

INTRODUCTION TO WEB DEVELOPMENT

Coding Course Curriculum

Week 4 - Github & Version control

WHAT WE'LL COVER THIS WEEK

- Recap of what we've learnt so far
- Version Control & Using GitHub
- Create your group repository
- Publishing on your first website on GitHub Pages
- How Github Pages Works
- Conflict scenario!
- How to avoid and reduce merge conflicts
- Homework: Create GitHub repository for the course project

TOPICS WE'VE COVERED IN WEEKS 1, 2 & 3

Session 1: Getting going + HTML

- HTML syntax

Session 2: CSS

- Tags, Selectors and Attributes, Stylesheets

Session 3: UX

- User Experience

Task: Find a partner and together take a quick look through the session notes from the last 3 sessions. If you're unclear on any of the concepts work through them with your partner and an instructor

GITHUB & VERSION CONTROL

WHAT IS VERSION CONTROL?

- It lets you track your files over time
- If you mess up, you can easily get back to a previous working version
- It's the key to collaborative software development
- You can work in teams on the same project
- You can manage conflicts in code on the same file

WHY DO WE NEED VERSION CONTROL?

It's powerful and it can do a lot more than simply file sharing

THE ADVANTAGES OF VERSION CONTROL

Backup and Restore

- Files are being saved as they are being edited
- You can jump back to any moment in time
- Even if it was 10 years ago



THE ADVANTAGES OF VERSION CONTROL

Synchronization

- Share files with people
- Stay up-to-date with latest version



THE ADVANTAGES OF VERSION CONTROL

Short-term undo

If you mess up, go back to the last known good version



THE ADVANTAGES OF VERSION CONTROL

Long-term undo

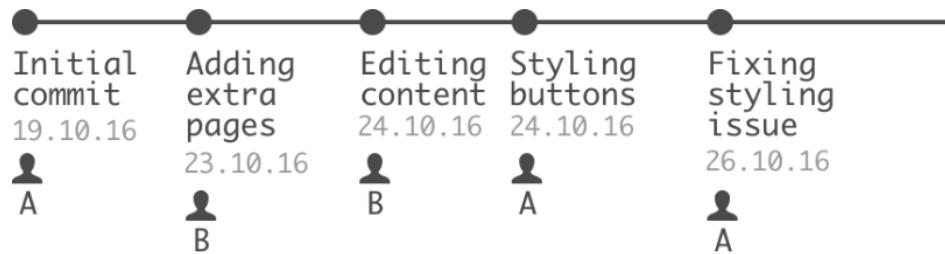
- If you mess up, go back to the last known good version
- Even if it is quite some time ago



THE ADVANTAGES OF VERSION CONTROL

Track Changes & Ownership

- Every file change receives a message
- The person making the change is logged as well
- If someone deserves credit: you know who
- If someone needs to be blamed: you know who



THE ADVANTAGES OF VERSION CONTROL

Sandboxing, branching & merging

- Insurance against yourself
- Test a new feature in isolation
- When everything is tested and OK, add it back into the big pool



THE MAIN ELEMENTS OF VERSION CONTROL

Repository

- A single project folder containing all the files of a project

Branches

- Every repository has at least one branch called Master
- Branches allow you to work on different parts of a repository at the same time

THE MAIN ELEMENTS OF VERSION CONTROL

Commit

- A change in a repository
- Every commit needs an associated message describing the change
- Commits help others understand what has been done to a repository

Issue

- A note on a repository about something that needs attention

Pull Request

- A request to the repository owner to include your code in their project

WHAT ARE WE USING?

Git

- The technology of version control

Github

- A company/website where you can store your code, and connect to using git

Github Desktop

- A GUI developed by the folks at Github to make the steep learning curve just a little bit easier! It's still quite early stages but we love it!

CREATING A REPOSITORY

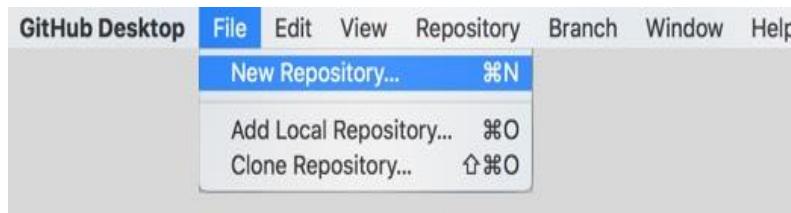
Go to <https://desktop.github.com/>

Download the Windows or MacOS version

Either



OR



Create a New Repository

Name

Description

Local Path

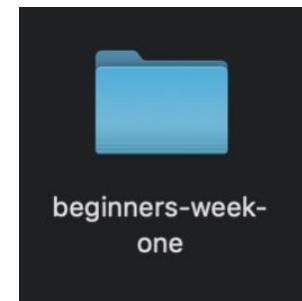
Initialize this repository with a README

Git Ignore

License

Write in the name of the repo you want to initialise, in this case, the name of the folder for week one.

In general, repository name should be without names and spaces!



Adjust the location of where this folder will be on your computer. In this case, it should be in your 'coding_course' folder

Create your new repository

/Users/roo/Documents/coding_course/
beginners-week-one
- beginners-week-one

Current Branch
master

Publish repository
Publish this repository to GitHub

Changes History

0 changed files

Your first repository!



No local changes

Would you like to [open this repository](#) in Finder?

Summary (required)

Description

Commit to master

Committed 17 minutes ago

Initial commit

Undo

Changes

History

Initial commit

 Rosie-Brigham committed e69e910  9 changed files

.DS_Store



.gitattributes



README.md



css/styles.css



duck.jpg



example.html



index.html



solution.png



week-two-solution.png

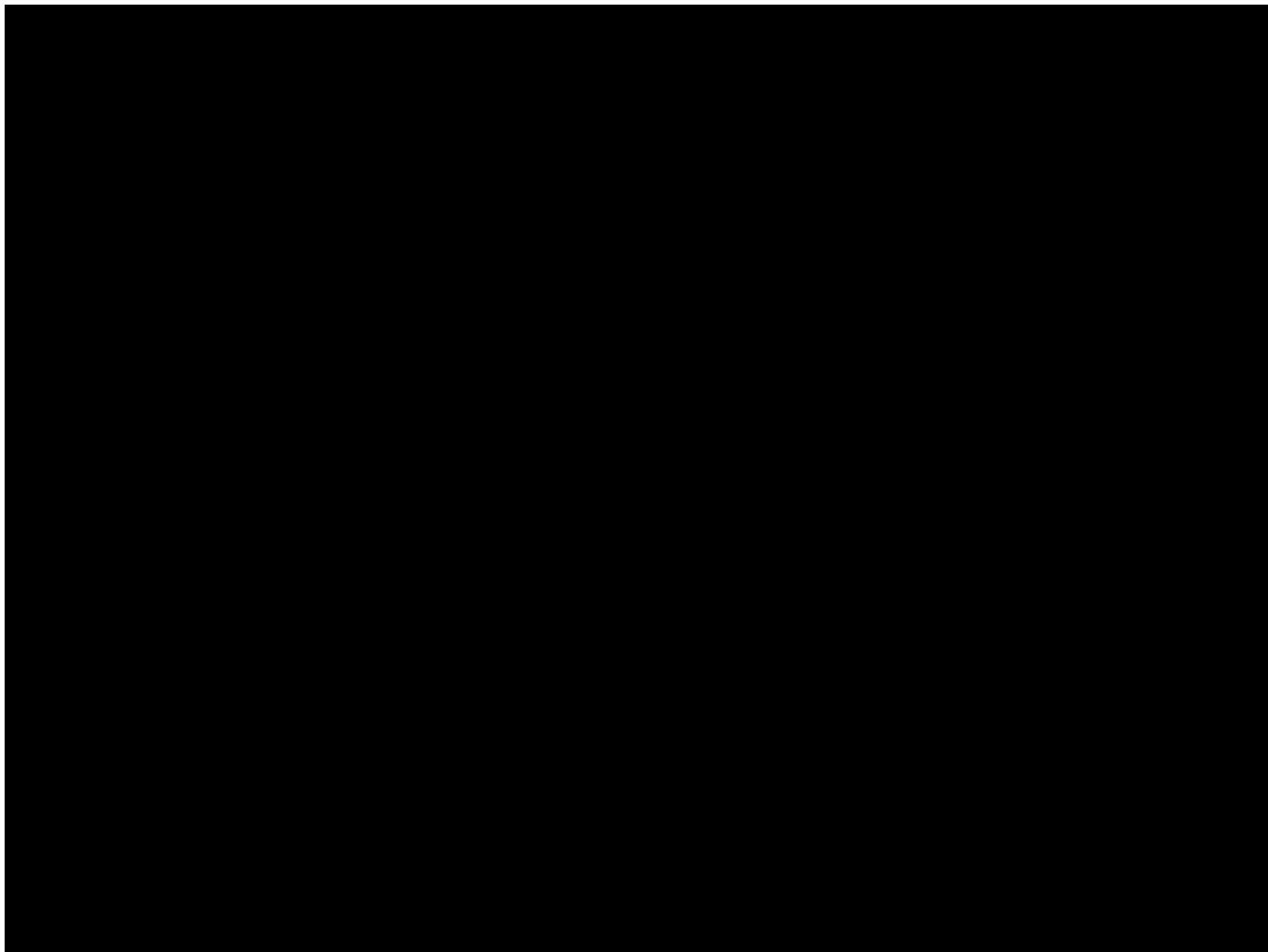


The history of your changes in this one. Here we can see the first commit

This binary file has changed.

[Open file in external program.](#)

Creating a new repo using existing work - demo



FIRST COMMIT

Make a small change in your index.html file

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>First site</title>
    <link rel="stylesheet" type="text/css" href="css/styles.css">
  </head>
  <body>
    <h1>Hello Universe!</h1>
...
...
```

Current Repository: beginners-week-one

Current Branch: master

Publish repository: Publish this repository to GitHub

Changes 1 History index.html

1 changed file: index.html

		@@ -11,7 +11,7 @@	
		11	11
		12	12
		13	13
		14	- <h1>Hello World</h1>
		14	+ <h1>Hello Universe!</h1>
		15	15
		16	<h2>Welcome to my site!</h2>
		17	17

Any changes appear on the changes tab - additions in green, subtractions in red

Update index.html

Description

Commit to master

Committed 27 minutes ago
Initial commit

Undo

The screenshot shows a GitHub commit interface. At the top, there are three dropdown menus: "Current Repository" set to "beginners-week-one", "Current Branch" set to "master", and "Publish repository" which says "Publish this repository to GitHub". Below these are two tabs: "Changes" (with 1 change) and "History". Under "Changes", a list shows "1 changed file" named "index.html". A red arrow points from the text "Select the box for the files that you want to commit here" to the checkbox next to "index.html". The main area displays a diff of "index.html". The diff shows the following changes:

```
@@ -11,7 +11,7 @@
 11   11 </head>
 12   12 <body>
 13   13 <div>
 14 - 14 <h1>Hello World</h1>
 15   15 <h1>Hello Universe!</h1>
 16   16 <h2>Welcome to my site!</h2>
 17   17
```

Below the diff, a commit message field contains "updated hello world" and "updated hello world to hello universe". A red arrow points from the text "Write your commit message and description here, then the commit button." to the "Commit to master" button.

The screenshot shows a GitHub commit history for a repository named "updated hello world". The "History" tab is selected. A single commit is listed:

updated hello world
Rosie-Brigham committed just now

This commit is a merge commit, indicated by the message "updated hello world to hello universe". The diff view shows the changes made to the file "index.html".

index.html

11	11	@@ -11,7 +11,7 @@	
12	12	</head>	
13	13	<body>	
14		-	<h1>Hello World</h1>
	14	+	<h1>Hello Universe!</h1>
15	15	<div>	
16	16	<h2>Welcome to my site!</h2>	
17	17		

Once committed, you
can see it in the history
tab

A simple commit - demo

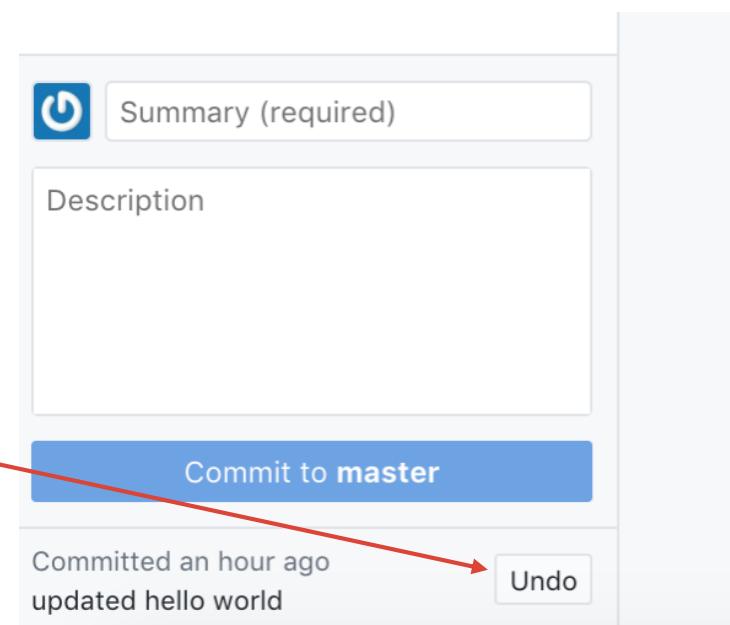
The screenshot shows a code editor window with a dark theme. On the left, there's a sidebar titled 'Project' containing files: 'index.html', 'css', 'css/style.css', 'gradients', 'icon.png', 'example.html', 'index.html' (selected), 'README.md', 'solution.org', and 'www.firebaseio.json'. The main area displays the content of 'index.html':

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>My first site</title>
    <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
    <h1>Hello Universe</h1>
    <h2>Welcome to my site!</h2>
    <br/> ----- <br/>
    
</body>
<p>
    I am currently learning to code with a href="http://www.codefirstgirls.org.uk">Code First Girls. The internet works, to creating websites and version control with git. A lot to cover in one session, but everyone should learn to code, here are some pretty good reasons why...
</p>
<ul style="list-style-type: none;">
    <li><a href="#">HTML is cool</a></li>
    <li><a href="#">CSS is cooler</a></li>
    <li><a href="#">JS is the best</a></li>
</ul>
```

UNDOING A COMMIT

If you ever need to undo a commit simply press the undo button.

This only works if you have *not* pushed it up to github (more on this on the next slide)



A screenshot of a GitHub interface showing the 'Changes' tab. The top navigation bar shows 'Current Branch: master'. The 'Changes' tab is selected, showing '1 changed file' named 'index.html'. The code diff shows a single change: a line '-<h1>Hello World</h1>' is deleted, and a line '+<h1>Hello Universe!</h1>' is added. The bottom part of the interface shows the commit history with one entry: 'updated hello world' with a commit message 'updated hello world to hello universe'. A red arrow points from the text 'Here you can see there is once again only one commit on the history tab, and the changes that were committed are back on the changes tab.' towards the commit message in the history.

Here you can see there is once again only one commit on the history tab, and the changes that were committed are back on the changes tab.

PUBLISHING TO GITHUB

The screenshot shows a GitHub desktop application interface. At the top, there are three tabs: 'Current Repository' (set to '/Users/roo/Documents/coding_course/beginners-week-one'), 'Current Branch' (set to 'master'), and 'Publish repository' (with a sub-instruction 'Publish this repository to GitHub'). A red arrow points upwards from the bottom of the slide towards the 'Publish repository' button.

The main area displays a code diff for 'index.html'. The diff shows the following changes:

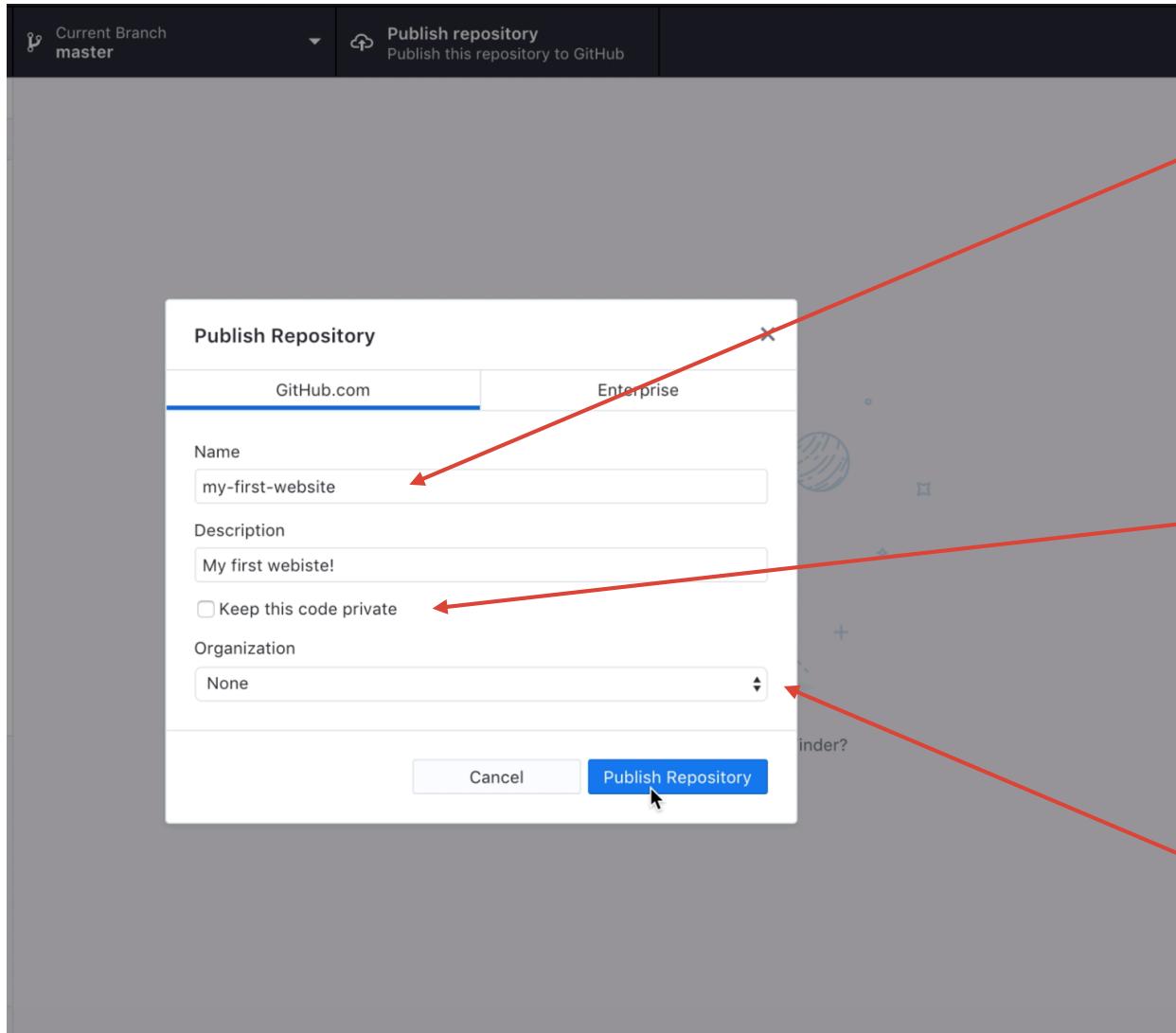
			@@ -11,7 +11,7 @@
11	11		</head>
12	12		<body>
13	13		<div>
14	14	-	<h1>Hello World</h1>
		+	<h1>Hello Universe!</h1>
15	15		
16	16		<h2>Welcome to my site!</h2>
17	17		

Below the code diff, a commit history is shown:

- updated hello world
- updated hello world to hello universe

A large blue button at the bottom left says 'Commit to master'. At the very bottom, it says 'Committed an hour ago' and 'Initial commit'. A blue 'Undo' button is also visible at the bottom right.

To publish a repository on github
simply press the 'publish
repository' button



Select the name of your repository and the description (you can edit this later on github if you want).

Deselect the 'keep this code private' as that is only available to paid accounts

Don't worry about the organisation for now, just select your own account



Rosie-Brigham

Overview **Repositories 65** Stars 8 Followers 19 Following 4

Find a repository... Type: All ▾ Language: All ▾ **New**

my-first-website ★ Star
My first website!
● HTML Updated 9 minutes ago

monumental_server ★ Star
basic server backend thing for monumental work
● Ruby Updated 10 days ago

playing-with-desktop ★ Star
delete me soon
Updated on 14 Nov

↑

Then head over to your GitHub profile to see your new project!

[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Insights](#)[Settings](#)

My first website!

[Edit](#)[Manage topics](#)

2 commits

1 branch

0 releases

0 contributors

Branch: master ▾

[New pull request](#)[Create new file](#)[Upload files](#)[Find file](#)[Clone or download ▾](#) Rosie-Brightman updated hello world ...

Latest commit 9a2e9af 12 minutes ago



Initial commit

an hour ago



Initial commit

an hour ago



Initial commit

an hour ago



Initial commit

an hour ago



Initial commit

an hour ago



Initial commit

an hour ago



updated hello world

12 minutes ago



Initial commit

an hour ago



Initial commit

an hour ago

All the files in your repository are listed here, together with the last commit message for each file

REVERTING A COMMIT

The screenshot shows a GitHub commit history for a repository named 'my-first-website'. The current branch is 'master' and it was last fetched 17 minutes ago. There is one commit titled 'updated hello world' by 'Rosie-Brigham committed' with SHA 9a2e9af, which changed one file. A context menu is open over this commit, with the 'Revert This Commit' option highlighted. Other options in the menu are 'Copy SHA' and 'View on GitHub'. Below the commit list is a diff view showing the changes made in the file. The diff shows the removal of 'Hello World' and the addition of 'Hello Universe!'. The commit message 'updated hello world' has been modified to 'updated hello universe'.

```
@@ -11,7 +11,7 @@
</head>
<body>
<div>
- <h1>Hello World</h1>
+ <h1>Hello Universe!</h1>
<h2>Welcome to my site!</h2>
```

If you have already pushed a commit up to github, you cannot simply ‘undo’ it, instead you need to revert it. Simply right click on the commit and select revert

Use this, instead of the ‘undo’ function to revert a commit in the long ago past, to undo something that you have already published and pushed up to github

Current Repository: my-first-website | Current Branch: master | Push origin: Last fetched 17 minutes ago

Changes History

No Branches to Compare

Revert "updated hello world"
Rosie-Brigham committed just now

updated hello world
Rosie-Brigham committed 18 minutes ago

Initial commit
Rosie-Brigham committed 2 hours ago

updated hello world to hello universe

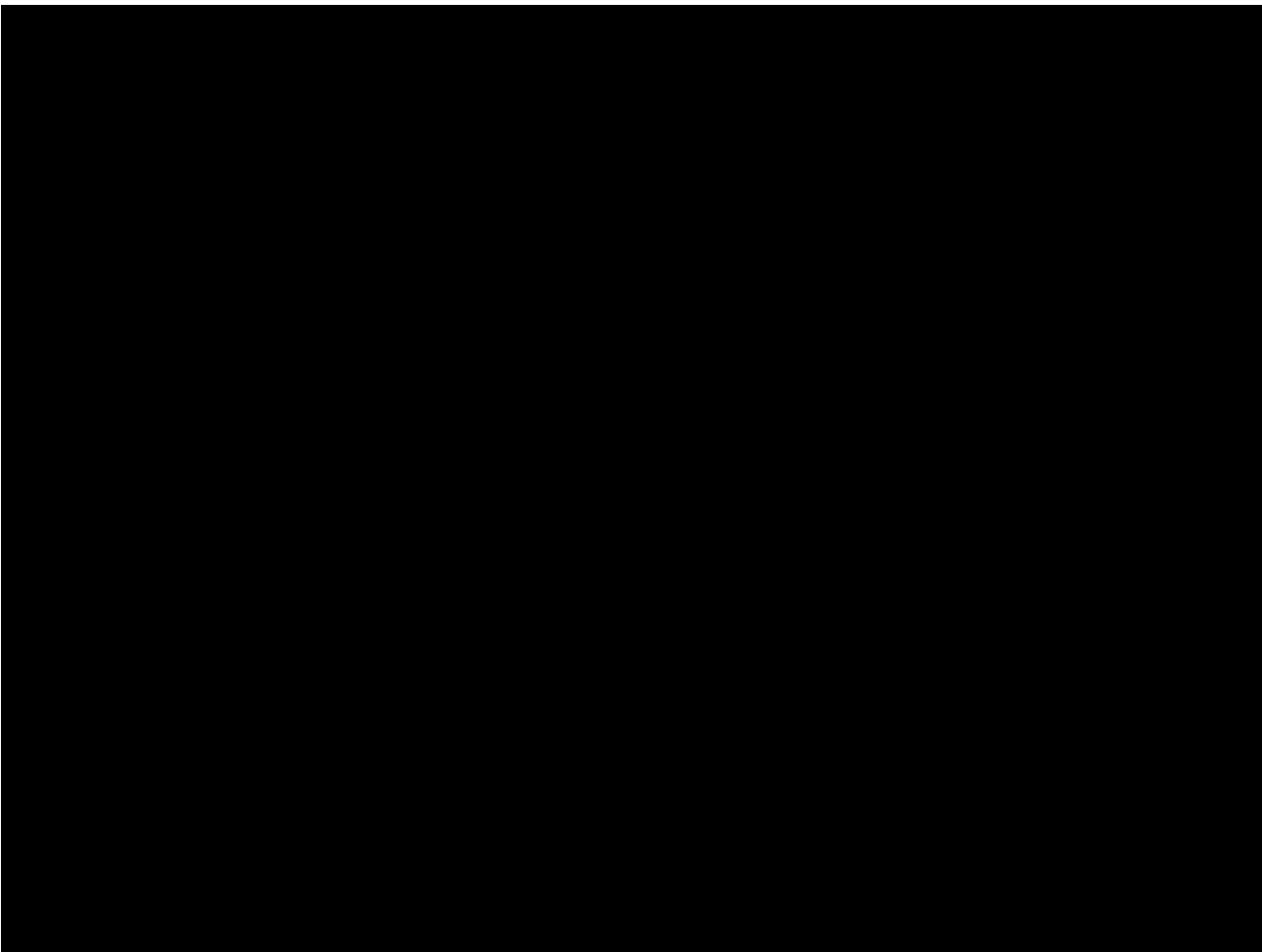
Rosie-Brigham committed 17 minutes ago

index.html

			@@ -11,7 +11,7 @@
11	11		</head>
12	12		<body>
13	13		<div>
14		-	<h1>Hello World</h1>
	14	+	<h1>Hello Universe!</h1>
15	15		<h2>Welcome to my site!</h2>
16	16		
17	17		

This will create a new commit, that reverts the work back to the original!

Reverting a commit - demo

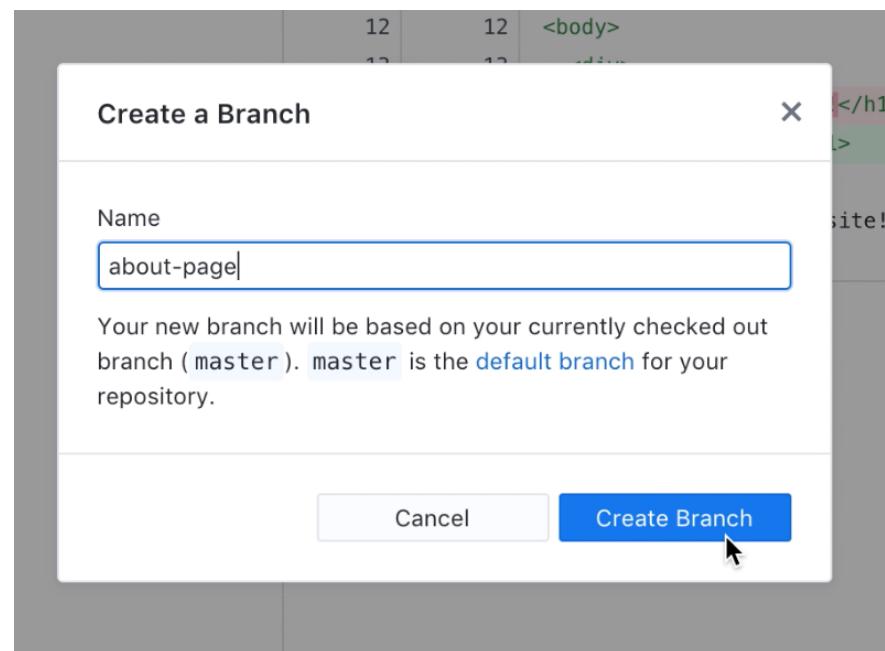
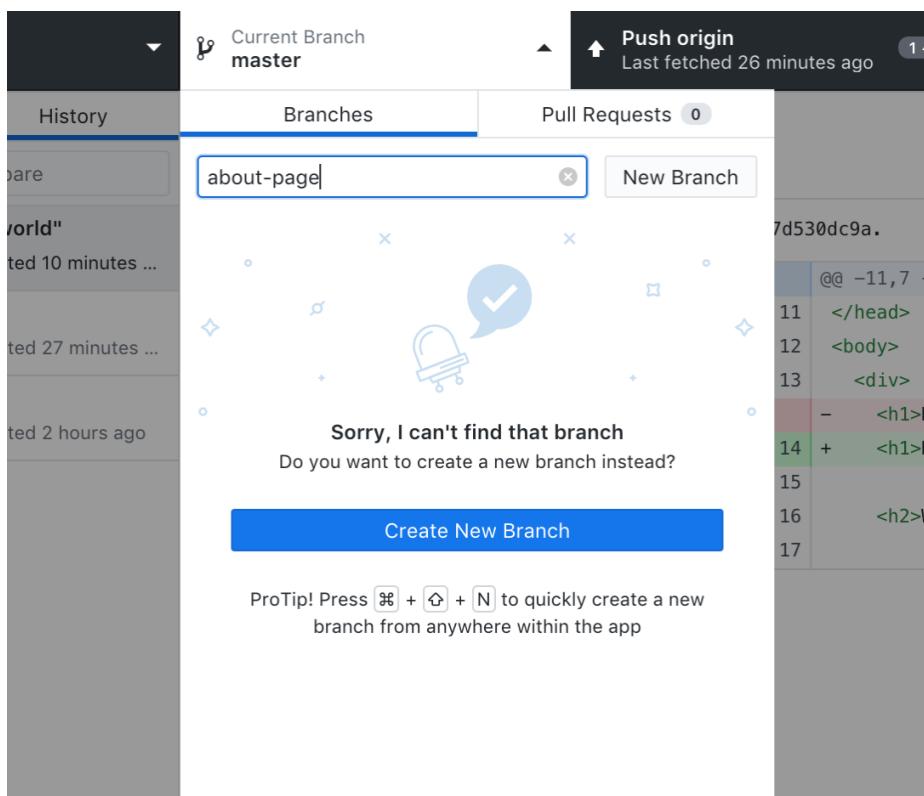


CREATING A BRANCH

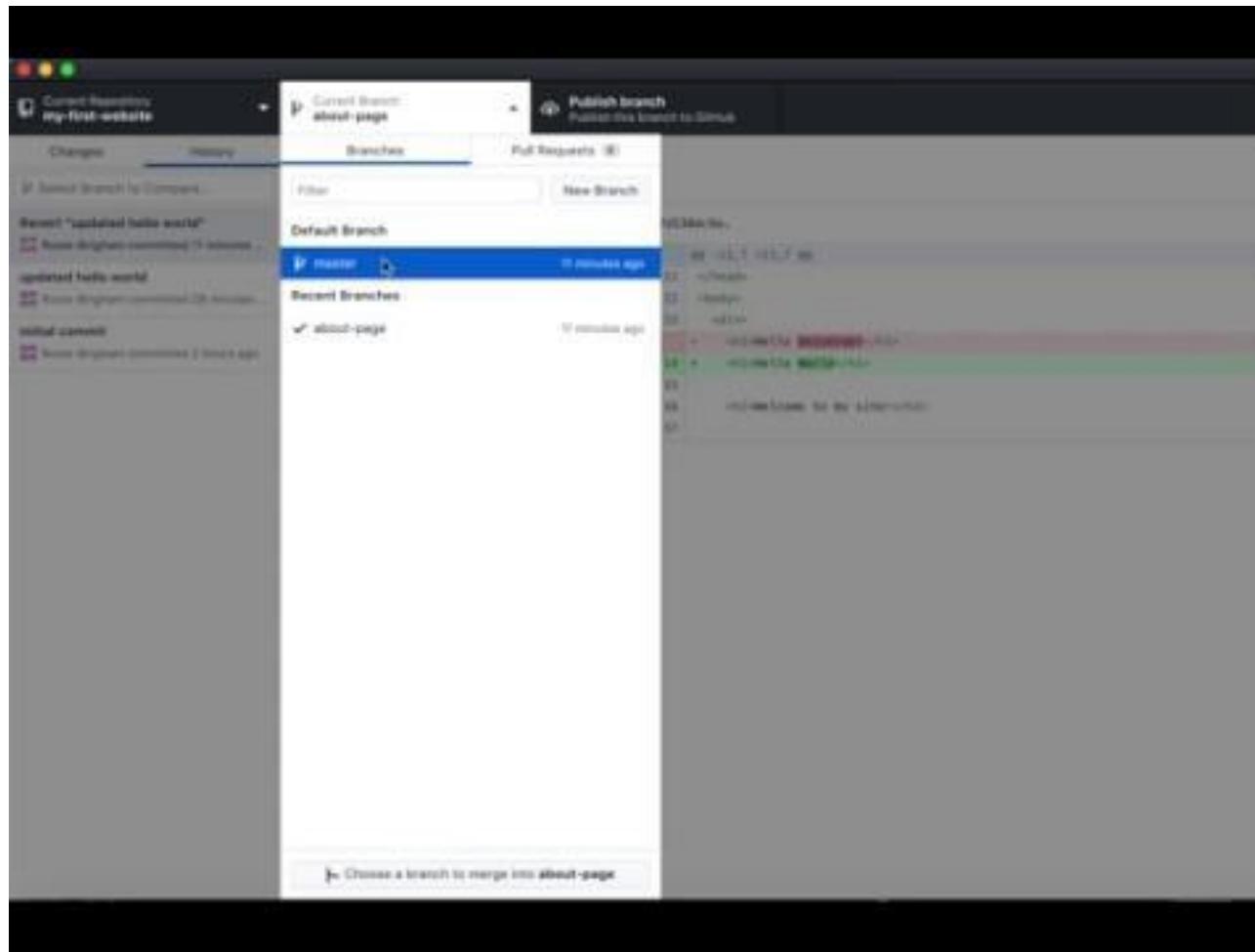
CREATING A BRANCH

- The first branch in any repository is master
- You can create a branch from any other branch you are in
- A branch is (initially) a copy of the current branch you are in
- Branches are useful for testing out features

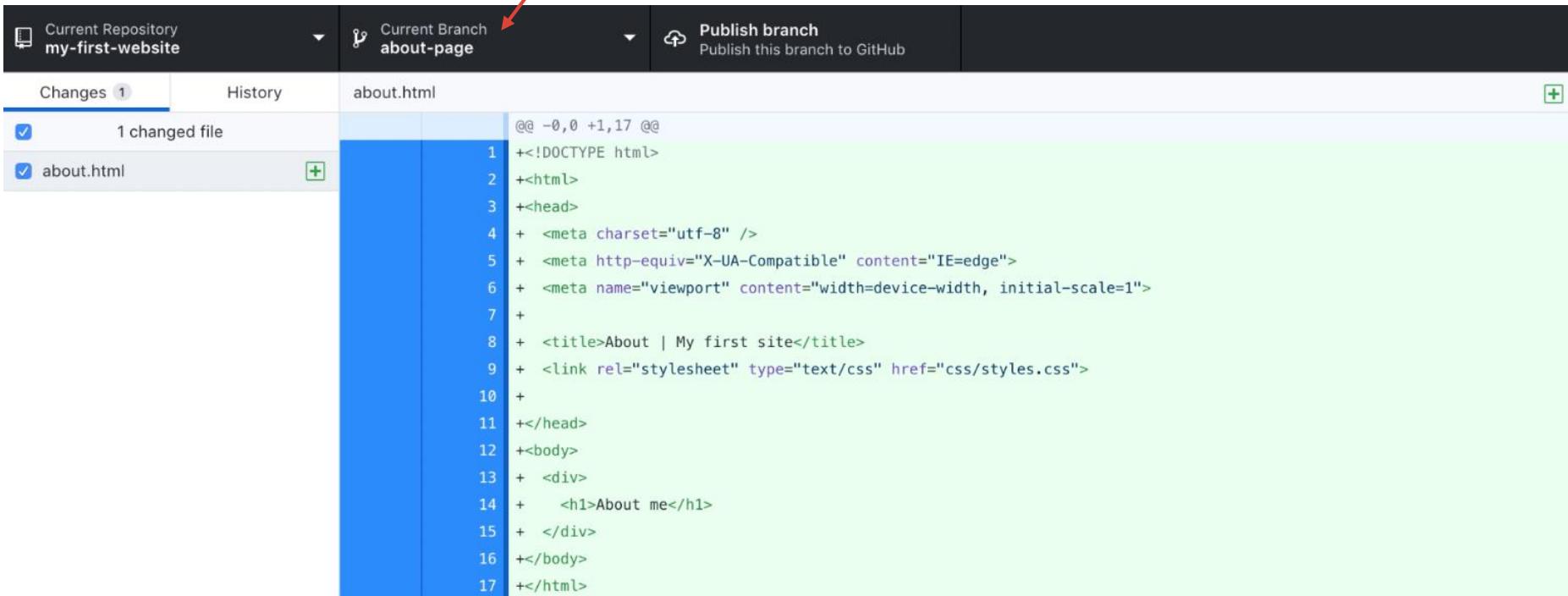
Click on the branch tab to move onto a branch, or create (and then move onto) a new one



CREATING A NEW BRANCH - DEMO



Remember to check out what branch you are on here



A screenshot of the GitHub desktop application interface. At the top, there are three dropdown menus: 'Current Repository' set to 'my-first-website', 'Current Branch' set to 'about-page' (which has a red arrow pointing to it), and 'Publish branch' with the sub-option 'Publish this branch to GitHub'. Below these is a navigation bar with 'Changes 1' (highlighted with a blue border) and 'History'. Under 'Changes 1', it shows '1 changed file' named 'about.html'. The main area displays the content of 'about.html':

```
@@ -0,0 +1,17 @@
+<!DOCTYPE html>
+<html>
+<head>
+<meta charset="utf-8" />
+<meta http-equiv="X-UA-Compatible" content="IE=edge">
+<meta name="viewport" content="width=device-width, initial-scale=1">
+
+<title>About | My first site</title>
+<link rel="stylesheet" type="text/css" href="css/styles.css">
+
+</head>
+<body>
+<div>
+<h1>About me</h1>
+</div>
+</body>
+</html>
```

At the bottom left, there is a commit message editor with the text 'creates about page'. Below it is a commit history section with one entry: 'creates about page'. A red arrow points from the 'about-page' branch selection at the top to the 'Commit to about-page' button at the bottom.

Make sure you are committing to the correct branch

The screenshot shows a GitHub repository interface. At the top, there are three tabs: "Current Repository" (set to "my-first-website"), "Current Branch" (set to "about-page"), and "Publish branch" (with a "Publish this branch to GitHub" button). Below these are two tabs: "Changes" (selected) and "History". A sidebar on the left lists commit history:

- "creates about page" (Rosie-Brigham committed just now)
- "Revert "updated hello world"" (Rosie-Brigham committed 17 minutes ago)
- "updated hello world" (Rosie-Brigham committed 35 minutes ago)
- "Initial commit" (Rosie-Brigham committed 2 hours ago)

The main area displays the commit "creates about page" by Rosie-Brigham. It shows the file "about.html" with the following content:

```
@@ -0,0 +1,17 @@
+<!DOCTYPE html>
+<html>
+<head>
+<meta charset="utf-8" />
+<meta http-equiv="X-UA-Compatible" content="IE=edge">
+<meta name="viewport" content="width=device-width, initial-scale=1">
+
+<title>About | My first site</title>
+<link rel="stylesheet" type="text/css" href="css/styles.css">
+
+</head>
+<body>
+<div>
+<h1>About me</h1>
+</div>
+</body>
+</html>
```

The history on this branch is now different to the master branch. Press the **publish** button to get the new branch, and your changes, up on github.

COMMITTING TO A NEW BRANCH - DEMO

The screenshot shows a web browser window with a GitHub interface. The title bar says "Current Branch: about-page". The main area displays a commit history for the file "about.html". The most recent commit is highlighted in blue and shows a diff view of the file's content. The diff highlights changes in lines 1 through 17. The code editor on the right shows the full content of the "about.html" file.

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <title>About Page</title>
    <link rel="stylesheet" type="text/css" href="css/styles.css" />
  </head>
  <body>
    <h1>About Page</h1>
    <p>This is the about page. It contains information about the website.</p>
  </body>
</html>
```

PULL REQUESTS

When you have pushed your new branch with your changes up to github, you can merge them into master using a pull request. On the ‘branches’ tab in your repo, select ‘new pull request’ on the branch you want to merge changes in from

The screenshot shows the GitHub interface for managing branches. At the top, there's a navigation bar with links for Code, Issues (0), Pull requests (0), Projects (0), Wiki, Insights, and Settings. Below this is a tabs section with Overview (selected), Yours, Active, Stale, and All branches. A search bar for branches is also present.

The main content area is titled "Default branch" and shows the "master" branch. It indicates the branch was updated 4 hours ago by Rosie-Brigham. There's a green checkmark icon, a "Default" button (which is currently selected), and a "Change default branch" button.

Below this is a section titled "Your branches" which lists the "about-page" branch. This branch was also updated 4 hours ago by Rosie-Brigham. It shows 0 open pull requests and 1 merged pull request. There are "New pull request" and delete buttons for this branch.

Finally, there's a section titled "Active branches" which also lists the "about-page" branch with the same update information, 0 open pull requests, and 1 merged pull request. It includes a "New pull request" button and a delete button.

Add a title and description for your pull request to describe the changes you've made

In the pull request you can then review the changes you have made, and add comments to things that maybe need to change

creates about page #1

Edit

 Open Rosie-Brigham wants to merge 1 commit into master from about-page

Conversation 0 Commits 1 Checks 0 Files changed 1

Changes from all commits ▾ File filter... ▾ Jump to... ▾ +17 -0 ████ Diff settings ▾ Review changes ▾

17 ████ about.html

Copy path View file    

```
... ... @@ -0,0 +1,17 @@
1 + <!DOCTYPE html>
2 + <html>
3 + <head>
4 +   <meta charset="utf-8" />
5 +   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 +   <meta name="viewport" content="width=device-width, initial-scale=1">
7 +
8 +   <title>About | My first site</title>
9 +   <link rel="stylesheet" type="text/css" href="css/styles.css">
10 +
11 + </head>
12 + <body>
13 +   <div>
14 +     <h1>About me</h1>
15 +   </div>
16 + </body>
17 + </html>
```

💡 ProTip! Use **n** and **p** to navigate between commits in a pull request.

If everyone looks good in the pull request, simply press the merge button and then confirm!

creates about page #1

Edit

 Open Rosie-Brightham wants to merge 1 commit into master from about-page

Conversation 0 Commits 1 Checks 0 Files changed 1 +17 -0

Rosie-Brightham commented 2 minutes ago
Creates about page

Creates about page ... 0001989

Add more commits by pushing to the **about-page** branch on [Rosie-Brightham/my-first-website](#).

This branch has not been deployed
No deployments

 Merge pull request You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

Reviewers No reviews

Assignees No one—assign yourself

Labels None yet

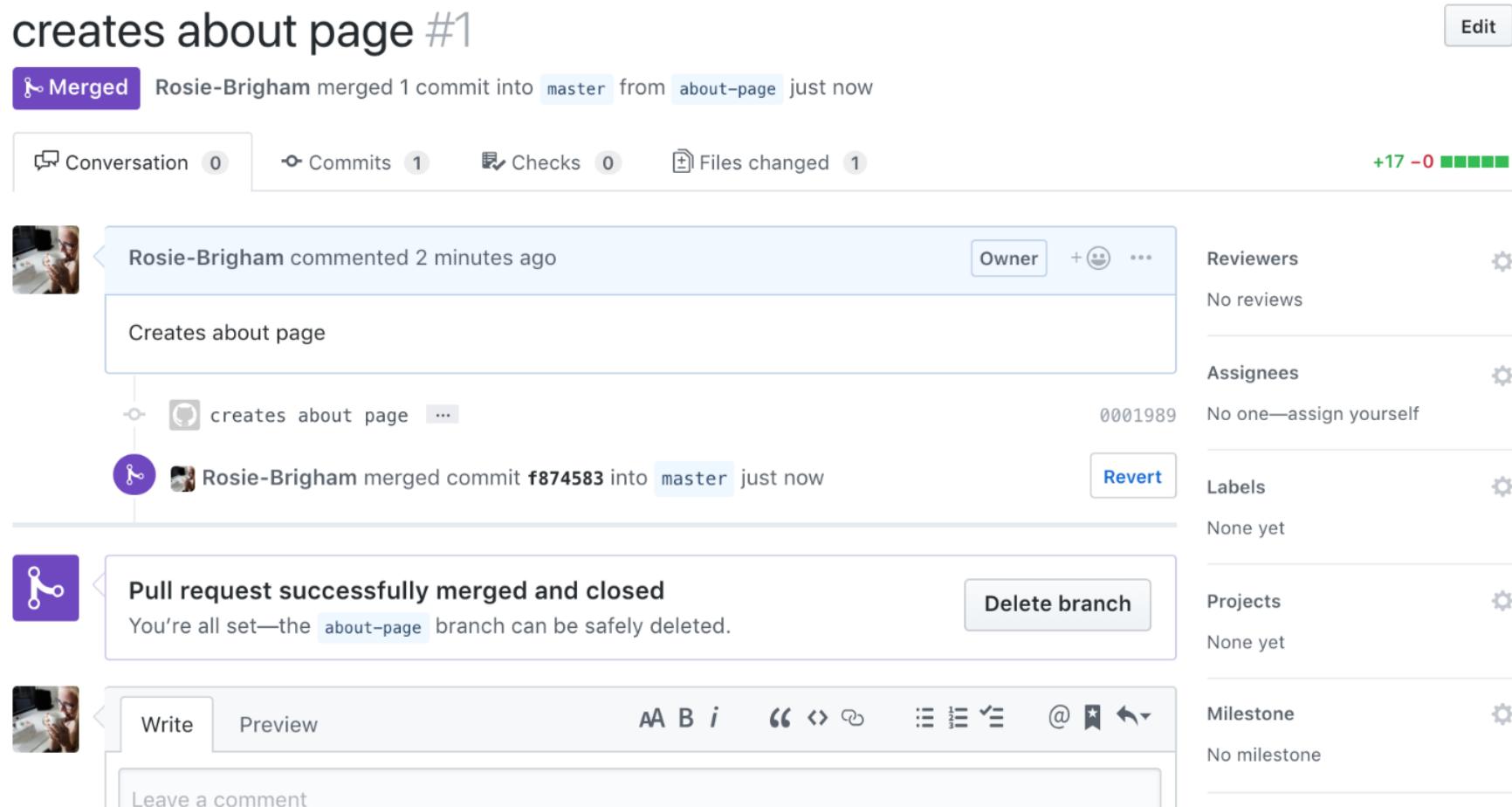
Projects None yet

Milestone No milestone

Notifications 

All merged! Make sure you delete the branch after you have merged the pull request to keep your repo tidy

creates about page #1



You can see the new commits from the merged branch, and the commit created by the merge, on the history of the master branch

Rosie-Brigham / my-first-website

Watch 0 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

Branch: master ▾

Commits on Dec 21, 2018

Merge pull request #1 from Rosie-Brigham/about-page ...
Rosie-Brigham committed 13 seconds ago ✓ Verified f874583

creates about page ...
Rosie-Brigham committed 4 hours ago

Revert "updated hello world" ...
Rosie-Brigham committed 4 hours ago ✓

updated hello world ...
Rosie-Brigham committed 4 hours ago ✓

Initial commit
Rosie-Brigham committed 6 hours ago

Newer Older

FIRST RULE OF GIT

REMEMBER TO PULL
DOWN NEW CHANGES

Current Repository
my-first-website

Current Branch
master

Pull origin
Last fetched just now

Changes

History

0 changed files



No local changes

Would you like to [open this repository in Finder?](#)

 Summary (required)

Description

±

Commit to master

The screenshot shows a GitHub repository interface. At the top, it displays "Current Repository: my-first-website" and "Current Branch: master". A "Fetch origin" button indicates the last fetch was just now. Below this, there are two tabs: "Changes" (selected) and "History". A sidebar on the left lists commit history:

- Merge pull request #1 from Rosie-Brigham/about-page (Rosie-Brigham committed 1 minute ago)
- creates about page (Rosie-Brigham committed 4 hours ago)
- Revert "updated hello world" (Rosie-Brigham committed 4 hours ago)
- updated hello world (Rosie-Brigham committed 4 hours ago)
- Initial commit (Rosie-Brigham committed 6 hours ago)

The main area shows a merge pull request titled "Merge pull request #1 from Rosie-Brigham/about-page". It details a merge from "Rosie-Brigham committed f874583" into "master" (1 changed file). The commit message is "creates about page". The diff shows the creation of an "about.html" file:

```
@@ -0,0 +1,17 @@
+<!DOCTYPE html>
+<html>
+<head>
+<meta charset="utf-8" />
+<meta http-equiv="X-UA-Compatible" content="IE=edge">
+<meta name="viewport" content="width=device-width, initial-scale=1">
+
+<title>About | My first site</title>
+<link rel="stylesheet" type="text/css" href="css/styles.css">
+
+</head>
+<body>
+<div>
+<h1>About me</h1>
+</div>
+</body>
+</html>
```

Now you have the commit created on github by merging the about branch into master on your local machine

PUSHING TO GITHUB PAGES

PUBLISHING ON GITHUB PAGES

- Free web hosting for git repositories on GitHub
- Make sure **index.html** is all lowercase
- Your website url will be **[your-github-username].github.io/[repository-name]**

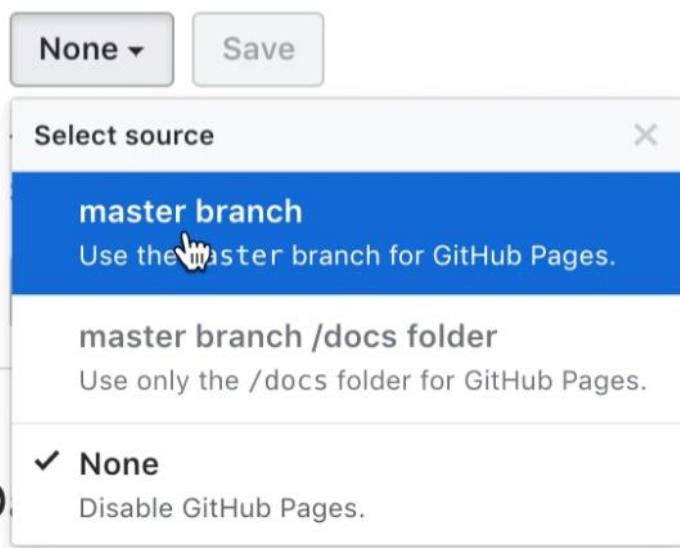
GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository.

[Learn more](#).



Will theme using the master branch. [Learn more](#).

On the settings page of your repo, scroll down to Github Pages and enable it.

Select it to build from your master branch

GitHub Pages

This will be the URL of the project

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.



Your site is ready to be published at <https://rosie-brigham.github.io/my-first-website/>.

Source

Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

master branch ▾

Save

Theme Chooser

Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

Choose a theme

PART 2

COLLABORATING

COLLABORATING

So far you have initialised your first site with git, made couple of commits on two different branches, pushed those commits to github and even published your site on github pages!

Now lets step things up a notch, and use github to collaborate with the team projects you started last week

TASKS

1. Find your teammates and sit with them for the rest of the session. Choose one person from your team to lead the first section.
2. **If you have already started coding your project,** initialise this in a new repository on github desktop.
3. **If you haven't started,** create a new folder in your coding_course folder called 'group_project' and create a file called 'index.html'. Initialise this as a new repository on github desktop following the instructions earlier
4. Commit your work and publish it to github

ADDING COLLABORATORS

- You should now have your group project pushed up to github (don't worry if it's only an empty file for now, you can add to it later on)
- We are now going to add your other team-mates as collaborators

The screenshot shows the GitHub repository settings page for 'CodeFirstGirls / group_project'. The 'Settings' tab is highlighted with a red border. On the left sidebar, the 'Collaborators & teams' option is also highlighted with a red border. A red arrow points from the text 'Select the Settings tab for your repository' to the 'Settings' tab. Another red arrow points from the text 'Go to Collaborators' to the 'Collaborators & teams' option in the sidebar.

CodeFirstGirls / group_project

Watch 6 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

Options

Collaborators & teams

Branches

Webhooks

Integrations & services

Deploy keys

Alerts

Moderation

Interaction limits

Teams

+ Create new team

No teams have been given access to this repository yet. Use the form below to add a team.

Add a team ▾

Collaborators

This repository doesn't have any collaborators yet. Use the form below to add a collaborator.

Search by username, full name or email address

You'll only be able to find a GitHub user by their email address if they've chosen to list it publicly. Otherwise, use their username instead.

moopandpoom

Add collaborator

Go to
Collaborators

Type the username of
your teammate and
select their account

[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Insights](#)[Settings](#)**Options****Collaborators & teams**[Branches](#)[Webhooks](#)[Integrations & services](#)[Deploy keys](#)[Alerts](#)[Moderation](#)[Interaction limits](#)**Teams**[+ Create new team](#)

No teams have been given access to this repository yet. Use the form below to add a team.

[Add a team ▾](#)**Collaborators**

Awaiting moopandpoom's response

[Write ▾](#)[Copy invite link ▾](#)[Cancel invite](#)**Search by username, full name or email address**

You'll only be able to find a GitHub user by their email address if they've chosen to list it publicly. Otherwise, use their username instead.

[Add collaborator](#)

The invitation has been sent



Rosie-Brigham invited you to collaborate

Accept the
invitation



Accept invitation

Decline



Owners of group_project will be able to see:

- Your public profile information
- Certain activity within this repository
- Country of request origin
- Your access level for this repository
- Your IP address

Is this user sending spam or malicious content?

[Block Rosie-Brigham](#)

You now have push access!

You now have push access to the CodeFirstGirls/group_project repository. X

CodeFirstGirls / group_project



Watch

▼

6



Star

0



1

Code

Issues 0

Pull requests 0

Projects 0

Wiki

Insights

demo group project

2 commits

1 branch

0 releases

0 contributors

Branch: master ▾

New pull request

Create new file

Upload files

Find file

Clone or download ▾

Rosie-Brigham adds index

Latest commit 90e85eb 8 minutes ago

.gitattributes

Initial commit

10 minutes ago

index.html

adds index

8 minutes ago

Help people interested in this repository understand your project by adding a README.

Add a README

TASKS

1. Add everyone in your team as a collaborator to your project

ADDING COLLABORATORS

- Now everyone has been added as a collaborator, we need to clone the projects down onto everyone's machine!

 An updated version of GitHub Desktop is available and will be installed at the next launch. See [what's new](#) or [restart GitHub Desktop](#).

X



No Repositories Found



Create a new project and publish it to GitHub

[Create New Repository](#)



Add an existing project on your computer and
publish it to GitHub

[Add a Local Repository](#)



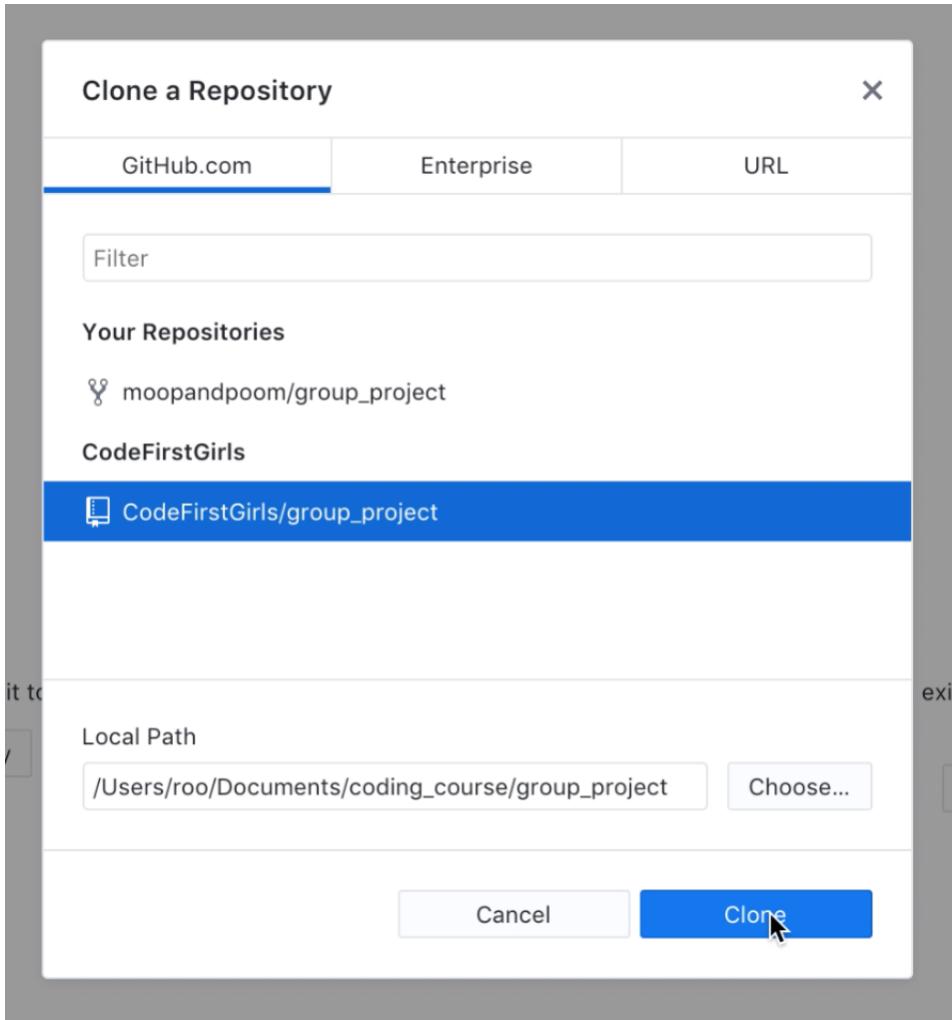
Clone an existing project from GitHub to your
computer

[Clone a Repository](#)

Alternatively, you can drag and drop a local repository here to add it.

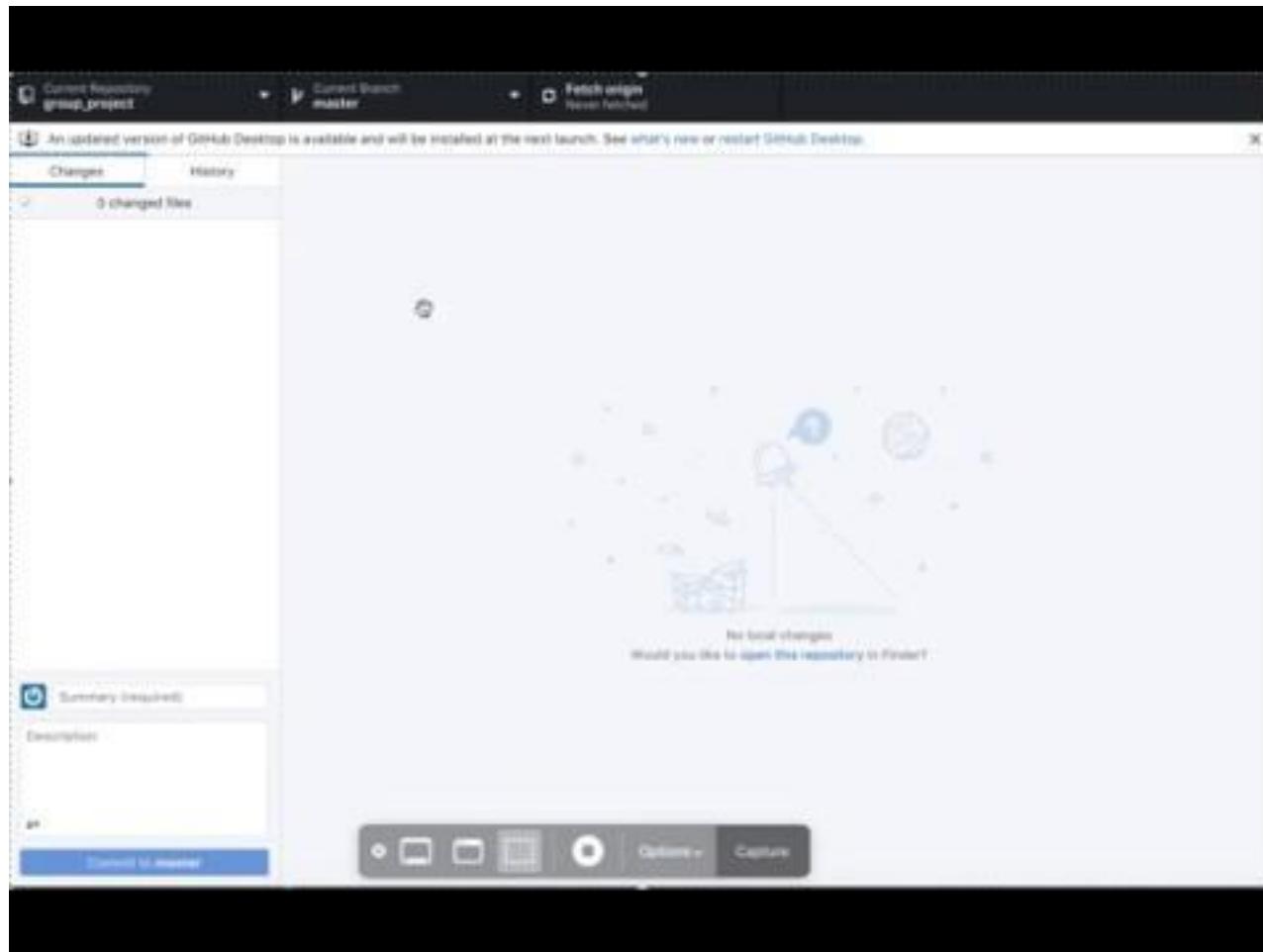


Select the 'Clone a Repository' to download a repository from
github down to your machine



Select the repository you want to download

CLoning from github using desktop - demo



TASKS

Take it in turns, working together, to do the following:

1. Check out a new branch
2. Make a small change, commit it and push it up to github
3. Open a pull request on github
4. Get someone to merge in the pull request
5. Pull down the changes onto everyone's version

CONFLICT SCENARIO!

- Working on a repository with more than one collaborator can create conflicts
- They happen if two people edit the same line/section of a file and then try to merge them. Github can't work out which one is the one to use
- Conflicts are a nuisance
- But they can be fixed!

CONFLICT SCENARIO!

- In the following example, line 14 of index.html was changed in the **change-intro**, and in master *after* that branch was created. Github can't work out which one should have precedence so you have to tell it manually

You can still open a pull request with a merge conflict, but you have to manually fix the conflicting changes

The screenshot shows a pull request creation interface. At the top, there's a navigation bar with links for Code, Issues (0), Pull requests (0), Projects (0), Wiki, Insights, and Settings. The main title is "Open a pull request". Below it, a sub-instruction says "Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#)". The comparison dropdowns show "base: master" and "compare: change-intro". A red error message "X Can't automatically merge. Don't worry, you can still create the pull request." is displayed. The main form area has a title "changes intro html tags" and sections for "Write" and "Preview". It includes a rich text editor toolbar with bold, italic, and other styling options. There's a "Leave a comment" text area and a file attachment section. On the right, there are configuration panels for "Reviewers" (No reviews), "Assignees" (No one—assign yourself), "Labels" (None yet), "Projects" (None yet), and "Milestone" (No milestone). A "Create pull request" button is at the bottom right. A note at the bottom left says "Styling with Markdown is supported".

changes intro html tags #2

Edit

 Open Rosie-Brigham wants to merge 1 commit into master from change-intro

Conversation 0

Commits 1

Checks 0

Files changed 1

+2 -2 



Rosie-Brigham commented just now

Owner



...

No description provided.

changes intro html tags

5ff5d5a

Reviewers

No reviews



Assignees

No one—assign yourself



Labels

None yet



Projects

None yet



Milestone

No milestone



Notifications

 Unsubscribe

You're receiving notifications because you authored the thread.



This branch has not been deployed
No deployments

Resolve conflicts



This branch has conflicts that must be resolved

Use the [web editor](#) or the [command line](#) to resolve conflicts.

Conflicting files

index.html

Merge pull request

You can also open this in [GitHub Desktop](#) or view [command line instructions](#).

Click on the 'resolve conflicts' button

This opens the web editor on github, simply delete the changes that you do not want and select ‘mark as resolved’

The screenshot shows the GitHub web editor interface for a repository named 'Rosie-Brigham / my-first-website'. The user is viewing a pull request comparing the 'change-intro' branch against the 'master' branch. The file 'index.html' contains the following code:

```
10 11  </head>
12  <body>
13  <div>
14  <===== change-intro
15  <h2>Hello World</h2>
16  =====
17  <h1>Hello!</h1>
18  >>>> master
19
20      <h3>Welcome to my site!</h3>
21
22      <!-- image of a duck -->
23      
24  </div>
25
26  <div>
27      <p>
28          I am currently learning to code with <a href="www.codefirstgirls.org.uk">Code First: Girls</a>. Going over everything from how the
29          internet works, to creating websites and version control with git. A lot to cover in only 8 weeks!
30          Everyone should learn to code, here are some pretty good reasons why...
31      </p>
32      <ol>
33          <li>HTML is cool</li>
34          <li id="lower">CSS is cooler</li>
35          <li id="lowest">JS is the best!</li>
```

A yellow bracket highlights the conflict area between line 14 and line 18. The 'change-intro' branch's code (lines 14-17) is shown above the merge separator, and the 'master' branch's code (line 18) is shown below it. The GitHub interface includes a 'Mark as resolved' button in the top right corner of the code editor.



Search or jump to...

Pull requests Issues Marketplace Explore



Rosie-Brigham / my-first-website

[Watch](#) 0[Star](#) 0[Fork](#) 0[Code](#)[Issues 0](#)[Pull requests 1](#)[Projects 0](#)[Wiki](#)[Insights](#)[Settings](#)

changes intro html tags #2

Resolving conflicts between `change-intro` and `master` and committing changes ➔ `change-intro`

1 conflicting file	index.html	1 conflict	Prev ▲	Next ▼	⚙️	Mark as resolved
index.html index.html	<pre>10 </head> 11 <body> 12 <div> 13 <h2>Hello World</h2> 14 15 <h3>Welcome to my site!</h3> 16 17 <!-- image of a duck --> 18 19 </div> 20 21 <div> 22 <p> 23 I am currently learning to code with Code First: Girls. Going over everything from how the 24 internet works, to creating websites and version control with git. A lot to cover in only 8 weeks! 25 Everyone should learn to code, here are some pretty good reasons why... 26 </p> 27 28 HTML is cool 29 <li id="lower">CSS is cooler 30 <li id="lowest">JS is the best 31 32 </div> 33 34</pre>	1 conflict	Prev ▲	Next ▼	⚙️	Mark as resolved

changes intro html tags #2

Edit

Open

Rosie-Brigham wants to merge 2 commits into `master` from `change-intro`

Conversation 0

Commits 2

Checks 0

Files changed 1

+2 -2



Rosie-Brigham commented 2 minutes ago

Owner

+ ...

No description provided.

Rosie-Brigham and others added some commits 3 minutes ago

changes intro html tags

5ff5d5a

[Merge branch 'master' into change-intro](#)

Verified

60728f1

Add more commits by pushing to the `change-intro` branch on [Rosie-Brigham/my-first-website](#).



This branch has not been deployed

No deployments

Reviewers

No reviews

Assignees

No one—assign yourself

Labels

None yet

Projects

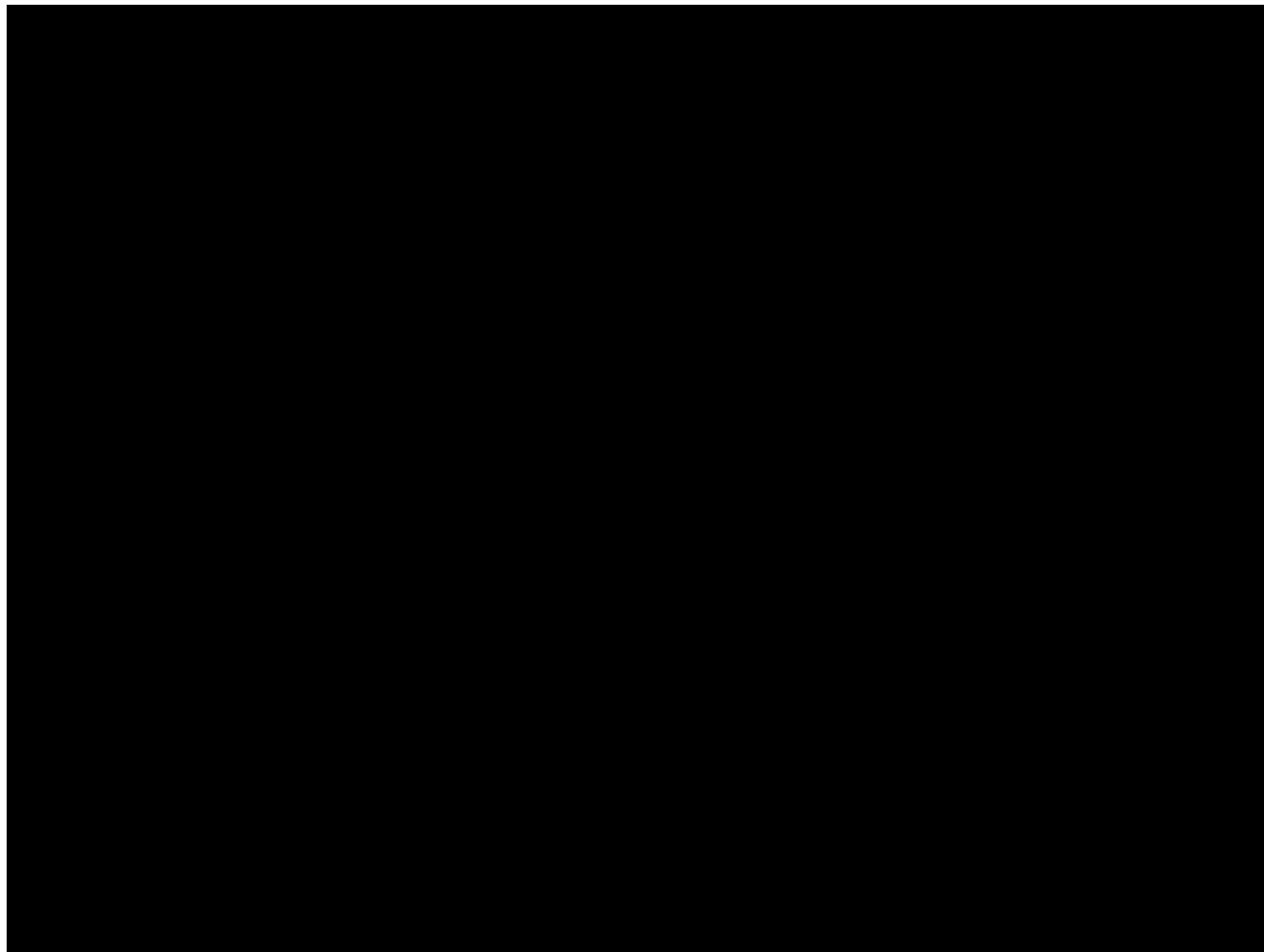
None yet

Milestone

No milestone

This adds a new merge commit - and the conflict is resolved!

RESOLVING CONFLICTS ON GITHUB - DEMO



HOW TO AVOID AND REDUCE MERGE CONFLICTS

- Always pull down changes from github (click the ‘fetch origin’ button)
- Plan with your collaborators who is going to work on what and when

HOMEWORK

1. Make sure both your group project and first site is published on github, and your first site is published on GH pages
2. Work on your group projects, using github to collaborate!