Project 4: Github Instructions – Draft

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Background Information

TODO

Setting up your Account

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Setting Up Git Repositories (Elias)

`git init`

The `init` command creates an empty git repository – a `.git` directory containing every-thing you need for version control in this repository.

Command Line

To initialize a repository from the command line:

1. Navigate to desired parent directory:

   - *This directory will contain the git repository.*

   ```
   $ cd ~/cmu/76270/project4/
   ```

2. Create a directory for your repository:

   ```
   $ mkdir github-instructions
   ```

3. Navigate to new directory:

```
$ cd github-instructions
```

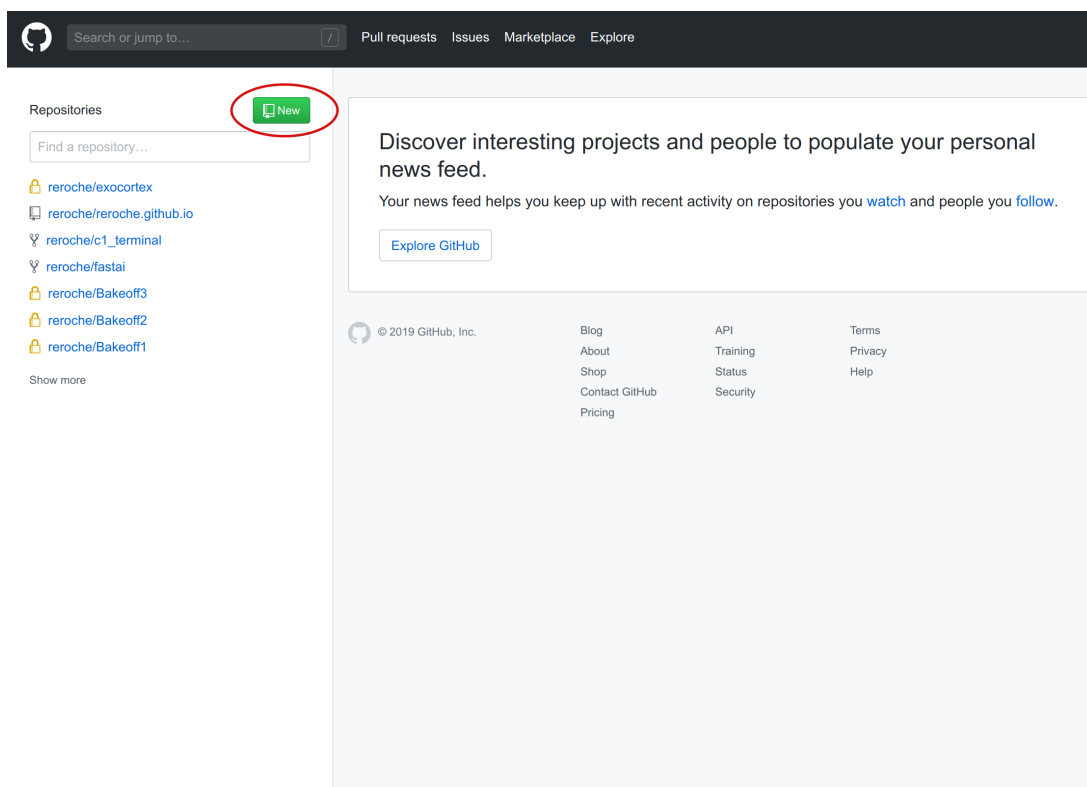4. Initialize the repository:

```
$ git init
```

GitHub

On `github.com`, the `init` command is run automatically when a repository is created. Ensure that you are logged in before following these steps:

1. Navigate to home page:

   • `http://github.com`

2. Click on the green **New** button on the top-left of the page:

3. Enter a name for the repository:

- *The name of the repository must be unique to your user – that is, you cannot give two repositories the same name.*

4. Enter additional customizations:

- *You can include an optional description to provide more information about the purpose of the repository.*
- *Repositories can be public (others can view and use your code), or private (only you and invited users can access the repository).*
- *README.md, .gitignore, and LICENSE are typical files to include in a repository. They are addressed in a later section.*

5. Click on **Create Repository** to complete.

- *The page will be redirected to the empty repositories home page.*

6. Finally, set up the repository:

- *You can create a new repository on the command line by running:*

```
echo "# github-instructions" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@github.com:reroche/github-instructions.git
git push -u origin master
```

- *Or you can import an existing repository on your computer into this GitHub new repository by running:*

```
git remote add origin git@github.com:reroche/github-instructions.git
git push -u origin master
```

`git clone`

The `clone` command creates a copy of a of a repository into a newly created directory.

All repositories on GitHub have a unique URL, in the format:

```
https://github.com/username/repository-name.git
```

The repository for this instructions, for example, is available at `https://github.com/reroche/github-instructions`.

Command Line

To clone a repository from the command line:

1. Navigate to the desired parent directory.

```
$ cd ~/cmu/76270/project4/
```

2. Clone the repository using its GitHub URL:

- *The new repository will be in a directory with its original name (e.g. `github-instructions`).*

```
$ git clone https://github.com/reroche/github-instructions.git
```
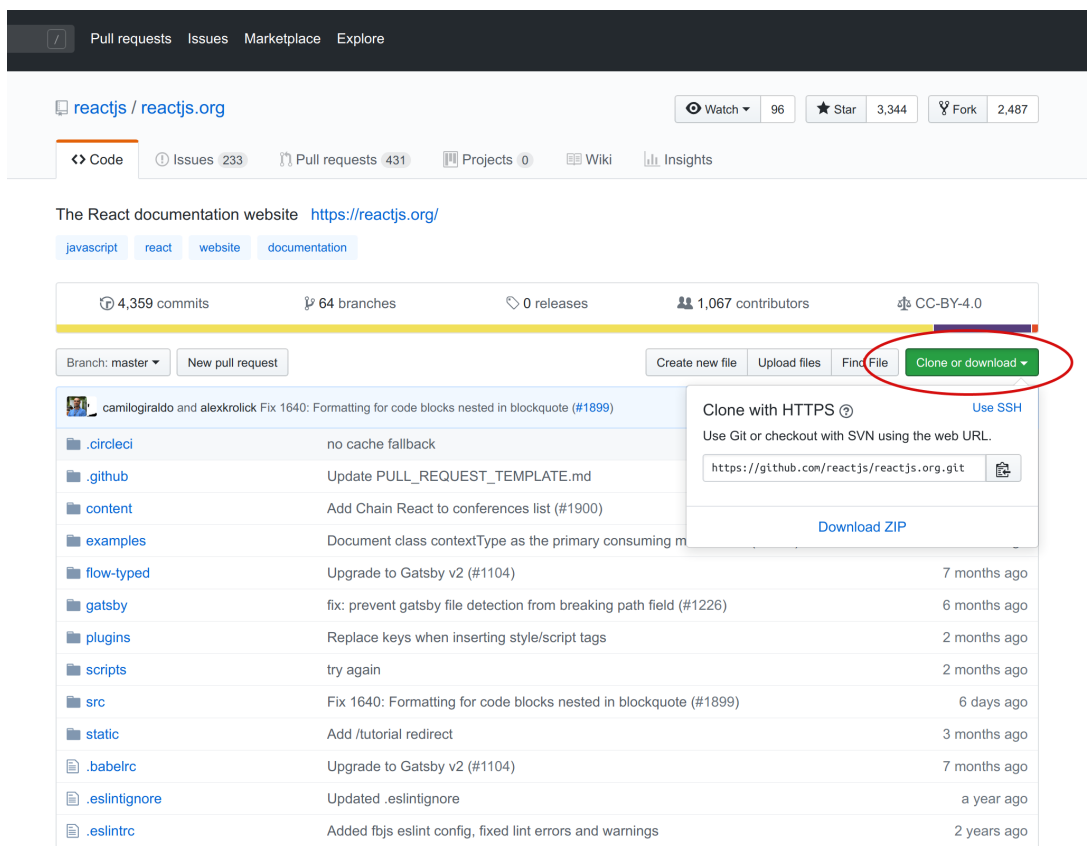
GitHub

The online interface allows you to easily browse and copy repository URLs to clone via the command line.

To clone or download a repository from Github:

1. Navigate to the repository URL:

```
https://github.com/reactjs/reactjs.org
```

2. Click the green "Clone or Download" button:

3. Copy the link and clone from the command line, or download ZIP file.

Forking on GitHub

Forking is copying a repository that belongs to another user into your repositories, granting you ownership permissions over that repository.

Forking cannot be done via the command line.

To fork a repository on Github, simply click the "Fork" button on the top right of a repository's home page.