# Contributing

?? First off, thanks for taking the time to contribute! ??

When contributing to this project, please first discuss the changes you wish to make via an issue before making changes.

Please note the [Code of Conduct](CODE\_OF\_CONDUCT.md) document, please follow it in all your interactions with this project.

## Your First Code Contribution

Unsure where to begin contributing? You can start by looking through the [`help-wanted`](https://github.com/eamodio/vscode-gitlens/labels/help%20wanted) issues.

### Getting the code

```

git clone https://github.com/eamodio/vscode-gitlens.git

```

Prerequisites

- [Git](https://git-scm.com/)

- [NodeJS](https://nodejs.org/), `>= 10.11.0`

- [yarn](https://yarnpkg.com/), `>= 1.17.3`

### Dependencies

From a terminal, where you have cloned the repository, execute the following command to install the required dependencies:

```

yarn --frozen-lockfile

```

### Build

From a terminal, where you have cloned the repository, execute the following command to re-build the project from scratch:

```

yarn run rebuild

```

? \*\*NOTE!\*\* This will run a complete rebuild of the project.

Or to just run a quick build, use:

```

yarn run build

```

### Watch

During development you can use a watcher to make builds on changes quick and easy. From a terminal, where you have cloned the repository, execute the following command:

```

yarn run watch

```

Or use the provided `watch` task in VS Code, execute the following from the command palette (be sure there is no `>` at the start):

```

task watch

```

This will first do an initial full build and then watch for file changes, compiling those changes incrementally, enabling a fast, iterative coding experience.

? \*\*Tip!\*\* You can press <kbd>CMD+SHIFT+B</kbd> (<kbd>CTRL+SHIFT+B</kbd> on Windows, Linux) to start the watch task.

? \*\*Tip!\*\* You don't need to stop and restart the development version of Code after each change. You can just execute `Reload Window` from the command palette.

### Formatting

This project uses [prettier](https://prettier.io/) for code formatting. You can run prettier across the code by calling `yarn run pretty` from a terminal.

To format the code as you make changes you can install the [Prettier - Code formatter](https://marketplace.visualstudio.com/items/esbenp.prettier-vscode) extension.

Add the following to your User Settings to run prettier:

```

"editor.formatOnSave": true,

```

### Linting

This project uses [ESLint](https://eslint.org/) for code linting. You can run ESLint across the code by calling `yarn run lint` from a terminal. Warnings from ESLint show up in the `Errors and Warnings` quick box and you can navigate to them from inside VS Code.

To lint the code as you make changes you can install the [ESLint](https://marketplace.visualstudio.com/items?itemName=dbaeumer.vscode-eslint) extension.

### Bundling

To generate a production bundle (without packaging) run the following from a terminal:

```

yarn run bundle

```

To generate a VSIX (installation package) run the following from a terminal:

```

yarn run pack

```

### Debugging

#### Using VS Code

1. Open the `vscode-gitlens` folder

2. Ensure the required [dependencies](#dependencies) are installed

3. Start the [`watch`](#watch) task

4. Choose the `Launch GitLens` launch configuration from the launch dropdown in the Debug viewlet and press `F5`.

## Submitting a Pull Request

Please follow all the instructions in the [PR template](.github/PULL\_REQUEST\_TEMPLATE.md).