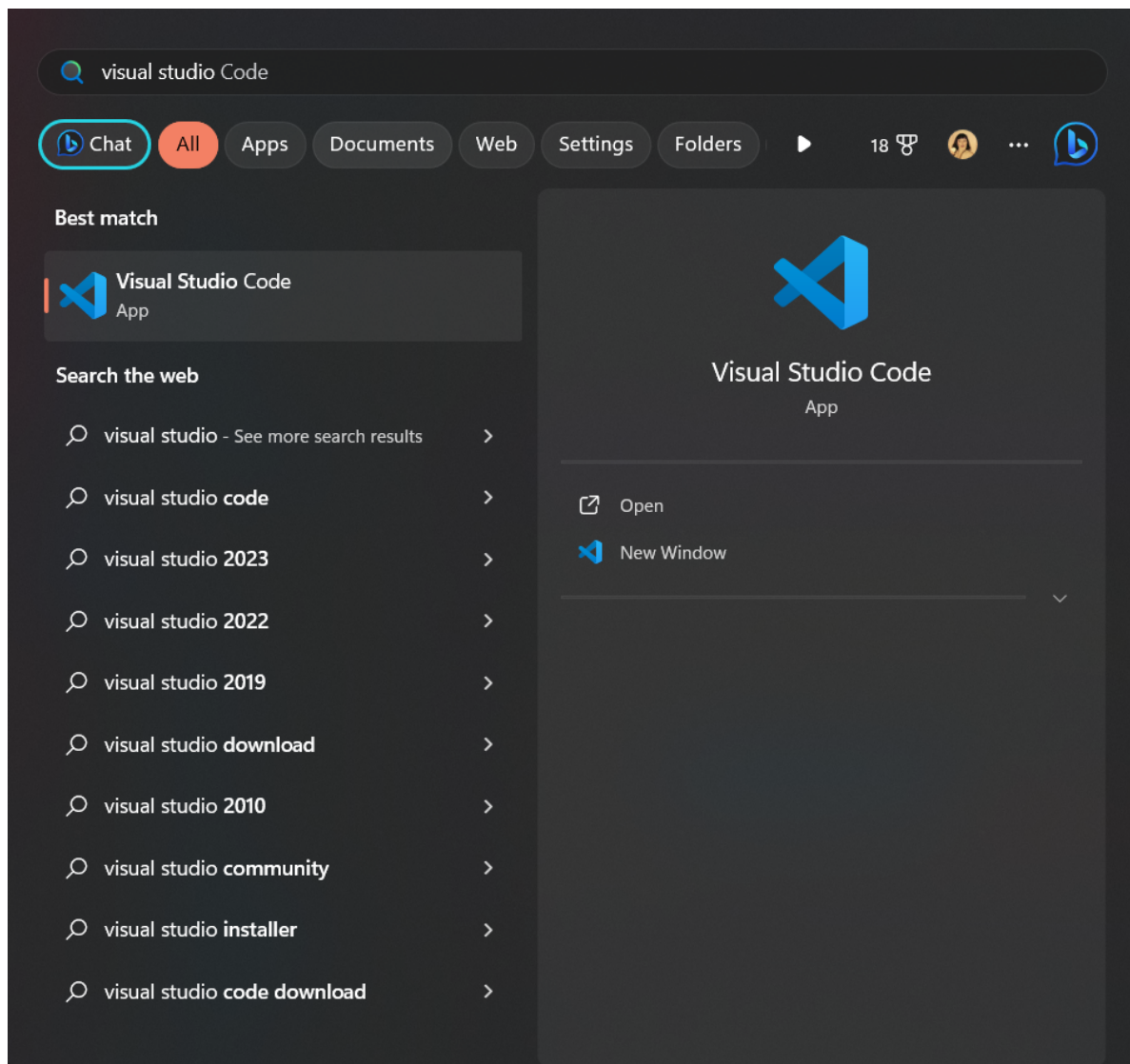
crocheting with spaghetti - answered by Christian Jay Salvino

Need to Know

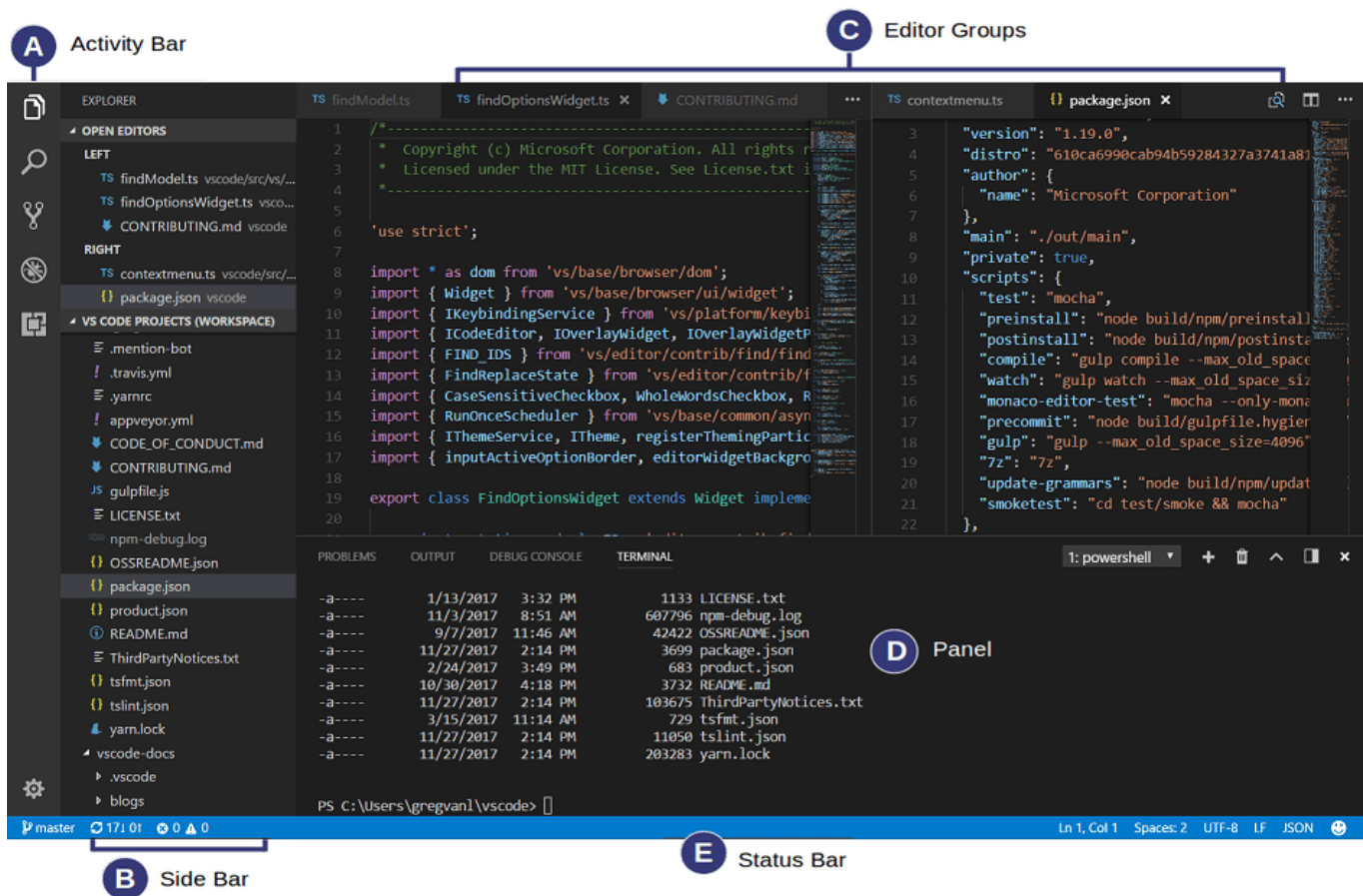
- Visual Studio Code is a free and open-source code editor that is used by programmers to write and edit code.
-
- Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux.
 - At its heart, Visual Studio Code is a code editor.
 - Like many other code editors, VS Code adopts a common user interface and layout of an explorer on the left, showing all of the files and folders you have access to, and an editor on the right, showing the content of the files you have opened.

Installation

1. Download the [Visual Studio Code installer](https://go.microsoft.com/fwlink/?LinkID=534107)  (<https://go.microsoft.com/fwlink/?LinkID=534107>) for Windows.
2. Once it is downloaded, run the installer (VSCodeUserSetup-[version].exe). Click on Next whenever prompted.
3. After the installation, you can access Visual Studio Code by looking it up via Windows Search.



Basic Layout

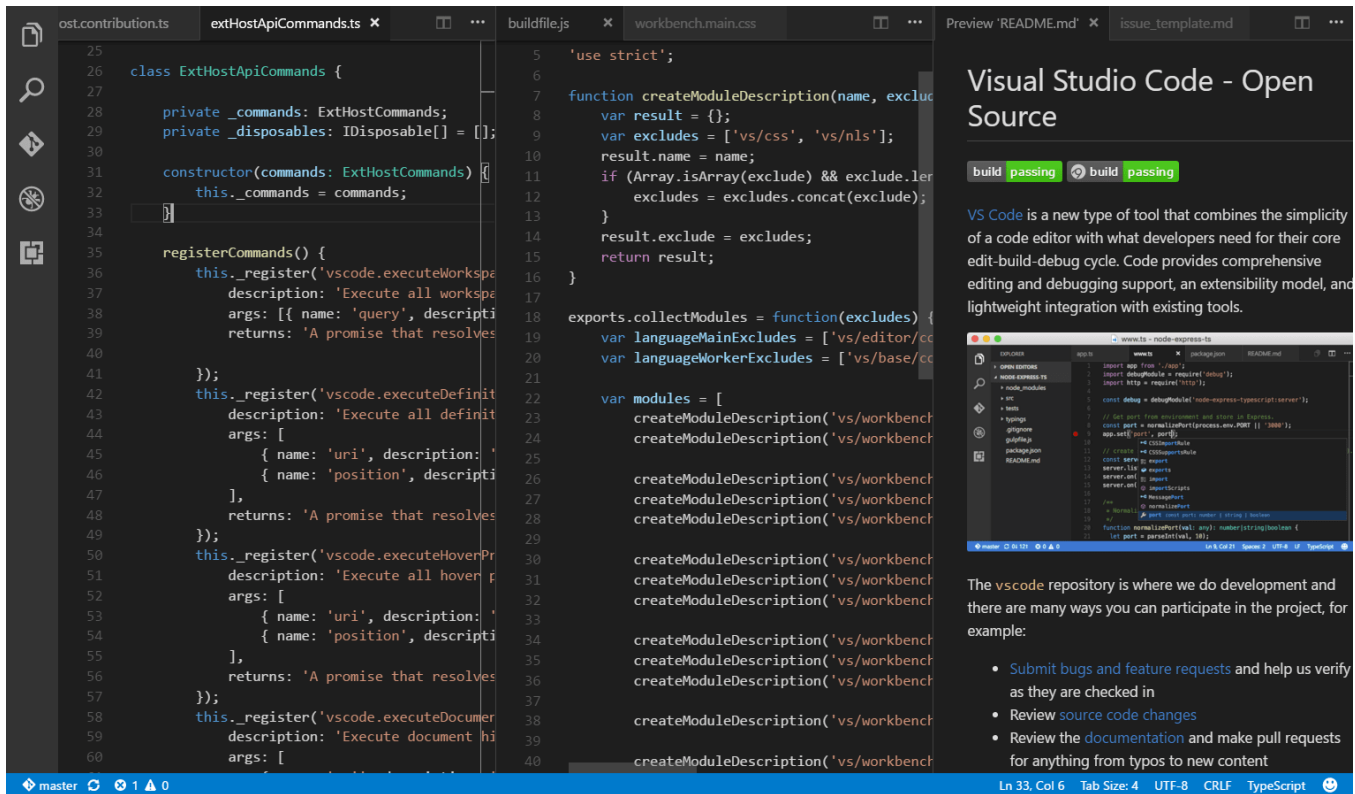


- VS Code comes with a simple and intuitive layout that maximizes the space provided for the editor while leaving ample room to browse and access the full context of your folder or project.
- The UI is divided into five areas:
 - **Editor.** The main area to edit your files. You can open as many editors as you like side by side vertically and horizontally.
 - **Side Bar.** Contains different views like the Explorer to assist you while working on your project.
 - **Status Bar.** Information about the opened project and the files you edit.
 - **Activity Bar.** Located on the far left-hand side, this lets you switch between views and gives you additional context-specific indicators, like the number of outgoing changes when Git is enabled.
 - **Panels.** You can display different panels below the editor region for output or debug information, errors and warnings, or an integrated terminal. Panel can also be moved to the right for more vertical space.
- Each time you start VS Code, it opens up in the same state it was in when you last closed it. The folder, layout, and opened files are preserved.
- Open files in each editor are displayed with tabbed headers (tabs) at the top of the editor region.

Editing

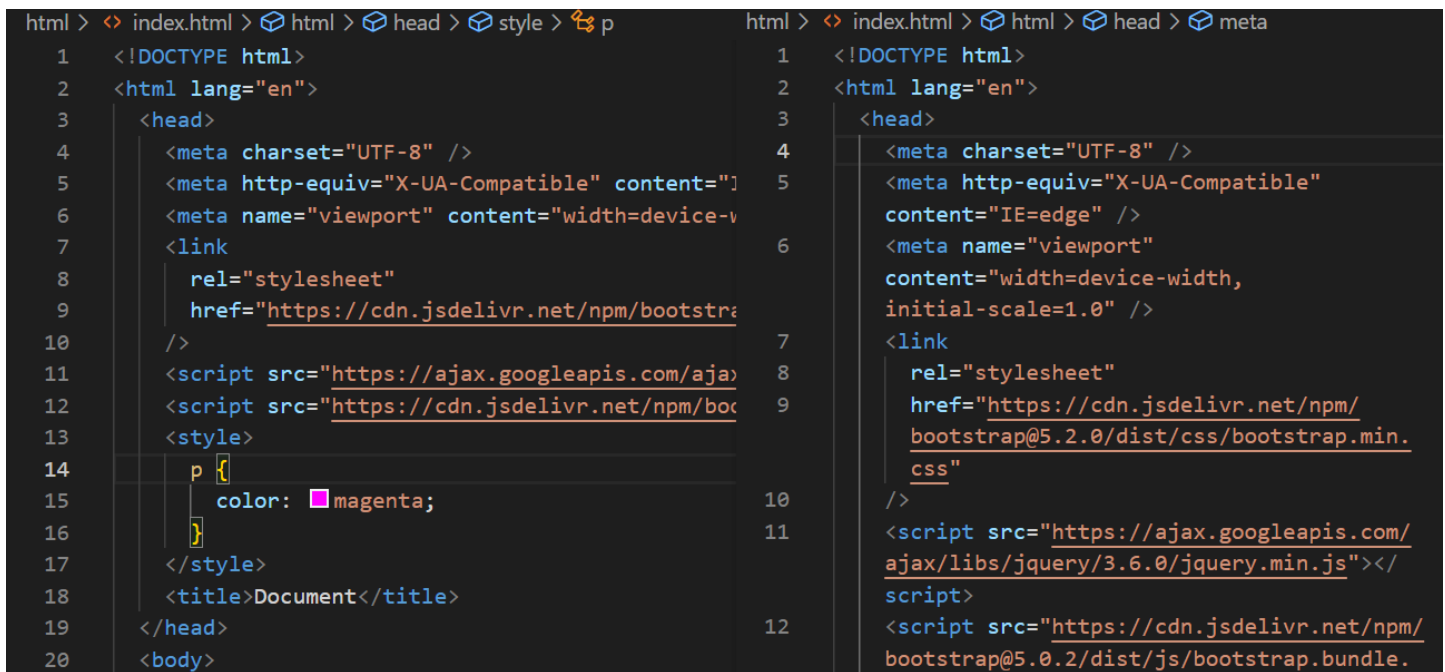
- You can open as many editors as you like side by side vertically and horizontally.

- If you already have one editor open, there are multiple ways of opening another editor to the side of the existing one:
 - Alt click on a file in the Explorer.
 - Ctrl+ \ to split the active editor into two.
 - **Open to the Side** (Ctrl + Enter) from the Explorer context menu on a file.
 - Click the **Split Editor** button in the upper right of an editor.
 - Drag and drop a file to any side of the editor region.
 - Ctrl + Enter (macOS: Cmd + Enter) in the **Quick Open** (Ctrl + P) file list.



- Whenever you open another file, the editor that is active will display the content of that file.
- So if you have two editors side by side and you want to open file **foo.cs** into the right-hand editor, make sure that editor is active (by clicking inside it) before opening file **foo.cs**.

Word wrapping



```
html > <> index.html > html > head > style > p
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <meta http-equiv="X-UA-Compatible" content="IE=edge" />
6     <meta name="viewport" content="width=device-width, initial-scale=1.0" />
7     <link
8       rel="stylesheet"
9       href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
10    />
11    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
12    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.js" />
13  </head>
14  <body>
15    <p>
16      color: magenta;
17    </p>
18  </body>
19 </html>
```

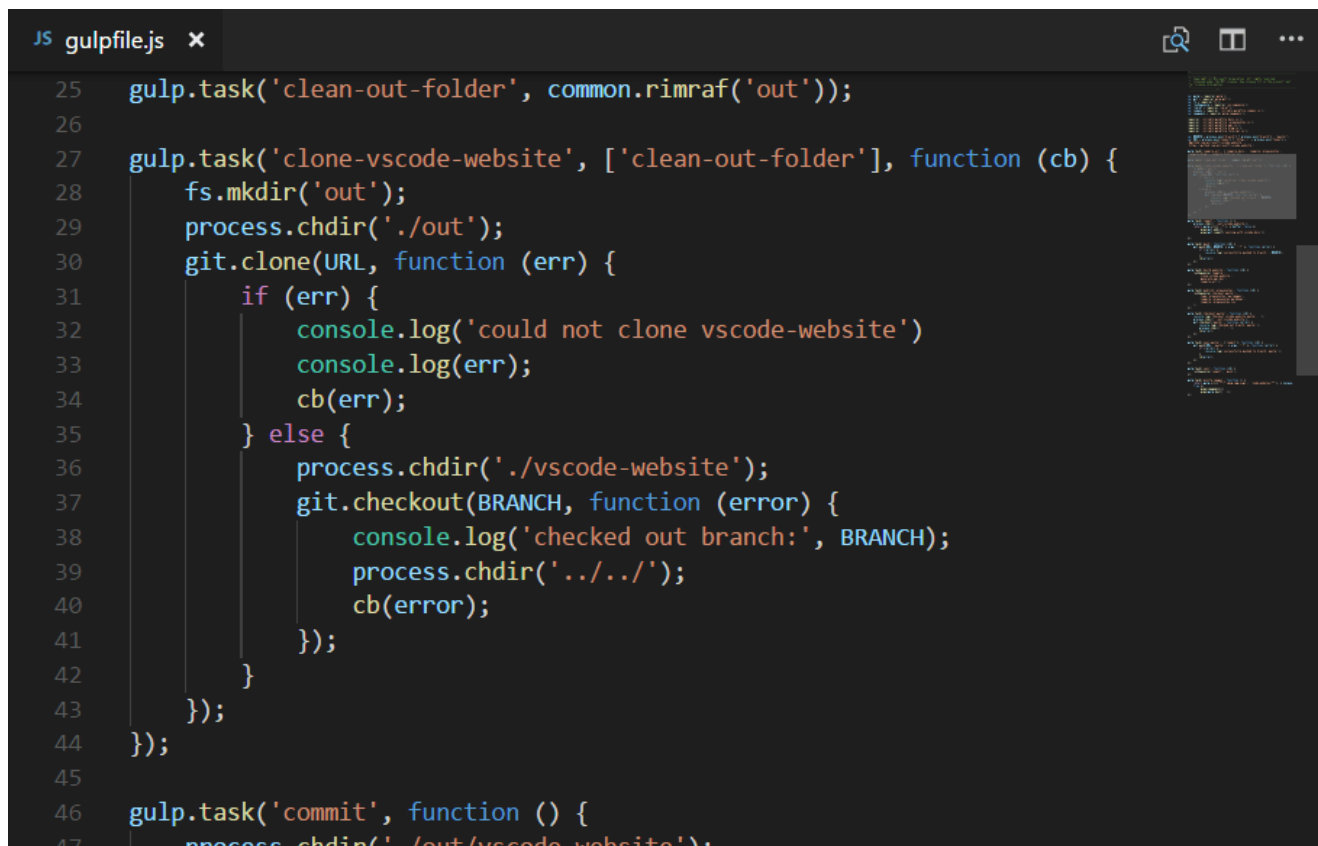
```
html > <> index.html > html > head > meta
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <meta http-equiv="X-UA-Compatible"
6       content="IE=edge" />
7     <meta name="viewport"
8       content="width=device-width,
9       initial-scale=1.0" />
10    <link
11      rel="stylesheet"
12      href="https://cdn.jsdelivr.net/npm/
13        bootstrap@5.2.0/dist/css/bootstrap.min.
14        css"
15    />
16    <script src="https://ajax.googleapis.com/
17      ajax/libs/jquery/3.6.0/jquery.min.js"></
18      script>
19    <script src="https://cdn.jsdelivr.net/npm/
20      bootstrap@5.0.2/dist/js/bootstrap.bundle.
```

Code before and after text wrapping

- Word wrapping refers to the text editor's capability to automatically wrap long lines of code or text within the visible area of the editor, enhancing readability without requiring horizontal scrolling.
- To turn on word wrapping, select View > Word Wrap or press ALT + Z.

Minimap

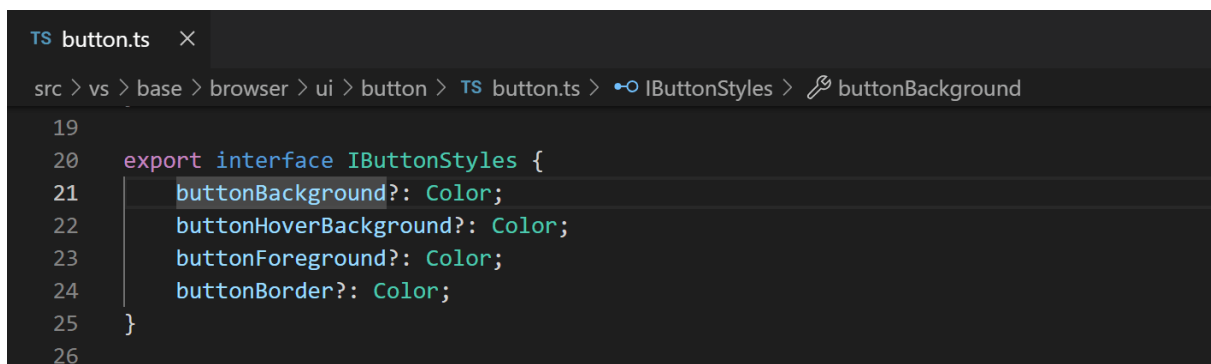
- A Minimap (code outline) gives you a high-level overview of your source code, which is useful for quick navigation and code understanding.
- A file's minimap is shown on the right side of the editor. You can click or drag the shaded area to quickly jump to different sections of your file.
- The image below also shows indentation guides (vertical lines) which help you quickly see matching indent levels.

A screenshot of the Visual Studio Code editor interface. The top of the window shows a tab for 'gulpfile.js'. Below the tab is a breadcrumb navigation bar that reads 'src > vs > base > browser > ui > button > TS button.ts > IButtonStyles > buttonBackground'. The main editor area displays the contents of 'gulpfile.js', which includes Gulp tasks for cleaning a folder, cloning a website, and committing changes. The code is written in JavaScript and uses the gulp plugin for task automation. The editor has a dark theme and a sidebar on the right showing a file explorer.

```
25 gulp.task('clean-out-folder', common.rimraf('out'));
26
27 gulp.task('clone-vscode-website', ['clean-out-folder'], function (cb) {
28   fs.mkdir('out');
29   process.chdir('./out');
30   git.clone(URL, function (err) {
31     if (err) {
32       console.log('could not clone vscode-website')
33       console.log(err);
34       cb(err);
35     } else {
36       process.chdir('./vscode-website');
37       git.checkout(BRANCH, function (error) {
38         console.log('checked out branch:', BRANCH);
39         process.chdir('../..');
40         cb(error);
41       });
42     }
43   });
44 });
45
46 gulp.task('commit', function () {
47   process.chdir('../out/vscode-website');
```

Breadcrumbs

- The editor has a navigation bar above its contents called Breadcrumbs.
- It shows the current location and allows you to quickly navigate between folders, files, and symbols.

A screenshot of the Visual Studio Code editor interface. The top of the window shows a tab for 'button.ts'. Below the tab is a breadcrumb navigation bar that reads 'src > vs > base > browser > ui > button > TS button.ts > IButtonStyles > buttonBackground'. The main editor area displays the contents of 'button.ts', which includes an interface definition for 'IButtonStyles' with properties like 'buttonBackground?', 'buttonHoverBackground?', 'buttonForeground?', and 'buttonBorder?'. The editor has a dark theme and a sidebar on the right showing a file explorer.

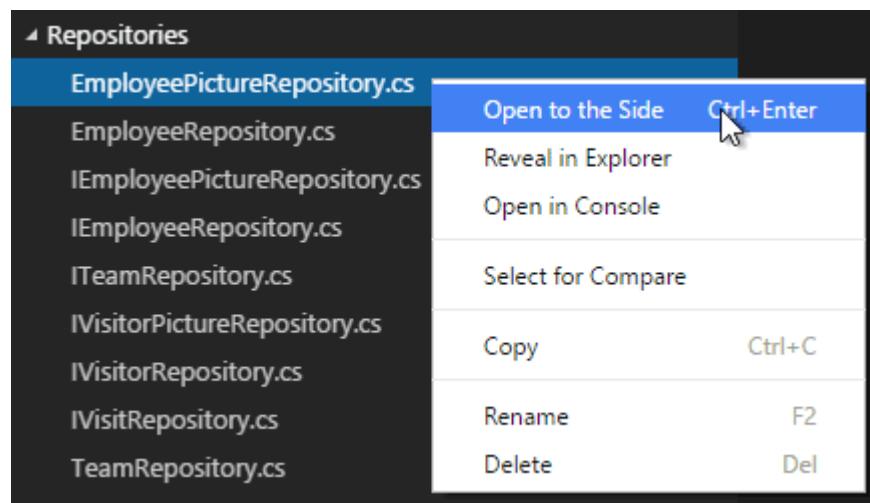
```
19
20 export interface IButtonStyles {
21   buttonBackground?: Color;
22   buttonHoverBackground?: Color;
23   buttonForeground?: Color;
24   buttonBorder?: Color;
25 }
26
```

- Breadcrumbs always show the file path and if the current file type has language support for symbols, the symbol path up to the cursor position.

Explorer

- The Explorer is used to browse, open, and manage all of the files and folders in your project.
- VS Code is file and folder based - you can get started immediately by opening a file or folder in VS Code.
- After opening a folder in VS Code, the contents of the folder are shown in the Explorer. You can do many things from here:

- Create, delete, and rename files and folders.
- Move files and folders with drag and drop.
- Use the context menu to explore all options.



Multi-selection

- You can select multiple files in the **File Explorer** and **OPEN EDITORS** view to run actions (Delete, Drag and Drop, Open to the Side) on multiple items.
- Use the Ctrl/Cmd key with click to select individual files and Shift + click to select a range.
- If you select two items, you can now use the context menu **Compare Selected** command to quickly diff two files.

Advanced tree navigation

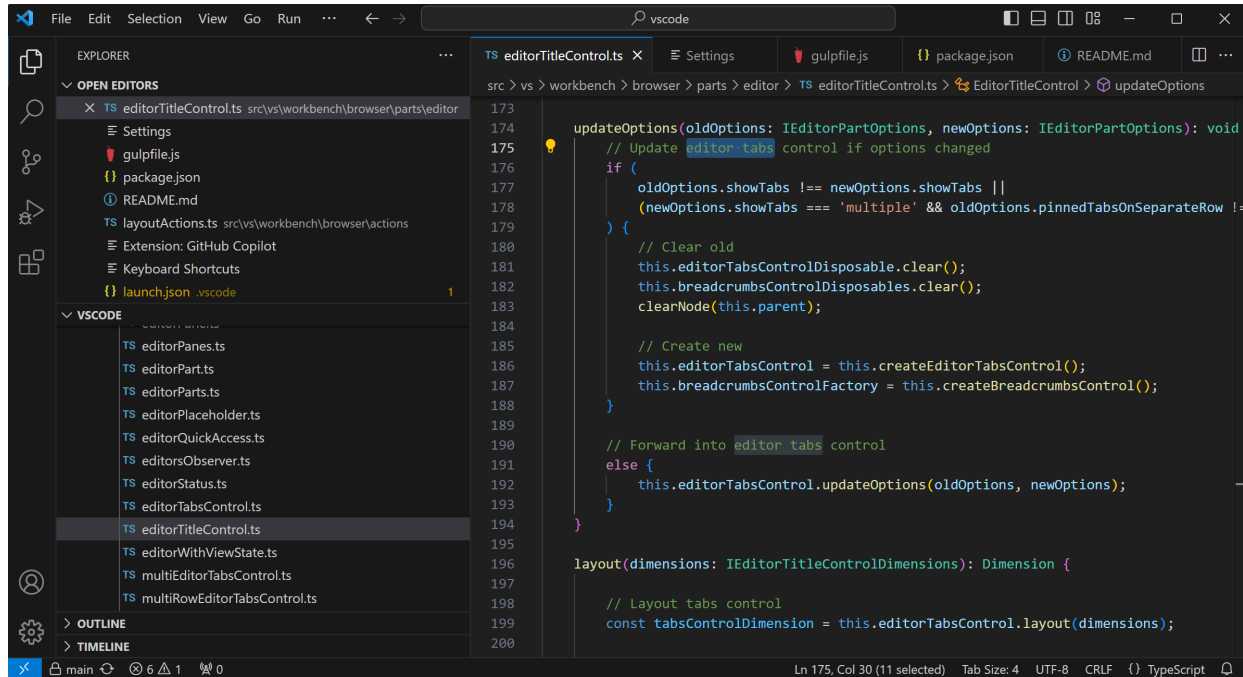
- You can filter the currently visible files in the **File Explorer**.
- With the focus on the **File Explorer**, press Ctrl/Cmd+F to open the tree Find control and type part of the file name you want to match.
- You will see a Find control in the top-right of the **File Explorer** showing what you have typed and matching file names will be highlighted.
- Pressing the **Filter** button will toggle between the two modes: highlighting and filtering.
- Pressing DownArrow will let you focus the first matched element and jump between matching elements.

Views



- The File Explorer is just one of the Views available in VS Code. There are also Views for:
 - **Search** - Provides global search and replace across your open folder.
 - **Source Control** - VS Code includes Git source control by default.
 - **Run** - VS Code's Run and Debug View displays variables, call stacks, and breakpoints.
 - **Extensions** - Install and manage your extensions within VS Code.
 - **Custom views** - Views contributed by extensions.

Tabs

- Visual Studio Code shows open items with Tabs (tabbed headings) in the title area above the editor.
- When you open a file, a new Tab is added for that file.
- Tabs let you quickly navigate between items and you can Drag and Drop Tabs to reorder them.



Additional Material

- **References**
 - Visual Studio Code
- **Learn more:**
 - [Visual Studio Code Tips and Tricks](https://code.visualstudio.com/docs/getstarted/tips-and-tricks)  <https://code.visualstudio.com/docs/getstarted/tips-and-tricks>
 - [Typing Games](https://www.typing.com/student/games)  <https://www.typing.com/student/games>
- **Recommended watch**

VS Code in 100 Seconds

