

Advanced git

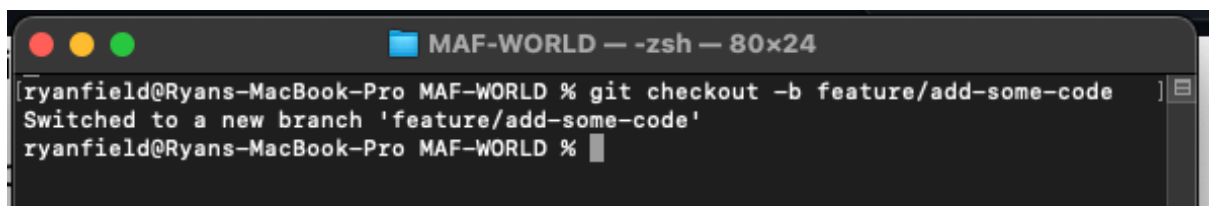
Create and clone a GitHub repository (see [Practical 2](#))

Create a new branch

In a terminal / command prompt run the following commands:

```
git checkout -b feature/add-something
```

NB: Make sure this command is executed in the git repository (you may need to change into the directory using `cd <directory name>`)

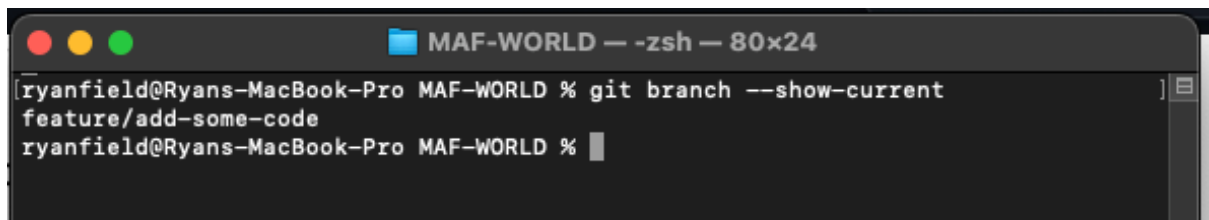
A terminal window titled 'MAF-WORLD - zsh - 80x24' showing a user named 'ryanfield' on a 'Ryans-MacBook-Pro' in the 'MAF-WORLD' directory. The user enters the command 'git checkout -b feature/add-some-code'. The terminal output shows 'Switched to a new branch 'feature/add-some-code'' followed by a new prompt line.

```
ryanfield@Ryans-MacBook-Pro MAF-WORLD % git checkout -b feature/add-some-code  
Switched to a new branch 'feature/add-some-code'  
ryanfield@Ryans-MacBook-Pro MAF-WORLD %
```

Check the branch you are on

In a terminal / command prompt run the following commands:

```
git branch --show-current
```

A terminal window titled 'MAF-WORLD - zsh - 80x24' showing the same user and directory. The user enters the command 'git branch --show-current'. The terminal output shows 'feature/add-some-code' followed by a new prompt line.

```
ryanfield@Ryans-MacBook-Pro MAF-WORLD % git branch --show-current  
feature/add-some-code  
ryanfield@Ryans-MacBook-Pro MAF-WORLD %
```

Add and commit some files / changes (See [Practical 1](#) & [Practical 2](#))

Switch back to the main branch

In a terminal / command prompt run the following commands:

```
git checkout main
```

Merge any changes from the new branch to the main branch

In a terminal / command prompt run the following commands:

```
git merge feature/add-some-code
```

Delete the new branch

In a terminal / command prompt run the following commands:

```
git branch -d feature/add-some-code
```

Advance GitHub

Follow the steps above until switching back to the main branch

Publish the branch to GitHub

```
git push -u origin feature/add-some-code
```

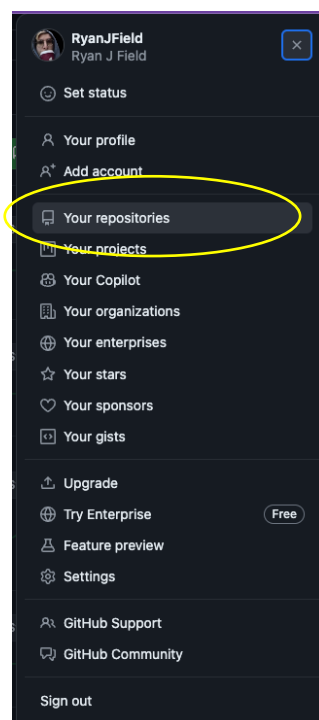
NB: any further changes can be pushed using git push, after committing the changes

Create a pull request on GitHub

Login to GitHub and navigate to your repository

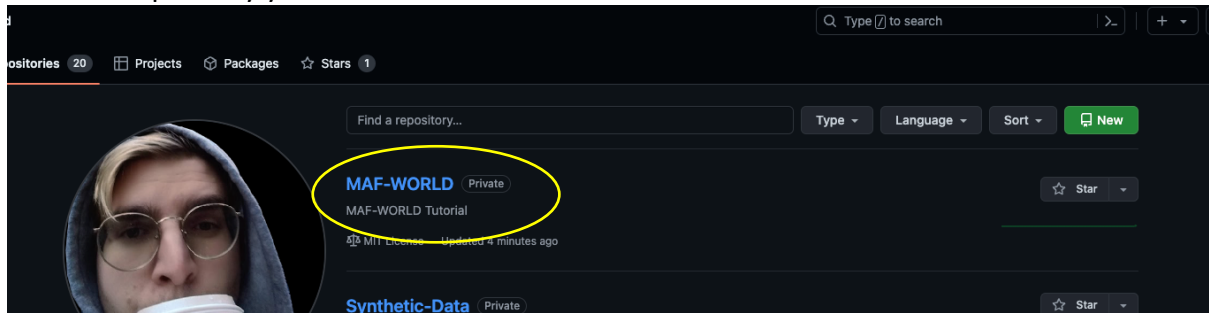


Click your profile picture (top right)

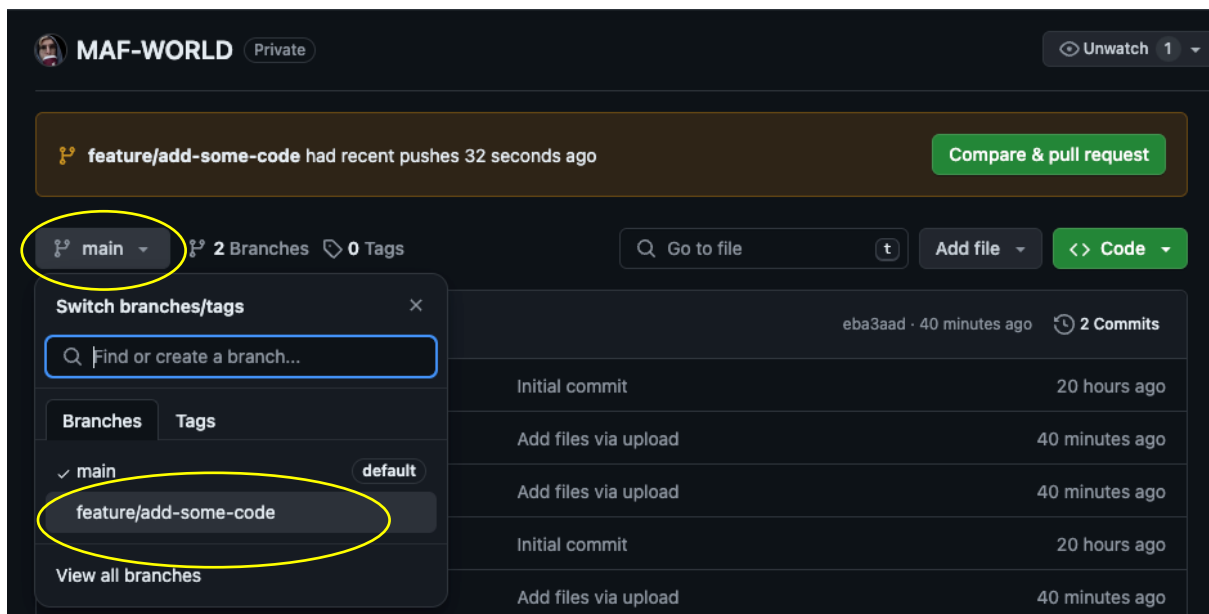


Click your repositories

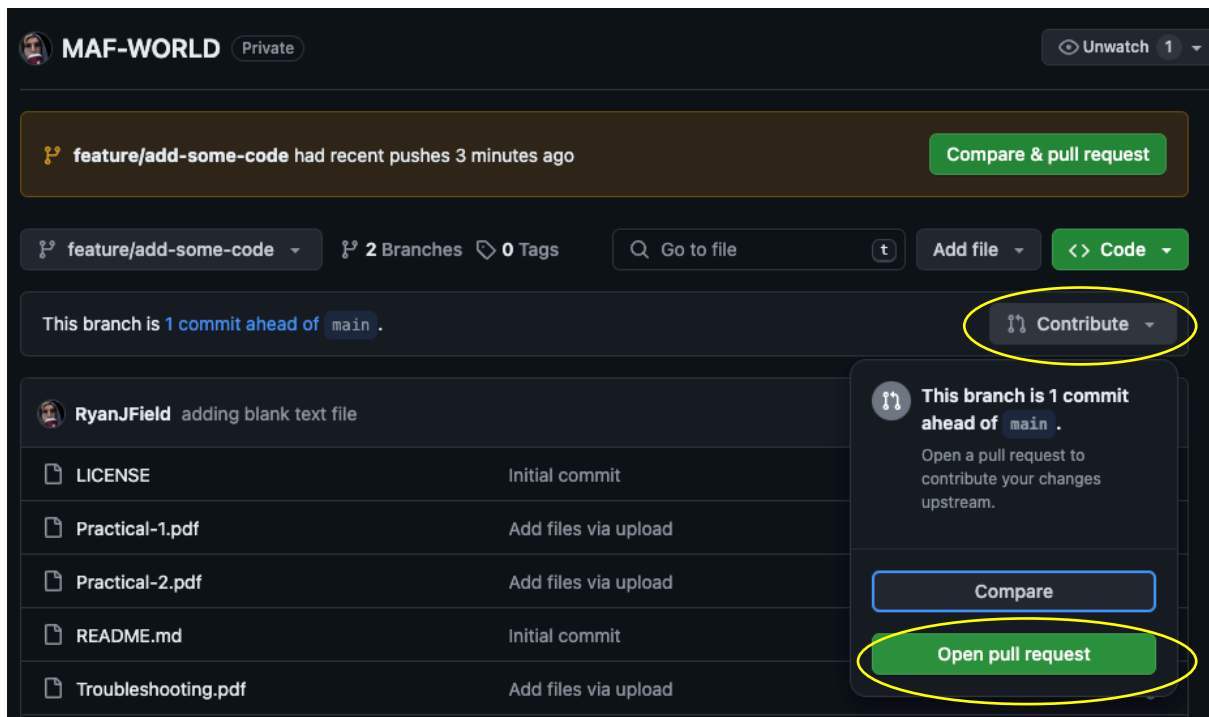
Click the repository you want



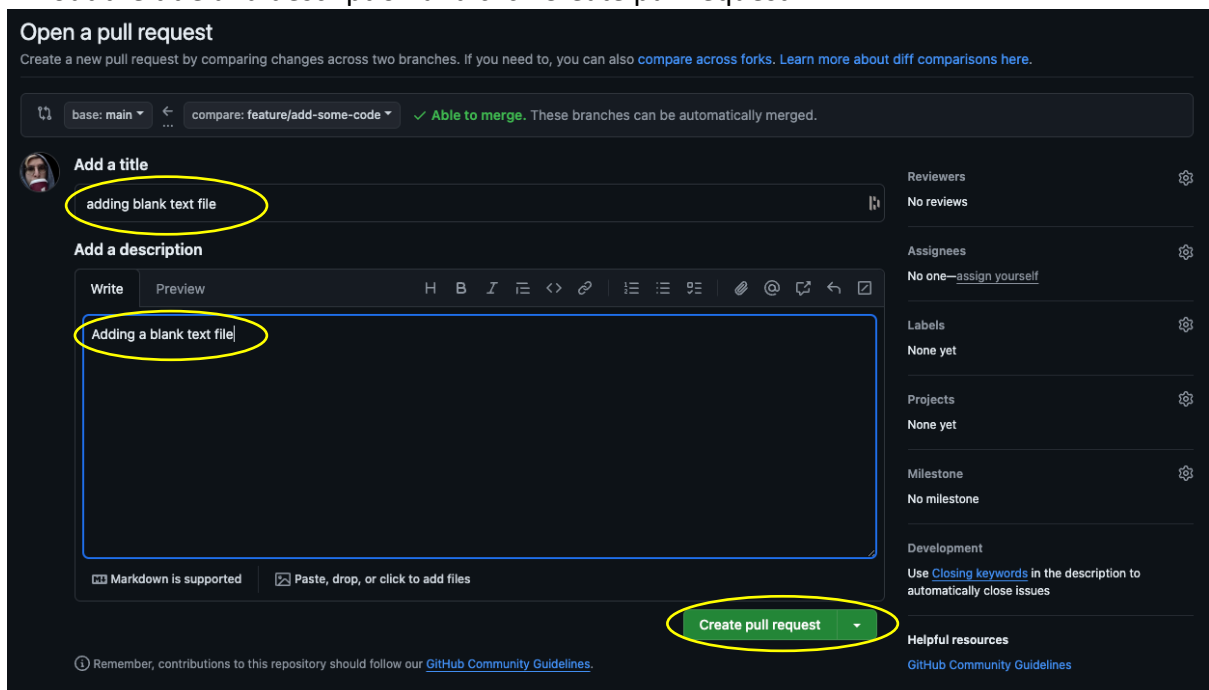
Select your new branch from the branches list:



Click Contribute and Open pull request



Fill out the title and description and click Create pull request



Merge the pull request by clicking Merge pull request

The screenshot shows a GitHub pull request titled "adding blank text file #1". At the top, it indicates "RyanJField wants to merge 1 commit into main from feature/add-some-code". Below this, there are tabs for "Conversation" (0), "Commits" (1), "Checks" (0), and "Files changed" (1). A comment from RyanJField is visible, stating "Adding a blank text file" with a commit hash of 84762f2. Below the comment, a message says "Add more commits by pushing to the feature/add-some-code branch on RyanJField/MAF-WORLD." A green box highlights the "Merge pull request" button, which is circled in yellow. Above this button, there is a message: "Require approval from specific reviewers before merging" with a link to "Rulesets". Below that, a green checkmark indicates "This branch has no conflicts with the base branch" and "Merging can be performed automatically." To the right of the "Merge pull request" button, there is a link to "open this in GitHub Desktop" and a link to "view command line instructions."

Optionally delete the branch after merging the pull request.