# How to contribute

One of the easiest ways to contribute is to participate in discussions on GitHub issues. You can also contribute by submitting pull requests with code changes.

## General feedback and discussions?

Start a discussion on the [repository issue tracker](https://github.com/dotnet/aspnetcore/issues).

## Bugs and feature requests?

For non-security related bugs, log a new issue in the appropriate GitHub repository. Here are some of the most common repositories:

\* [Docs](https://github.com/aspnet/Docs)

\* [AspNetCore](https://github.com/dotnet/aspnetcore)

\* [Entity Framework Core](https://github.com/dotnet/efcore)

\* [Tooling](https://github.com/aspnet/Tooling)

\* [Extensions](https://github.com/dotnet/extensions)

Or browse the full list of repositories in the [aspnet](https://github.com/aspnet/) organization.

## Reporting security issues and bugs

Security issues and bugs should be reported privately, via email, to the Microsoft Security Response Center (MSRC) secure@microsoft.com. You should receive a response within 24 hours. If for some reason you do not, please follow up via email to ensure we received your original message. Further information, including the MSRC PGP key, can be found in the [Security TechCenter](https://technet.microsoft.com/en-us/security/ff852094.aspx).

## Other discussions

Our team members also monitor several other discussion forums:

\* [ASP.NET Core forum](https://forums.asp.net/1255.aspx/1?ASP+NET+5)

\* [Stack Overflow](https://stackoverflow.com/) with the [`asp.net-core`](https://stackoverflow.com/questions/tagged/asp.net-core), [`asp.net-core-mvc`](https://stackoverflow.com/questions/tagged/asp.net-core-mvc), or [`entity-framework-core`](https://stackoverflow.com/questions/tagged/entity-framework-core) tags.

## Contributing code and content

We accept fixes and features! Here are some resources to help you get started on how to contribute code or new content.

\* Look at the [Contributor documentation](/docs/) to get started on building the source code on your own.

\* ["Help wanted" issues](https://github.com/dotnet/aspnetcore/labels/help%20wanted) - these issues are up for grabs. Comment on an issue if you want to create a fix.

\* ["Good first issue" issues](https://github.com/dotnet/aspnetcore/labels/good%20first%20issue) - we think these are a good for newcomers.

### Identifying the scale

If you would like to contribute to one of our repositories, first identify the scale of what you would like to contribute. If it is small (grammar/spelling or a bug fix) feel free to start working on a fix. If you are submitting a feature or substantial code contribution, please discuss it with the team and ensure it follows the product roadmap. You might also read these two blogs posts on contributing code: [Open Source Contribution Etiquette](http://tirania.org/blog/archive/2010/Dec-31.html) by Miguel de Icaza and [Don't "Push" Your Pull Requests](https://www.igvita.com/2011/12/19/dont-push-your-pull-requests/) by Ilya Grigorik. All code submissions will be rigorously reviewed and tested by the ASP.NET and Entity Framework teams, and only those that meet an extremely high bar for both quality and design/roadmap appropriateness will be merged into the source.

### Submitting a pull request

You will need to sign a [Contributor License Agreement](https://cla.dotnetfoundation.org/) when submitting your pull request. To complete the Contributor License Agreement (CLA), you will need to follow the instructions provided by the CLA bot when you send the pull request. This needs to only be done once for any .NET Foundation OSS project.

If you don't know what a pull request is read this article: https://help.github.com/articles/using-pull-requests. Make sure the repository can build and all tests pass. Familiarize yourself with the project workflow and our coding conventions. The coding, style, and general engineering guidelines are published on the [Engineering guidelines](https://github.com/dotnet/aspnetcore/wiki/Engineering-guidelines) page.

### Tests

- Tests need to be provided for every bug/feature that is completed.

- Tests only need to be present for issues that need to be verified by QA (for example, not tasks)

- If there is a scenario that is far too hard to test there does not need to be a test for it.

- "Too hard" is determined by the team as a whole.

### Feedback

Your pull request will now go through extensive checks by the subject matter experts on our team. Please be patient; we have hundreds of pull requests across all of our repositories. Update your pull request according to feedback until it is approved by one of the ASP.NET team members. After that, one of our team members may adjust the branch you merge into based on the expected release schedule.

## Code of conduct

See [CODE-OF-CONDUCT.md](./CODE-OF-CONDUCT.md)