# Generating a Personalized Access Token

A small guide to generating a personalized access token to interact with external GitHub's GraphQL API.

## Read/Write Data with GitHub's Personal Access Token #

To use GitHub's GraphQL API, you need to generate a **personal access token** on their website. The access token authorizes users to interact with data, and to read and write it under their username. You can follow these step by step instructions to generate the personal access token and be sure to check its necessary scopes (permissions), as you will need them to implement a well-rounded GitHub client later in the course.

| ☑ | **repo** | | Full control of private repositories |
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| | ☑ | repo:status | Access commit status |
| | ☑ | repo_deployment | Access deployment status |
| | ☑ | public_repo | Access public repositories |
| | ☑ | repo:invite | Access repository invitations |
| ☑ | **admin:org** | | Full control of orgs and teams |
| | ☑ | write:org | Read and write org and team membership |
| | ☑ | read:org | Read org and team membership |
| ☐ | **admin:public_key** | | Full control of user public keys |
| | ☐ | write:public_key | Write user public keys |
| | ☐ | read:public_key | Read user public keys |
| ☐ | **admin:repo_hook** | | Full control of repository hooks |
| | ☐ | write:repo_hook | Write repository hooks |
| | ☐ | read:repo_hook | Read repository hooks |
| ☐ | **admin:org_hook** | | Full control of organization hooks |
| ☐ | **gist** | | Create gists |
| ☑ | **notifications** | | Access notifications |
| ☑ | **user** | | Update all user data |
| | ☑ | read:user | Read all user profile data |
| | ☑ | user:email | Access user email addresses (read-only) |
| | ☑ | user:follow | Follow and unfollow users |
| ☐ | **delete_repo** | | Delete repositories |
| ☐ | **write:discussion** | | Read and write team discussions |
| | ☐ | read:discussion | Read team discussions |
| ☐ | **admin:gpg_key** | | Full control of user gpg keys (Developer Preview) |
| | ☐ | write:gpg_key | Write user gpg keys |
| | ☐ | read:gpg_key | Read user gpg keys |

Later, the personal access token can be used to interact with GitHub's GraphQL API. Be careful not to share these authorizations with any third parties.

In the next lesson, we will use our token to configure the environment.