```
1 <!doctype html>
 2 <html lang="en">
    <head>
    <meta charset="utf-8" />
     <title>Access permissions on GitHub - GitHub Docs</title>
    <meta name="viewport" content="width=device-width, initial-</pre>
   scale=1">
     <meta name="google-site-verification"</pre>
   content="OgdQc0GZfjDI52wDv1bkMT-SLpBUo_h5nn9mI9L22xQ" />
     <meta name="google-site-verification" content="c1kuD-</pre>
   K2HIVF635lypcsWPoD4kilo5-jA_wBFyT4uMY" />
     <!-- localized data needed by client-side JS -->
    <meta name="site.data.ui.search.placeholder" content="Search</pre>
   topics, products...">
    <!-- end localized data -->
       <meta name="description" content="While you can grant read/write
   access to collaborators on a personal repository, members of an
   organization can have more granular access permissions for the
   organization's repositories.">
   <!-- hreflangs -->
      link
         rel="alternate"
         hreflang="en"
         href="https://docs.github.com/en/github/getting-started-with-
   github/access-permissions-on-github"
      />
       link
         rel="alternate"
28
         hreflang="zh-Hans"
         href="https://docs.github.com/cn/github/getting-started-with-
   github/access-permissions-on-github"
       />
       link
         rel="alternate"
         hreflang="ja"
         href="https://docs.github.com/ja/github/getting-started-with-
   github/access-permissions-on-github"
       />
       link
         rel="alternate"
         hreflang="es"
         href="https://docs.github.com/es/github/getting-started-with-
   github/access-permissions-on-github"
       />
       link
         rel="alternate"
         hreflang="pt"
         href="https://docs.github.com/pt/github/getting-started-with-
   github/access-permissions-on-github"
       />
```

```
link
         rel="alternate"
         hreflang="de"
         href="https://docs.github.com/de/github/getting-started-with-
   github/access-permissions-on-github"
       />
     link rel="stylesheet" href="/dist
   /index.css?hash=e541b280d305ed56e32aa3b384722717">
    <link rel="alternate icon" type="image/png" href="/assets/images</pre>
   /site/favicon.png">
     <link rel="icon" type="image/svg+xml" href="/assets/images</pre>
   /site/favicon.svg">
60 </head>
     <body class="d-lg-flex">
       <!-- product > category > maptopic > article -->
65 <div class="sidebar d-none d-lg-block">
     <div class="d-flex flex-items-center p-4 position-sticky top-0"
   sidebar-background-color" style="z-index: 3;" id="github-logo"
   role="banner">
       <a href="<u>/en</u>" class="text-white" aria-hidden="true"
   tabindex="-1">
         <svg version="1.1" width="32" height="32" viewBox="0 0 16 16"</pre>
   class="octicon octicon-mark-github" aria-hidden="true"><path fill-</pre>
   rule="evenodd" d="M8 0C3.58 0 0 3.58 0 8c0 3.54 2.29 6.53 5.47
   7.59.4.07.55-.17.55-.38
   0-.19-.01-.82-.01-1.49-2.01.37-2.53-.49-2.69-.94-.09-.23-.48-.94-.82
   -1.13-.28-.15-.68-.52-.01-.53.63-.01 1.08.58 1.23.82.72 1.21 1.87.87
   2.33.66.07-.52.28-.87.51-1.07-1.78-.2-3.64-.89-3.64-3.95
   0 - .87.31 - 1.59.82 - 2.15 - .08 - .2 - .36 - 1.02.08 - 2.12 0 0 .67 - .21
   2.2.82.64-.18 1.32-.27 2-.27.68 0 1.36.09 2 .27 1.53-1.04 2.2-.82
   2.2-.82.44 1.1.16 1.92.08 2.12.51.56.82 1.27.82 2.15 0 3.07-1.87
   3.75-3.65 3.95.29.25.54.73.54 1.48 0 1.07-.01 1.93-.01 2.2 0
   .21.15.46.55.38A8.013 8.013 0 0016 8c0-4.42-3.58-8-8-8z"></path>
   </svg>
       </a>>
       <a href="/en" class="h4-mktg text-white no-underline no-wrap"
   pl-2 flex-auto">GitHub Docs</a>
    </div>
74
    <nav>
       <!--
    Styling note:
     Categories, Maptopics, and Articles list items get a class of
    `active` when they correspond to content
    hierarchy of the current page. If an item's URL is also the same
   as the current URL, the item
    also gets an `is-current-page` class.
    -->
```

```
87 
           <a href="<u>/en</u>" class="f6 pl-4 pr-5 ml-n1 pb-1">
                <svg xmlns="http://www.w3.org/2000/svg" class="octicon"
       viewBox="0 0 16 16" width="16" height="16"> <path fill-</pre>
        rule="evenodd" clip-rule="evenodd" d="M7.78033 12.5303C7.48744
        12.8232 7.01256 12.8232 6.71967 12.5303L2.46967 8.28033C2.17678
        7.98744 2.17678 7.51256 2.46967 7.21967L6.71967 2.96967C7.01256
        2.67678 7.48744 2.67678 7.78033 2.96967C8.07322 3.26256 8.07322
        3.73744 7.78033 4.03033L4.81066 7L12.25 7C12.6642 7 13 7.33579 13
        7.75C13 8.16421 12.6642 8.5 12.25 8.5L4.81066 8.5L7.78033
       11.4697C8.07322 11.7626 8.07322 12.2374 7.78033 12.5303Z"></path>
       </svg>
               All products
           </a>
 92 
 95 title="GitHub.com" class="sidebar-product mb-2">
           <a href="/en/github" class="pl-4 pr-5 pb-1 f4">GitHub.com</a>
 99 </li>
100 1
101 ul class="sidebar-categories list-style-none">
105 
               <details class="dropdown-withArrow details details-reset" open>
                   <summary>
                       <div class="d-flex flex-justify-between">
                           <a href="/en/github/getting-started-with-github"
       class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
       mr-3">Getting started</a>>
                           <svg xmlns="http://www.w3.org/2000/svg" class="oction"
        flex-shrink-0 arrow mr-3" style="margin-top:7px" viewBox="0 0 16 16"
       width="16" height="16"> <path fill-rule="evenodd" clip-</pre>
        rule="evenodd" d="M12.7803 6.21967C13.0732 6.51256 13.0732 6.98744
        12.7803 7.28033L8.53033 11.5303C8.23744 11.8232 7.76256 11.8232
        7.46967 11.5303L3.21967 7.28033C2.92678 6.98744 2.92678 6.51256
        3.21967 6.21967C3.51256 5.92678 3.98744 5.92678 4.28033 6.21967L8
        9.93934L11.7197 6.21967C12.0126 5.92678 12.4874 5.92678 12.7803
       6.21967Z"></path></svg>
114
                       </div>
                   </summary>
                   <!-- some categories have maptopics with child articles -->
118
                   class="sidebar-maptopic">
                                   <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/
        /quickstart" class="pl-4 pr-5 py-2">Quickstart</a>
```

```
ul class="sidebar-articles my-2">
                                                                                      class="sidebar-article">
                                                                                                <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/set-up-git" class="pl-6 pr-5 py-1">Set up Git</a>
                                                                                     class="sidebar-article">
                                                                                                <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/g
/create-a-repo" class="pl-6 pr-5 py-1">Create a repo</a>
                                                                                      class="sidebar-article">
                                                                                                <a href="/en/github/getting-started-with-github"
/fork-a-repo" class="pl-6 pr-5 py-1">Fork a repo</a>
                                                                                     class="sidebar-article">
                                                                                                <a href="/en/github/getting-started-with-github"
/be-social" class="pl-6 pr-5 py-1 pb-2">Be social</a>
                                                                                     </li>
                                                                          </!!!>
                                                               class="sidebar-maptopic active">
                                                                           <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/
/learning-about-github" class="pl-4 pr-5 py-2">Learning about
GitHub</a>
                                                                           ul class="sidebar-articles my-2">
                                                                                     class="sidebar-article">
                                                                                               <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/githubs-products" class="pl-6 pr-5 py-1">GitHub's products</a>
```

```
class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/about-github-advanced-security" class="pl-6 pr-5 py-1">About GitHub
Advanced Security</a>>
                                                   class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/exploring-early-access-releases-with-feature-preview" class="pl-6
pr-5 py-1">Exploring early access releases with feature preview</a>
                                                   class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/types-of-github-accounts" class="pl-6 pr-5 py-1">Types of GitHub
accounts</a>
                                                   class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/faq-about-changes-to-githubs-plans" class="pl-6 pr-5 py-1">FAQ
about changes to GitHub's plans</a>>
                                                   class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/g
/github-cli" class="pl-6 pr-5 py-1">GitHub CLI</a>
                                                  class="sidebar-article">
                                                         <a href="/en/github/getting-started-with-github"
/github-desktop" class="pl-6 pr-5 py-1">GitHub Desktop</a>
```

```
class="sidebar-article">
                                                                                            <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/github-for-mobile" class="pl-6 pr-5 py-1">GitHub for mobile</a>
                                                                                  class="sidebar-article active is-current-page">
                                                                                            <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/getting-github/g
/access-permissions-on-github" class="pl-6 pr-5 py-1">Access
permissions on GitHub</a>
                                                                                 class="sidebar-article">
                                                                                            <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/github-glossary" class="pl-6 pr-5 py-1">GitHub glossary</a>
                                                                                 class="sidebar-article">
                                                                                            <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/git-cheatsheet" class="pl-6 pr-5 py-1">Git cheatsheet</a>
                                                                                 class="sidebar-article">
                                                                                           <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with
/git-and-github-learning-resources class="pl-6 pr-5 py-1 pb-2">Git
and GitHub learning resources</a>
                                                                                  </1i>
                                                                       class="sidebar-maptopic">
                                                                        <a href="/en/github/getting-started-with-github"
/signing-up-for-github" class="pl-4 pr-5 py-2">Signing up for
GitHub</a>
                                                                       ul class="sidebar-articles my-2">
```

```
class="sidebar-article">
                     <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/signing-up-for-a-new-github-account" class="pl-6 pr-5 py-1">Sign up
for a new GitHub account</a>>
                   class="sidebar-article">
                     <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/verifying-your-email-address" class="pl-6 pr-5 py-1">Verifying your
email address</a>
                   class="sidebar-article">
                     <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/setting-up-a-trial-of-github-enterprise-cloud" class="pl-6 pr-5
py-1">Setting up a trial of GitHub Enterprise Cloud</a>
                   class="sidebar-article">
                     <a href="/en/github/getting-started-with-github"
/setting-up-a-trial-of-github-enterprise-server class="pl-6 pr-5"
py-1 pb-2">Setting up a trial of GitHub Enterprise Server</a>
                </!!!>
              class="sidebar-maptopic">
                <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/exploring-projects-on-github" class="pl-4 pr-5 py-2">Exploring
projects on GitHub</a>>
                ul class="sidebar-articles my-2">
                  class="sidebar-article">
                     <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/finding-ways-to-contribute-to-open-source-on-github" class="pl-6
pr-5 py-1">Finding ways to contribute to open source on GitHub</a>>
                  </1i>
```

```
class="sidebar-article">
                                                       <a href="/en/github/getting-started-with-github"
/saving-repositories-with-stars" class="pl-6 pr-5 py-1">Saving
repositories with stars</a>
                                                class="sidebar-article">
                                                      <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/following-people" class="pl-6 pr-5 py-1 pb-2">Following people</a>
                                                </!!!>
                                    class="sidebar-maptopic">
                                          <a href="/en/github/getting-started-with-github/using-
github" class="pl-4 pr-5 py-2">Using GitHub</a>
                                          ul class="sidebar-articles my-2">
                                                 class="sidebar-article">
                                                       <a href="/en/github/getting-started-with-github"
/supported-browsers" class="pl-6 pr-5 py-1">Supported browsers</a>
                                                class="sidebar-article">
                                                       <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github</a>
/troubleshooting-connectivity-problems" class="pl-6 pr-5
py-1">Troubleshooting connectivity problems</a>
                                                class="sidebar-article">
                                                       <a href="/en/github/getting-started-with-github">a href="/en/github/getting-started-with-github">href="/en/github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/getting-started-with-github/
/keyboard-shortcuts" class="pl-6 pr-5 py-1 pb-2">Keyboard
shortcuts</a>
```

```
</1i>
         <!-- some categories have no maptopics, only articles -->
       </details>
     class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" open>
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/setting-up-and-managing-your-github-
    user-account" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-
    auto mr-3">User accounts</a>
              <svg xmlns="http://www.w3.org/2000/svg" class="oction"
    flex-shrink-0 arrow mr-3" style="margin-top:7px" viewBox="0 0 16 16"
    width="16" height="16"> <path fill-rule="evenodd" clip-</pre>
    rule="evenodd" d="M12.7803 6.21967C13.0732 6.51256 13.0732 6.98744
    12.7803 7.28033L8.53033 11.5303C8.23744 11.8232 7.76256 11.8232
    7.46967 11.5303L3.21967 7.28033C2.92678 6.98744 2.92678 6.51256
    3.21967 6.21967C3.51256 5.92678 3.98744 5.92678 4.28033 6.21967L8
    9.93934L11.7197 6.21967C12.0126 5.92678 12.4874 5.92678 12.7803
    6.21967Z"></path></svg>
            </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
         class="sidebar-topics list-style-none position-relative">
410
412
413
414
                class="sidebar-maptopic">
415
                  <a href="/en/github/setting-up-and-managing-your-
    github-user-account/managing-user-account-settings" class="pl-4 pr-5
    py-2">Managing user account settings</a>>
                 ul class="sidebar-articles my-2">
417
418
419
                    class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/about-your-personal-dashboard" class="pl-6 pr-5
    py-1">About your personal dashboard</a>
```

```
class="sidebar-article">
430
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/managing-your-theme-settings" class="pl-6 pr-5
    py-1">Managing your theme settings</a>>
                   432
435
436
437
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/changing-your-github-username class="pl-6 pr-5"
    py-1">Changing your GitHub username</a>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/merging-multiple-user-accounts" class="pl-6 pr-5
    py-1">Merging multiple user accounts</a>
                   452
                   class="sidebar-article">
454
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/converting-a-user-into-an-organization"
    class="pl-6 pr-5 py-1">Converting a user into an organization</a>
                   457
458
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/deleting-your-user-account" class="pl-6 pr-5
    py-1">Deleting your user account</a>
                   class="sidebar-article">
470
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/permission-levels-for-a-user-account-repository"
    class="pl-6 pr-5 py-1">Permission levels for a user account
    repository</a>>
```

```
473
477
                   class="sidebar-article">
478
                     <a href="/en/github/setting-up-and-managing-your-
   github-user-account/permission-levels-for-user-owned-project-boards"
    class="pl-6 pr-5 py-1">Permission levels for user-owned project
    boards</a>
479
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/managing-the-default-branch-name-for-your-
    repositories" class="pl-6 pr-5 py-1">Managing the default branch
    name for your repositories</a>>
                   </1i>
491
493
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/managing-security-and-analysis-settings-for-
    your-user-account" class="pl-6 pr-5 py-1">Managing security and
    analysis settings for your user account</a>>
495
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/managing-access-to-your-user-accounts-project-
    boards" class="pl-6 pr-5 py-1">Managing access to your user
    account's project boards</a>>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-user-account/best-practices-for-leaving-your-company"
    class="pl-6 pr-5 py-1">Best practices for leaving your company</a>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
```

```
github-user-account/what-does-the-available-for-hire-checkbox-do"
class="pl-6 pr-5 py-1 pb-2">What does the 'Available for hire'
checkbox do?</a>
               </li>
             class="sidebar-maptopic">
             <a href="/en/github/setting-up-and-managing-your-
github-user-account/managing-email-preferences" class="pl-4 pr-5
py-2">Managing email preferences</a>
             ul class="sidebar-articles my-2">
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/adding-an-email-address-to-your-github-account"
class="pl-6 pr-5 py-1">Adding an email address to your GitHub
account</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/changing-your-primary-email-address" class="pl-6"
pr-5 py-1">Changing your primary email address</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/setting-a-backup-email-address class="pl-6 pr-5
py-1">Setting a backup email address</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/setting-your-commit-email-address" class="pl-6
pr-5 py-1">Setting your commit email address</a>
```

```
class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/blocking-command-line-pushes-that-expose-your-
personal-email-address" class="pl-6 pr-5 py-1">Blocking command line
pushes that expose your personal email address</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/remembering-your-github-username-or-email"
class="pl-6 pr-5 py-1">Remembering your GitHub username or email</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/types-of-emails-github-sends" class="pl-6 pr-5
py-1">Types of emails GitHub sends</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/managing-marketing-emails-from-github"
class="pl-6 pr-5 py-1 pb-2">Managing marketing emails from
GitHub</a>
               </!!!>
           class="sidebar-maptopic">
             <a href="/en/github/setting-up-and-managing-your-
github-user-account/managing-access-to-your-personal-repositories"
class="pl-4 pr-5 py-2">Managing access to your personal
repositories</a>
             ul class="sidebar-articles my-2">
               class="sidebar-article">
```

```
<a href="/en/github/setting-up-and-managing-your-
github-user-account/inviting-collaborators-to-a-personal-repository"
class="pl-6 pr-5 py-1">Inviting collaborators to a personal
repository</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/removing-a-collaborator-from-a-personal-
repository" class="pl-6 pr-5 py-1">Removing a collaborator from a
personal repository</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/removing-yourself-from-a-collaborators-
repository" class="pl-6 pr-5 py-1">Removing yourself from a
collaborator's repository</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/maintaining-ownership-continuity-of-your-user-
accounts-repositories" class="pl-6 pr-5 py-1 pb-2">Maintaining
ownership continuity of your user account's repositories</a>
               </111/>
           class="sidebar-maptopic">
             <a href="/en/github/setting-up-and-managing-your-
github-user-account/managing-your-membership-in-organizations"
class="pl-4 pr-5 py-2">Managing your membership in organizations</a>
             ul class="sidebar-articles my-2">
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/about-organization-membership" class="pl-6 pr-5
py-1">About organization membership</a>>
```

```
class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/accessing-an-organization" class="pl-6 pr-5
py-1">Accessing an organization</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/viewing-peoples-roles-in-an-organization"
class="pl-6 pr-5 py-1">Viewing people's roles in an organization</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/requesting-organization-approval-for-oauth-apps"
class="pl-6 pr-5 py-1">Requesting organization approval for OAuth
Apps</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/publicizing-or-hiding-organization-membership"
class="pl-6 pr-5 py-1">Publicizing or hiding organization
membership</a>>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-user-account/managing-your-scheduled-reminders" class="pl-6
pr-5 py-1">Managing your scheduled reminders</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
```

```
github-user-account/removing-yourself-from-an-organization"
   class="pl-6 pr-5 py-1 pb-2">Removing yourself from an
   organization</a>
                  <!-- some categories have no maptopics, only articles -->
714
       </details>
     class="sidebar-category py-1">
       <details class="dropdown-withArrow details details-reset" open>
         <summary>
           <div class="d-flex flex-justify-between">
             <a href="/en/github/setting-up-and-managing-your-github-
   profile" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
   mr-3">Profiles</a>
             <svg xmlns="http://www.w3.org/2000/svg" class="oction"
   flex-shrink-0 arrow mr-3" style="margin-top:7px" viewBox="0 0 16 16"
   width="16" height="16"> <path fill-rule="evenodd" clip-</pre>
   rule="evenodd" d="M12.7803 6.21967C13.0732 6.51256 13.0732 6.98744
   12.7803 7.28033L8.53033 11.5303C8.23744 11.8232 7.76256 11.8232
   7.46967 11.5303L3.21967 7.28033C2.92678 6.98744 2.92678 6.51256
   3.21967 6.21967C3.51256 5.92678 3.98744 5.92678 4.28033 6.21967L8
   9.93934L11.7197 6.21967C12.0126 5.92678 12.4874 5.92678 12.7803
   6.21967Z"></path></svg>
           </div>
         </summary>
         <!-- some categories have maptopics with child articles -->
734
         class="sidebar-maptopic">
                 <a href="/en/github/setting-up-and-managing-your-
   github-profile/customizing-your-profile" class="pl-4 pr-5
   py-2">Customizing your profile</a>
                ul class="sidebar-articles my-2">
                  class="sidebar-article">
                    <a href="/en/github/setting-up-and-managing-your-
```

```
github-profile/about-your-profile" class="pl-6 pr-5 py-1">About your
profile</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-profile/about-your-organizations-profile" class="pl-6 pr-5
py-1">About your organization's profile</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-profile/personalizing-your-profile" class="pl-6 pr-5
py-1">Personalizing your profile</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-profile/managing-your-profile-readme" class="pl-6 pr-5
py-1">Managing your profile README</a>
               class="sidebar-article">
                 <a href="/en/github/setting-up-and-managing-your-
github-profile/pinning-items-to-your-profile" class="pl-6 pr-5 py-1
pb-2">Pinning items to your profile</a>
               class="sidebar-maptopic">
             <a href="/en/github/setting-up-and-managing-your-
github-profile/managing-contribution-graphs-on-your-profile"
class="pl-4 pr-5 py-2">Managing contribution graphs on your
profile</a>>
             ul class="sidebar-articles my-2">
```

```
class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/viewing-contributions-on-your-profile" class="pl-6"
    pr-5 py-1">Viewing contributions on your profile</a>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/showing-an-overview-of-your-activity-on-your-profile"
    class="pl-6 pr-5 py-1">Showing an overview of your activity on your
    profile</a>>
                   811
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/publicizing-or-hiding-your-private-contributions-on-
   your-profile" class="pl-6 pr-5 py-1">Publicizing or hiding your
   private contributions on your profile</a>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/sending-your-github-enterprise-server-contributions-
    to-your-githubcom-profile" class="pl-6 pr-5 py-1">Sending your
    GitHub Enterprise Server contributions to your GitHub.com
    profile</a>>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/why-are-my-contributions-not-showing-up-on-my-
    profile" class="pl-6 pr-5 py-1">Why are my contributions not showing
    up on my profile?</a>>
                   class="sidebar-article">
                     <a href="/en/github/setting-up-and-managing-your-
    github-profile/troubleshooting-commits-on-your-timeline" class="p1-6
```

```
pr-5 py-1 pb-2">Troubleshooting commits on your timeline</a>
                   </!!!>
               </!!!>
          <!-- some categories have no maptopics, only articles -->
851
       </details>
     class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
859
         <summary>
           <div class="d-flex flex-justify-between">
              <a href="/en/github/authenticating-to-github" class="pl-4"
   pr-2 py-2 f6 text-uppercase d-block flex-auto
   mr-3">Authentication</a>
           </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
       </details>
     871
872
873
     class="sidebar-category py-1">
875
       <details class="dropdown-withArrow details details-reset" >
876
         <summary>
877
           <div class="d-flex flex-justify-between">
              <a href="/en/github/managing-subscriptions-and-
    notifications-on-github" class="pl-4 pr-2 py-2 f6 text-uppercase
    d-block flex-auto mr-3">Managing subscriptions and notifications on
   GitHub</a>>
           </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
       </details>
     </li>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
```

```
<div class="d-flex flex-justify-between">
              <a href="/en/github/setting-up-and-managing-organizations-
    and-teams" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Organizations and teams</a>>
            </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
       </details>
     class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
         <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/setting-up-and-managing-your-
    enterprise" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-
    auto mr-3">Your enterprise</a>
914
            </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
918
        </details>
     class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/setting-up-and-managing-billing-and-
    payments-on-github" class="pl-4 pr-2 py-2 f6 text-uppercase d-block
    flex-auto mr-3">Billing and payments</a>
            </div>
         </summary>
          <!-- some categories have maptopics with child articles -->
       </details>
     class="sidebar-category py-1">
       <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/writing-on-github" class="pl-4 pr-2"
    py-2 f6 text-uppercase d-block flex-auto mr-3">Writing on GitHub</a>
```

```
</div>
     </summary>
     <!-- some categories have maptopics with child articles -->
   </details>
 class="sidebar-category py-1">
   <details class="dropdown-withArrow details details-reset" >
     <summary>
       <div class="d-flex flex-justify-between">
         <a href="/en/github/creating-cloning-and-archiving-
repositories" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-
auto mr-3">Creating, cloning, and archiving repositories</a>
       </div>
     </summary>
     <!-- some categories have maptopics with child articles -->
   </details>
 class="sidebar-category py-1">
   <details class="dropdown-withArrow details details-reset" >
     <summary>
       <div class="d-flex flex-justify-between">
         <a href="/en/github/using-git" class="pl-4 pr-2 py-2 f6"
text-uppercase d-block flex-auto mr-3">Using Git</a>
       </div>
     </summary>
     <!-- some categories have maptopics with child articles -->
   </details>
 class="sidebar-category py-1">
   <details class="dropdown-withArrow details details-reset" >
     <summary>
       <div class="d-flex flex-justify-between">
         <a href="/en/github/committing-changes-to-your-project"
class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
mr-3">Committing changes to your project</a>
       </div>
     </summary>
```

```
<!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
1014
              <a href="/en/github/collaborating-with-issues-and-pull-
    requests" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Collaborating with issues and pull requests</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      </li>
1024
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/managing-your-work-on-github"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Managing your work on GitHub</a>>
            </div>
1034
          </summary>
           <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/developing-online-with-codespaces"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Codespaces</a>>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
```

```
class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/building-a-strong-community"
    class="p1-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Building a strong community</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      1074
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/searching-for-information-on-github"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Searching for information on GitHub</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/importing-your-projects-to-github"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Importing your projects</a>>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
```

```
class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
1114
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/administering-a-repository"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Administering a repository</a>
1118
            </div>
          </summary>
           <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/visualizing-repository-data-with-
    graphs" class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Visualizing repository data with graphs</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/managing-security-vulnerabilities"
    class="p1-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Managing security vulnerabilities</a>
            </div>
          </summary>
           <!-- some categories have maptopics with child articles -->
        </details>
      </li>
      class="sidebar-category py-1">
```

```
<details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/finding-security-vulnerabilities-and-
    errors-in-your-code" class="pl-4 pr-2 py-2 f6 text-uppercase d-block
    flex-auto mr-3">Finding vulnerabilities and coding errors</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
1174
        </details>
      class="sidebar-category py-1">
         <details class="dropdown-withArrow details details-reset" >
          <summary>
             <div class="d-flex flex-justify-between">
              <a href="/en/github/managing-files-in-a-repository"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Managing files in a repository</a>
            </div>
          </summary>
           <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="<u>/en/github/managing-large-files</u>" class="pl-4 pr-2"
    py-2 f6 text-uppercase d-block flex-auto mr-3">Managing large
    files</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
1214
        <details class="dropdown-withArrow details details-reset" >
            <div class="d-flex flex-justify-between">
```

```
<a href="/en/github/customizing-your-github-workflow"
class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
mr-3">Customizing your GitHub workflow</a>>
        </div>
     </summary>
      <!-- some categories have maptopics with child articles -->
   </details>
 </li>
 class="sidebar-category py-1">
    <details class="dropdown-withArrow details details-reset" >
      <summary>
        <div class="d-flex flex-justify-between">
          <a href="/en/github/extending-github" class="pl-4 pr-2"
py-2 f6 text-uppercase d-block flex-auto mr-3">Extending GitHub</a>
        </div>
     </summary>
      <!-- some categories have maptopics with child articles -->
   </details>
 class="sidebar-category py-1">
    <details class="dropdown-withArrow details details-reset" >
      <summary>
        <div class="d-flex flex-justify-between">
          <a href="/en/github/working-with-github-pages" class="pl-4"
pr-2 py-2 f6 text-uppercase d-block flex-auto mr-3">GitHub Pages</a>
        </div>
     </summary>
      <!-- some categories have maptopics with child articles -->
    </details>
 class="sidebar-category py-1">
    <details class="dropdown-withArrow details details-reset" >
      <summary>
        <div class="d-flex flex-justify-between">
          <a href="/en/github/supporting-the-open-source-community-
with-github-sponsors" class="pl-4 pr-2 py-2 f6 text-uppercase
d-block flex-auto mr-3">GitHub Sponsors</a>
        </div>
```

```
</summary>
1274
          <!-- some categories have maptopics with child articles -->
        </details>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/finding-talent-with-github-jobs"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Finding talent with GitHub Jobs</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
     1298 
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/working-with-github-support"
    class="pl-4 pr-2 py-2 f6 text-uppercase d-block flex-auto
    mr-3">Working with GitHub Support</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
        </details>
      </li>
1314
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
              <a href="/en/github/understanding-how-github-uses-and-
    protects-your-data" class="pl-4 pr-2 py-2 f6 text-uppercase d-block
    flex-auto mr-3">Understanding how GitHub uses and protects your
    data</a>
            </div>
          </summary>
```

```
<!-- some categories have maptopics with child articles -->
       </details>
1328 </li>
      class="sidebar-category py-1">
        <details class="dropdown-withArrow details details-reset" >
          <summary>
            <div class="d-flex flex-justify-between">
               <a href="/en/github/site-policy" class="pl-4 pr-2 py-2 f6"
     text-uppercase d-block flex-auto mr-3">Site policy</a>
            </div>
          </summary>
          <!-- some categories have maptopics with child articles -->
       </details>
     </li>
1347 
1348 
        </nav>
1353 </div>
       <main class="width-full">
          <div class="border-bottom border-gray-light no-print">
1359 <!-- START TRANSLATIONS NOTICES -->
1361 <!-- END TRANSLATIONS NOTICES -->
1363 <!-- START RELEASE NOTICES -->
1364 <!-- Custom GitHub AE notice -->
1366 <!-- END RELEASE NOTICES -->
1368 <!-- ONEOFF EARLY ACCESS NOTICE -->
1370 <!-- END ONEOFF EARLY ACCESS NOTICE -->
       <header class="container-xl px-3 px-md-6 pt-3 pb-2 position-
    relative d-flex flex-justify-between width-full ">
        <div class="d-flex flex-items-center d-lg-none" style="z-index:</pre>
     3;" id="github-logo-mobile" role="banner">
```

```
<a href="/en" aria-hidden="true" tabindex="-1">
        <svg version="1.1" width="32" height="32" viewBox="0 0 16</pre>
16" class="octicon octicon-mark-github text-black" aria-
hidden="true"><path fill-rule="evenodd" d="M8 0C3.58 0 0 3.58 0 8c0</pre>
3.54 2.29 6.53 5.47 7.59.4.07.55-.17.55-.38
0-.19-.01-.82-.01-1.49-2.01.37-2.53-.49-2.69-.94-.09-.23-.48-.94-.82
-1.13-.28-.15-.68-.52-.01-.53.63-.01 1.08.58 1.23.82.72 1.21 1.87.87
2.33.66.07-.52.28-.87.51-1.07-1.78-.2-3.64-.89-3.64-3.95
0-.87.31-1.59.82-2.15-.08-.2-.36-1.02.08-2.12 0 0 .67-.21
2.2.82.64-.18 1.32-.27 2-.27.68 0 1.36.09 2 .27 1.53-1.04 2.2-.82
2.2-.82.44 1.1.16 1.92.08 2.12.51.56.82 1.27.82 2.15 0 3.07-1.87
3.75-3.65 3.95.29.25.54.73.54 1.48 0 1.07-.01 1.93-.01 2.2 0
.21.15.46.55.38A8.013 8.013 0 0016 8c0-4.42-3.58-8-8-8z"></path>
</svg>
      <a href="/en" class="h4-mktg text-gray-dark no-underline no-
wrap pl-2">GitHub Docs</a>>
    </div>
    <div class="width-full">
      <div class="d-inline-block width-full d-md-flex" style="z-</pre>
index: 1;">
        <button class="nav-mobile-burgerIcon float-right mt-1"
border-0 d-md-none" type="button" aria-label="Toggle navigation">
          <!-- Hamburger icon added with css -->
        </button>
        <div style="z-index: 2;" class="nav-mobile-dropdown width-
full">
          <div class="d-md-flex flex-justify-between flex-items-</pre>
center">
            <div class="py-2 py-md-0 d-md-inline-block">
              <h4 class="text-mono f5 text-normal text-gray d-md-
none">Explore by product</h4>
              <details class="dropdown-withArrow position-relative"
details details-reset d-md-none close-when-clicked-outside">
                <summary class="nav-desktop-productDropdownButton"</pre>
text-blue-mktg py-2" role="button" aria-label="Toggle products
list">
                  <div id="current-product" class="d-flex flex-</pre>
items-center flex-justify-between" style="padding-top: 2px;">
                     <!-- Product switcher - GitHub.com, Enterprise
Server, etc -->
                    <!-- 404 and 500 error layouts are not real
pages so we need to hardcode the name for those -->
                    GitHub.com
                    <svg class="arrow ml-md-1" width="14px"
height="8px" viewBox="0 0 14 8" xml:space="preserve" fill="none"
stroke="#1277eb"><path d="M1,116.2,6L13,1"></path></svg>
                  </div>
                </summary>
                <!-- Mobile-only product dropdown -->
                <div id="homepages" class="position-md-absolute nav-</pre>
desktop-productDropdown p-md-4 left-md-n4 top-md-6" style="z-index:
6;">
                  <a href="/en/github"
                      class="d-block py-2
                      text-blue-mktg text-underline active">
                      GitHub.com
```

```
</a>
<a href="/en/enterprise-server@3.0/admin"
    class="d-block py-2
    link-gray-dark no-underline">
    Enterprise Administrators
</a>
<a href="/en/discussions"
    class="d-block py-2
    link-gray-dark no-underline">
    GitHub Discussions
</a>
<a href="/en/actions"
    class="d-block py-2
    link-gray-dark no-underline">
    GitHub Actions
</a>
<a href="/en/packages"
    class="d-block py-2
    link-gray-dark no-underline">
    GitHub Packages
</a>
<a href="/en/developers"
    class="d-block py-2
    link-gray-dark no-underline">
    Developers
</a>
<a href="/en/rest"
    class="d-block py-2
    link-gray-dark no-underline">
    REST API
</a>>
<a href="/en/graphql"
    class="d-block py-2
    link-gray-dark no-underline">
    GraphQL API
</a>
<a href="/en/enterprise-server@3.0/insights"
    class="d-block py-2
    link-gray-dark no-underline">
    GitHub Insights
</a>>
<a href="/en/education"
    class="d-block py-2
```

```
link-gray-dark no-underline">
                            Education
                       </a>>
                       <a href="/en/desktop"
                            class="d-block py-2
                            link-gray-dark no-underline">
                            GitHub Desktop
                       </a>>
                       <a href="https://cli.github.com/manual"
                            class="d-block py-2
                            link-gray-dark no-underline">
                            GitHub CLI
                           <span class="ml-1"><svg width="9" height="10"</pre>
     viewBox="0 0 9 10" fill="none" xmlns="http://www.w3.org
     /2000/svg"><path stroke="#24292e" d="M.646 8.78918-8M8.5 9V1M1
     .643h8"/></svg></span>
                       </a>>
                       <a href="https://atom.io/docs"
                            class="d-block py-2
                            link-gray-dark no-underline">
                            Atom
                            <span class="ml-1"><svg width="9" height="10"</pre>
     viewBox="0 0 9 10" fill="none" xmlns="http://www.w3.org
     /2000/svg"><path stroke="#24292e" d="M.646 8.78918-8M8.5 9V1M1
     .643h8"/></svg></span>
                       </a>
                       <a href="https://electronjs.org/docs"
                            class="d-block py-2
                            link-gray-dark no-underline">
                           Electron
                           <span class="ml-1"><svg width="9" height="10"</pre>
     viewBox="0 0 9 10" fill="none" xmlns="http://www.w3.org
     /2000/svg"><path stroke="#24292e" d="M.646 8.78918-8M8.5 9V1M1
     .643h8"/></svg></span>
                       </a>
                     </div>
1514
                   </details>
                 </div>
                 <!-- Versions picker that only appears in the header on
     homepage/versioned homepages -->
                 <!-- Versions picker that only appears in the header on
     homepage/versioned homepages -->
                 <div class="d-md-inline-block">
```

```
<!-- Language picker - 'English', 'Japanese', etc -->
                <div class="border-top border-md-top-0 py-2 py-md-0"</pre>
d-md-inline-block">
                  <details class="dropdown-withArrow position-</pre>
relative details details-reset mr-md-3 close-when-clicked-outside">
                     <summary class="py-2 text-gray-dark"</pre>
role="button" aria-label="Toggle languages list">
                       <div class="d-flex flex-items-center flex-
justify-between">
                           English
                         <svg class="arrow ml-md-1" width="14px"</pre>
height="8px" viewBox="0 0 14 8" xml:space="preserve" fill="none"
stroke="#1B1F23"><path d="M1,116.2,6L13,1"></path></svg>
                       </div>
                     </summary>
                     <div id="languages-selector" class="position-md-</pre>
absolute nav-desktop-langDropdown p-md-4 right-md-n4 top-md-6"
style="z-index: 6;">
                         <a
                           href="/en/github/getting-started-with-
github/access-permissions-on-github"
                           class="d-block py-2 no-underline active
link-gray"
                           style="white-space: nowrap"
                             English
                         </a>>
                         <a
                           href="/cn/github/getting-started-with-
github/access-permissions-on-github"
                           class="d-block py-2 no-underline link-
gray-dark"
                           style="white-space: nowrap"
                             简体中文 (Simplified Chinese)
                         </a>>
                         <a
                           href="/ja/github/getting-started-with-
github/access-permissions-on-github"
                           class="d-block py-2 no-underline link-
gray-dark"
                           style="white-space: nowrap"
```

```
日本語 (Japanese)
                             </a>>
                             <a
                               href="/es/github/getting-started-with-
     github/access-permissions-on-github"
                               class="d-block py-2 no-underline link-
     gray-dark"
                               style="white-space: nowrap"
                                 Español (Spanish)
                             </a>>
                             <a
                               href="/pt/github/getting-started-with-
     github/access-permissions-on-github"
                               class="d-block py-2 no-underline link-
     gray-dark"
                               style="white-space: nowrap"
                                 Português do Brasil (Portuguese)
                             </a>>
                         </div>
                       </details>
                     </div>
                   <!-- GitHub.com homepage and 404 page has a stylized
     search; Enterprise homepages do not -->
                   <div class="pt-3 pt-md-0 d-md-inline-block ml-md-3</pre>
     border-top border-md-top-0">
                     <!--
     This form is used in two places:
1611 - On the homepage, front and center
1612 - On all other pages, in the header
    -->
1615 <div id="search-input-container" aria-hidden="true">
      <!-- will add a search input here -->
1617 </div>
                     <div id="search-results-container"></div>
                     <div class="search-overlay-desktop"></div>
                   </div>
```

```
</div>
               </diw>
             </div>
           </div>
         </diw>
      </header>
1630 </div>
             <div class="container-xl px-3 px-md-6 my-4 my-lg-4 d-xl-
     flex">
       <article class="markdown-body width-full">
         <div class="d-lg-flex flex-justify-between">
           <div class="d-block d-lg-none">
       <details class="dropdown-withArrow d-inline-block details details-</pre>
    reset mb-1 position-relative close-when-clicked-outside article-
     versions">
         <summary class="d-flex flex-items-center flex-justify-between f4
    h5-mktg btn-outline-mktg btn-mktg p-2">
           <!-- GitHub.com, Enterprise Server 2.16, etc -->
           <span class="d-md-none d-xl-inline-block mr-1">Article
    version:</span> GitHub.com
           <svg class="arrow ml-1" width="14px" height="8px" viewBox="0 0
    14 8" xml:space="preserve" fill="none" stroke="#1277eb"><path
     d="M1,116.2,6L13,1"></path></svg>
         </summary>
         <div class="nav-dropdown position-absolute bg-white rounded-1"
    px-4 py-3 top-7 box-shadow-large" style="z-index: 6; width: 210px;">
           href="/en/github/getting-started-with-github/access-
    permissions-on-github"
           class="d-block py-2 link-blue active"
           GitHub.com</a>
           href="/en/enterprise-server@3.0/github/getting-started-with-
    github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 3.0</a>
           href="/en/enterprise-server@2.22/github/getting-started-with-
     github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.22</a>>
           href="/en/enterprise-server@2.21/github/getting-started-with-
     github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.21</a>
```

```
<a
           href="/en/enterprise-server@2.20/github/getting-started-with-
     github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.20</a>>
           <a
           href="/en/github-ae@latest/github/getting-started-with-github
     /access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           GitHub AE</a>
           <a class="f6 no-underline text-gray-light pt-1"
     href="/enterprise-server-releases">See all Enterprise releases</a>
      </details>
1688 </div>
           <div class="d-flex flex-items-center breadcrumbs-wrapper">
             <nav class="breadcrumbs f5" aria-label="Breadcrumb">
       <a title="product: GitHub.com" href="<a href="">href="<a href="en/github"</a> class="d-inline-
     block ">
         GitHub.com</a>
       <a title="category: Getting started" href="/en/github/getting-
     started-with-github" class="d-inline-block ">
         Getting started</a>>
       <a title="maptopic: Learning about GitHub" href="/en/github"
     /getting-started-with-github/learning-about-github" class="d-inline-
     block ">
         Learning about GitHub</a>>
       <a title="article: Access permissions on GitHub" href="/en/github"
     /getting-started-with-github/access-permissions-on-github" class="d-
     inline-block text-gray-light">
         Access permissions on GitHub</a>
1712 </nav>
1714
           </div>
           <div class="d-none d-lg-block">
       <details class="dropdown-withArrow d-inline-block details details-</pre>
     reset mb-1 position-relative close-when-clicked-outside article-
     versions">
         <summary class="d-flex flex-items-center flex-justify-between f4"
     h5-mktg btn-outline-mktg btn-mktg p-2">
           <!-- GitHub.com, Enterprise Server 2.16, etc -->
```

```
<span class="d-md-none d-xl-inline-block mr-1">Article
     version:</span> GitHub.com
           <svg class="arrow ml-1" width="14px" height="8px" viewBox="0 0
    14 8" xml:space="preserve" fill="none" stroke="#1277eb"><path
     d="M1,116.2,6L13,1"></path></svg>
         </summary>
         <div class="nav-dropdown position-absolute bg-white rounded-1</pre>
     px-4 py-3 top-7 box-shadow-large" style="z-index: 6; width: 210px;">
           <a
           href="/en/github/getting-started-with-github/access-
     permissions-on-github"
           class="d-block py-2 link-blue active"
           GitHub.com</a>
           href="/en/enterprise-server@3.0/github/getting-started-with-
     github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 3.0</a>>
           <a
           href="/en/enterprise-server@2.22/github/getting-started-with-
    github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.22</a>>
           href="/en/enterprise-server@2.21/github/getting-started-with-
    github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.21</a>
           <a
           href="/en/enterprise-server@2.20/github/getting-started-with-
    github/access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           Enterprise Server 2.20</a>
           <a
           href="/en/github-ae@latest/github/getting-started-with-github
     /access-permissions-on-github"
           class="d-block py-2 link-gray-dark no-underline"
           GitHub AE</a>>
           <a class="f6 no-underline text-gray-light pt-1"
    href="/enterprise-server-releases">See all Enterprise releases</a>
         </div>
      </details>
1765 </div>
        </div>
```

```
<div class="mt-2 article-grid-container">
                   <div class="article-grid-head">
                       <div class="d-flex flex-items-baseline flex-justify-between"</pre>
          mt-3">
                           <h1 class="border-bottom-0">Access permissions on
          GitHub</h1>
                           <div class="d-none d-lg-block ml-2">
1774
                                <button class="btn-link link-gray js-print tooltipped</pre>
          tooltipped-n" aria-label="Print this article">
                                    <!-- From https://heroicons.dev/ -->
1776 <svg fill="none" height="18" width="18" stroke-linecap="round"
          stroke-linejoin="round" stroke-width="2" viewBox="0 0 24 24"
          stroke="currentColor"><path d="M17 17h2a2 2 0 002-2v-4a2 2 0
          00-2-2H5a2 2 0 00-2 2v4a2 2 0 002 2h2m2 4h6a2 2 0 002-2v-4a2 2 0
          00-2-2H9a2 2 0 00-2 2v4a2 2 0 002 2zm8-12V5a2 2 0 00-2-2H9a2 2 0
          00-2 2v4h10z"></path></svg>
                               </button>
1778
                           </div>
                       </div>
                           <div class="lead-mktg">While you can grant read/write
          access to collaborators on a personal repository, members of an
          organization can have more granular access permissions for the
          organization's repositories.</div>
                  </div>
                  <div class="article-grid-toc border-bottom border-x1-0 pb-4 mb-5</pre>
          pb-x1-0 mb-x1-0">
                       <div class="article-grid-toc-content">
                           <h2 id="in-this-article" class="f5 mb-2"><a class="link-
          gray-dark" href="#in-this-article">In this article</a>></h2>
                           class="ml-0 mb-2 lh-condensed"><a href="#personal-</a>
          user-accounts">Personal user accounts</a>
                                class="ml-0 mb-2 lh-condensed"><a</li>
          href="#organization-accounts">Organization accounts</a>>
                               class="m1-0 mb-2 lh-condensed"><a href="#enterprise-</a>
          accounts">Enterprise accounts</a>
                               class="ml-0 mb-2 lh-condensed"><a href="#further-">a href="#further-">a href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-">href="#further-
          reading">Further reading</a>
                           </div>
                  </div>
                  <div id="article-contents" class="article-grid-body">
```

```
<h3 id="personal-user-accounts"><a href="#personal-user-
        accounts">Personal user accounts</a></h3>
1812 A repository owned by a user account has two permission levels:
        the <em>repository owner</em> and <em>collaborators</em>. For more
        information, see "<a href="/en/articles/permission-levels-for-
        a-user-account-repository">Permission levels for a user account
        repository</a>."
1813 <h3 id="organization-accounts"><a href="#organization-
        accounts">Organization accounts</a></h3>
1814 Organization members can have <em>owner</em>, <em>billing
        manager</em>, or <em>member</em> roles. Owners have complete
        administrative access to your organization, while billing managers
        can manage billing settings. Member is the default role for everyone
        else. You can manage access permissions for multiple members at a
        time with teams. For more information, see:
1815 
1816 "<a href="/en/articles/permission-levels-for-an-
        organization">Permission levels for an organization</a>"
1817 1817 1817 1818 | href="/en/articles/project-board-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permissions-for-an-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission-permission
        organization">Project board permissions for an organization</a>"
        </li>
1818 "<a href="/en/articles/repository-permission-levels-for-an-
        organization">Repository permission levels for an organization</a>"
1819 "<a href="/en/articles/about-teams">About teams</a>"
1820 
1821 <h3 id="enterprise-accounts"><a href="#enterprise-
        accounts">Enterprise accounts</a></h3>
1822 <em>Enterprise owners</em> have ultimate power over the
        enterprise account and can take every action in the enterprise
        account. <em>Billing managers</em> can manage your enterprise
        account's billing settings. Members and outside collaborators of
        organizations owned by your enterprise account are automatically
        members of the enterprise account, although they have no access to
        the enterprise account itself or its settings. For more information,
        see "<a href="/en/github/setting-up-and-managing-your-enterprise"
        /roles-in-an-enterprise">Roles in an enterprise</a>."
1823 Enterprise accounts are available with GitHub Enterprise Cloud
        and GitHub Enterprise Server. For more information, see "<a
        href="/en/articles/about-enterprise-accounts">About enterprise
        accounts</a>."
1824 <h3 id="further-reading"><a href="#further-reading">Further
        reading</a></h3>
1825 
1826 "<a href="/en/articles/types-of-github-accounts">Types of GitHub
        accounts</a>"
1827 </ul>
               </div>
               </div>
               <div class="d-block mt-4 markdown-body">
1834 < form class="js-helpfulness mt-4 f5">
1835 <h2
               data-help-start
               data-help-yes
               data-help-no
               class="mb-1 f5"
1840 >
```

```
Did this doc help you?
 </h2>
  <a href="/github/site-policy/github-privacy-statement">Privacy</a>
policy</a>>
  <p
    class="radio-group"
    data-help-start
    data-help-yes
   data-help-no
   <input
      hidden
      id="helpfulness-yes"
      type="radio"
      mame="helpfulness-vote"
      value="Yes"
      aria-label="Yes"
   />
    <label class="btn x-radio-label" for="helpfulness-yes">
      <svg version="1.1" width="24" height="24" viewBox="0 0 24 24"</pre>
class="octicon octicon-thumbsup" aria-hidden="true"><path fill-</pre>
rule="evenodd" d="M12.596 2.043c-1.301-.092-2.303.986-2.303
2.206v1.053c0 2.666-1.813 3.785-2.774 4.2a1.866 1.866 0
01-.523.131A1.75 1.75 0 005.25 8h-1.5A1.75 1.75 0 002 9.75v10.5c0
.967.784 1.75 1.75 1.75h1.5a1.75 1.75 0 001.742-1.58c.838.06
1.667.296 2.69.5861.602.17c1.464.406 3.213.824 5.544.824 2.188 0
3.693-.204
4.583-1.372.422-.554.65-1.255.816-2.05.148-.708.262-1.57.396-2.581.0
51-.39c.319-2.386.328-4.18-.223-5.394-.293-.644-.743-1.125-1.355-1.4
31-.59-.296-1.284-.404-2.036-.404h-
2.051.056-.429c.025-.18.05-.372.076-.572.06-.483.117-1.006.117-1.438
0-1.245-.222-2.253-.92-2.941-.684-.675-1.668-.88-2.743-.956zM7
18.918c1.059.064 2.079.355 3.118.6521.568.16c1.406.39 3.006.77
5.142.77 2.277 0 3.004-.274
3.39-.781.216-.283.388-.718.54-1.448.136-.65.242-1.45.379-2.4771.05-
.384c.32-2.4.253-3.795-.102-4.575-.16-.352-.375-.568-.66-.711-.305-.
153-.74-.245-1.365-.245h-2.37c-.681
0-1.293-.57-1.211-1.328.026-.243.065-.537.105-.8341.07-.527c.06-.482
.105-.921.105-1.25
0-1.125-.213-1.617-.473-1.873-.275-.27-.774-.455-1.795-.528-.351-.02
4-.698.274-.698.71v1.053c0 3.55-2.488 5.063-3.68
5.577-.372.16-.754.232-1.113.26v7.78zM3.75 20.5a.25.25 0
01-.25-.25V9.75a.25.25 0 01.25-.25h1.5a.25.25 0 01.25.25v10.5a.25.25
0 01-.25.25h-1.5z"></path></svg>
   </label>
   <input
      hidden
      id="helpfulness-no"
      type="radio"
      name="helpfulness-vote"
      value="No"
      aria-label="No"
    />
    <label class="btn x-radio-label" for="helpfulness-no">
      <svg version="1.1" width="24" height="24" viewBox="0 0 24 24"</pre>
class="octicon octicon-thumbsdown" aria-hidden="true"><path fill-</pre>
rule="evenodd" d="M12.596 21.957c-1.301.092-2.303-.986-2.303-2.206v-
1.053c0-2.666-1.813-3.785-2.774-4.2a1.864 1.864 0 00-.523-.13A1.75
```

```
1.75 0 015.25 16h-1.5A1.75 1.75 0 012 14.25V3.75C2 2.784 2.784 2
    3.75 2h1.5a1.75 1.75 0 011.742 1.58c.838-.06 1.667-.296
    2.69-.5861.602-.17C11.748 2.419 13.497 2 15.828 2c2.188 0 3.693.204
    4.583 1.372.422.554.65 1.255.816 2.05.148.708.262 1.57.396
    2.581.051.39c.319 2.386.328 4.18-.223 5.394-.293.644-.743
    1.125-1.355 1.431-.59.296-1.284.404-2.036.404h-
    2.051.056.429c.025.18.05.372.076.572.06.483.117 1.006.117 1.438 0
    1.245-.222 2.253-.92 2.942-.684.674-1.668.879-2.743.955zM7
    5.082c1.059-.064 2.079-.355 3.118-.651.188-.054.377-.108.568-.16
    1.406-.392 3.006-.771 5.142-.771 2.277 0 3.004.274
    3.39.781.216.283.388.718.54 1.448.136.65.242 1.45.379
    2.4771.05.385c.32 2.398.253 3.794-.102
    4.574-.16.352-.375.569-.66.711-.305.153-.74.245-1.365.245h-
    2.37c-.681 0-1.293.57-1.211
    1.328.026.244.065.537.105.8341.07.527c.06.482.105.922.105 1.25 0
    1.125-.213 1.617-.473
    1.873-.275.27-.774.456-1.795.528-.351.024-.698-.274-.698-.71v-
    1.053c0-3.55-2.488-5.063-3.68-5.577A3.485 3.485 0 007
    12.861V5.08zM3.75 3.5a.25.25 0 00-.25.25v10.5c0
    .138.112.25.25.25h1.5a.25.25 0 00.25-.25V3.75a.25.25 0 00-.25-.25h-
    1.5z"></path></svg>
        </label>
1874 
      Want to learn about new docs features and updates? Sign up for
    updates!
      We're continually improving our docs. We'd love to hear how we
    can do better.
1880 
1881 < input
        type="text"
        class="d-none"
        name="helpfulness-token"
       aria-hidden="true"
1886 />
     <label
          class="d-block mb-1 f6"
          for="helpfulness-category"
          What problem did you have?
          <span class="text-normal text-gray-light float-right ml-1">
            Required
          </span>
        </label>
        <select
          class="form-control select-sm width-full"
          name="helpfulness-category"
          id="helpfulness-category"
          <option value="">
            Choose an option
          </option>
          <option value="Unclear">
            Information was unclear
          </option>
          <option value="Confusing">
            The content was confusing
```

```
</option>
          <option value="Unhelpful">
            The article didn't answer my question
          </option>
1914
          <option value="Other">
            0ther
          </option>
        </select>
1918
     <label
          class="d-block mb-1 f6"
          for="helpfulness-comment"
          <span>Let us know what we can do better</span>
          <span class="text-normal text-gray-light float-right ml-1">
            Optional
          </span>
        </label>
        <textarea
          class="form-control input-sm width-full"
          name="helpfulness-comment"
          id="helpfulness-comment"
        ></textarea>
1934
     <p>>
        <label
          class="d-block mb-1 f6"
          for="helpfulness-email"
          hidden
          data-help-no
          Can we contact you if we have more questions?
          <span class="text-normal text-gray-light float-right ml-1">
            Optional
          </span>
        </label>
        <input
          type="email"
          class="form-control input-sm width-full"
          name="helpfulness-email"
          id="helpfulness-email"
          placeholder="email@example.com"
          hidden
          data-help-yes
          data-help-no
        />
      class="text-right"
        hidden
        data-help-yes
        data-help-no
        <but><button type="submit" class="btn btn-blue btn-sm"></br>
          Send
        </button>
      Thank you! Your feedback has been submitted.
```

```
1971 </form>
1975 <div class="mt-3 f5 contribution">
      <h2 class="f5">Help us make these docs great!</h2>
      All GitHub docs are open source. See
    something that's wrong or unclear? Submit a pull request.
      <a class="btn btn-outline" href=https://github.com/github
    /docs/edit/main/content/github/getting-started-with-github/access-
    permissions-on-github.md>
        <svg version="1.1" width="16" height="16" viewBox="0 0 16 16"</pre>
    class="oction oction-git-pull-request" aria-hidden="true"><path</pre>
    fill-rule="evenodd" d="M7.177 3.073L9.573.677A.25.25 0 0110
     .854v4.792a.25.25 0 01-.427.177L7.177 3.427a.25.25 0 010-.354zM3.75
    2.5a.75.75 0 100 1.5.75.75 0 000-1.5zm-2.25.75a2.25 2.25 0 113
    2.122v5.256a2.251 2.251 0 11-1.5 0V5.372A2.25 2.25 0 011.5 3.25zM11
    2.5h-1V4h1a1 1 0 011 1v5.628a2.251 2.251 0 101.5 0V5A2.5 2.5 0 0011
    2.5zm1 10.25a.75.75 0 111.5 0 .75.75 0 01-1.5 0zM3.75 12a.75.75 0
    100 1.5.75.75 0 000-1.5z"></path></svg>
        Make a contribution
      </a>
      Or, <a href="https://github.com")</pre>
    /github/docs/blob/main/CONTRIBUTING.md" target="_blank">learn how to
    contribute.</a>
1983 </div>
        </div>
      </article>
1988 </div>
          <!-- Contact support banner -->
1992 < section class="mt-lg-9 py-7 no-print js-support-banner"
    style="background-color: #fafbfc;">
      <div class="container-xl px-3 px-md-6">
        <h3 class="mb-2 f4">
          Still need help?
        </h3>
        <a id="ask-community" href="https://github.community" class="btn
    btn-outline mr-4 mt-2">
          <svg version="1.1" width="16" height="16" viewBox="0 0 16 16"
    class="octicon octicon-people" aria-hidden="true"><path fill-</pre>
    rule="evenodd" d="M5.5 3.5a2 2 0 100 4 2 2 0 000-4zM2 5.5a3.5 3.5 0
    115.898 2.549 5.507 5.507 0 013.034 4.084.75.75 0 11-1.482.235 4.001
    4.001 0 00-7.9 0 .75.75 0 01-1.482-.236A5.507 5.507 0 013.102 8.05
    3.49 3.49 0 012 5.5zM11 4a.75.75 0 100 1.5 1.5 1.5 0 01.666
    2.844.75.75 0 00-.416.672v.352a.75.75 0 00.574.73c1.2.289 2.162 1.2
    2.522 2.372a.75.75 0 101.434-.44 5.01 5.01 0 00-2.56-3.012A3 3 0
    0011 4z"></path></svg>
          Ask the GitHub community
        </a>>
        <a id="contact-us" href="https://support.github.com/contact"
    class="btn btn-outline mt-2">
          <svg version="1.1" width="16" height="16" viewBox="0 0 16 16"</pre>
    class="octicon octicon-comment-discussion" aria-hidden="true"><path</pre>
    fill-rule="evenodd" d="M1.5 2.75a.25.25 0 01.25-.25h8.5a.25.25 0
```

```
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             11.44V9.25a.75.75 0 00-.75-.75h-1a.25.25 0 01-.25-.25v-5.5zM1.75
             1A1.75 1.75 0 000 2.75v5.5C0 9.216.784 10 1.75 10H2v1.543a1.457
             1.457 0 002.487 1.03L7.061 10h3.189A1.75 1.75 0 0012 8.25v-5.5A1.75
             1.75 0 0010.25 1h-8.5zM14.5 4.75a.25.25 0 00-.25-.25h-.5a.75.75 0
             110-1.5h.5c.966 0 1.75.784 1.75 1.75v5.5A1.75 1.75 0 0114.25
             12H14v1.543a1.457 1.457 0 01-2.487 1.03L9.22 12.28a.75.75 0
             111.06-1.0612.22 2.22v-2.19a.75.75 0 01.75-.75h1a.25.25 0
             00.25-.25v-5.5z"></path></svg>
                             Contact support
                        </a>>
                  </div>
2007 </section>
                             <footer class="py-6 text-small">
2010 <div class="container-xl d-flex px-3 px-md-6">
                       class="d-flex list-style-none flex-wrap flex-justify-center"
             flex-xl-justify-start">
                             class="d-flex mr-xl-3 text-gray">
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             16" class="octicon octicon-mark-github mr-2 mr-xl-3" aria-
             hidden="true"><path fill-rule="evenodd" d="M8 0C3.58 0 0 3.58 0 8c0</pre>
             3.54 2.29 6.53 5.47 7.59.4.07.55-.17.55-.38
             0-.19-.01-.82-.01-1.49-2.01.37-2.53-.49-2.69-.94-.09-.23-.48-.94-.82
             -1.13-.28-.15-.68-.52-.01-.53.63-.01 1.08.58 1.23.82.72 1.21 1.87.87
             2.33.66.07-.52.28-.87.51-1.07-1.78-.2-3.64-.89-3.64-3.95
             0-.87.31-1.59.82-2.15-.08-.2-.36-1.02.08-2.12 0 0 .67-.21
             2.2.82.64-.18 1.32-.27 2-.27.68 0 1.36.09 2 .27 1.53-1.04 2.2-.82
             2.2-.82.44 1.1.16 1.92.08 2.12.51.56.82 1.27.82 2.15 0 3.07-1.87
             3.75-3.65 3.95.29.25.54.73.54 1.48 0 1.07-.01 1.93-.01 2.2 0
              .21.15.46.55.38A8.013 8.013 0 0016 8c0-4.42-3.58-8-8-8z"></path>
             </svg>
                                  <span>&copy; 2021 GitHub, Inc.</span>
                             class="ml-3"><a href="/github/site-policy/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-"/github-terms-of-</li>
             service">Terms </a>
                             class="ml-3"><a href="/github/site-policy/github-privacy-"><a href="/github-privacy-"><a href="/g
             statement">Privacy </a>
                             class="ml-3"><a href="https://github.com">href="https://github.com</a>
             /security">Security</a>
                             class="ml-3"><a href="https://www.githubstatus.com">https://www.githubstatus.com</a>
             <u>/</u>">Status</a></li>
                             class="ml-3"><a href="/">Help</a>
                             class="ml-3"><a href="https://support.github.com"><a href="https://support.github.com">><a href="https://support.githu
             /contact ">Contact GitHub</a>
                             class="ml-3"><a href="https://github.com">href="https://github.com</a>
             /pricing">Pricing</a>
                             class="ml-3"><a href="/developers">Developer API</a>>
                             class="ml-3"><a href="https://services.github.com">a href="https://services.github.com
             /">Training</a>
                             class="ml-3"><a href="https://github.com/about">About</a>
             </div>
2028 </footer>
2030 <script id="search-options" type="application/json">{"languages":
             ["en", "cn", "ja", "es", "pt", "de"], "versions": {"free-pro-
             team@latest": "dotcom", "enterprise-server@3.0": "3.0", "enterprise-
             server@2.22":"2.22","enterprise-server@2.21":"2.21","enterprise-
```