

Web Server Design

Lecture 2 – Git/GitHub Walkthrough

Old Dominion University

Department of Computer Science

CS 431/531 Spring 2026

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Create a Private GitHub Repository and Add “**dcalano**” as a Collaborator

<https://github.com/>

The screenshot shows the GitHub homepage with a user profile dropdown menu open on the right side. The dropdown is titled "Signed in as cs531bot" and includes options like "Set status", "Your profile" (which is highlighted with a blue background), "Your repositories", "Your projects", "Your stars", "Your gists", "Help", "Settings", and "Sign out". A red box highlights the "Your profile" option. The main content area features a large central box with the text "Learn Git and GitHub without any code!" and two buttons: "Read the guide" (green) and "Start a project" (white). Below this is another section with the text "Discover interesting projects and people to populate your personal news feed." and a "Explore GitHub" button.

GitHub

Search or jump to...

Pull requests Issues Marketplace Explore

Repositories

Your most active repositories will appear here. [Create a repository](#) or [explore repositories](#).

Learn Git and GitHub without any code!

Using the Hello World guide, you'll create a repository, start a branch, write comments, and open a pull request.

Read the guide Start a project

Signed in as cs531bot

Set status

Your profile

Your repositories

Your projects

Your stars

Your gists

Help

Settings

Sign out

Explore repositories

kubernetes/website

Kubernetes website and documentation repo:

HTML ★ 1.5k

knative/serving-operator

Go ★ 10

hlissner/doom-emacs

An Emacs configuration for the stubborn martian vimmer

Emacs Lisp ★ 3.6k

Explore more →

ProTip! The feed shows you events from people you follow and repositories you watch.

Subscribe to your news feed

<https://github.com/cs531bot>

cs531bot

GitHub, Inc. [US] | https://github.com/cs531bot

Search or jump to... Pull requests Issues Marketplace Explore

ProTip! Updating your profile with your name, location, and a profile picture helps other GitHub users get to know you. [Edit profile](#)

Overview **Repositories 0** Projects 0 Stars 0 Followers 0 Following 0

Popular repositories

You don't have any public repositories yet.

1 contribution in the last year

Contribution settings ▾

Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug

Mon Wed Fri

Learn how we count contributions. Less More

This is your **contribution graph**. Your first is for joining GitHub and you'll earn more as you make **additional contributions**. More contributions means a darker green square for that day. Over time, your chart might start looking **something like this**.

We have a quick guide that will show you how to create your first repository and earn more green squares!

[Read the Hello World guide](#)

Contribution activity

2019

<https://github.com/cs531bot?tab=repositories>

August 2019

Your Repositories

GitHub, Inc. [US] | https://github.com/cs531bot?tab=repositories

Search or jump to... Pull requests Issues Marketplace Explore

ProTip! Updating your profile with your name, location, and a profile picture helps other GitHub users get to know you. [Edit profile](#)

Overview Repositories 0 Projects 0 Stars 0 Followers 0 Following 0

Find a repository... Type: All Language: All [New](#)

cs531bot doesn't have any public repositories yet.

Set status

cs531bot

[Edit profile](#)

Joined 6 minutes ago

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https://github.com/new

Create a New Repository

GitHub, Inc. [US] | https://github.com/new

Search or jump to... Pull requests Issues Marketplace Explore

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Owner cs531bot / Repository name * http-server-tutor

Great repository names are short and memorable. Need inspiration? How about [legendary-octo-winner](#)?

Description (optional) A tutorial implementation of a rudimentary HTTP server

Public Anyone can see this repository. You choose who can commit.

Private You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer.

Add .gitignore: Python Add a license: None

Create repository

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cs531bot/http-server-tutor: A t... +

GitHub, Inc. [US] | https://github.com/cs531bot/http-server-tutor

Search or jump to... Pull requests Issues Marketplace Explore

cs531bot / http-server-tutor Private

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Security Insights Settings

A tutorial implementation of a rudimentary HTTP server

Manage topics

1 commit 1 branch 0 releases

Branch: master New pull request Create new file Upload files Find File Clone or download

cs531bot Initial commit Latest commit 3ebc4e7 now

.gitignore Initial commit now

README.md Initial commit now

README.md

http-server-tutor

A tutorial implementation of a rudimentary HTTP server

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The screenshot shows a GitHub repository settings page for the repository `cs531bot / http-server-tutor`. The repository is private.

The top navigation bar includes links for `Pull requests`, `Issues`, `Marketplace`, and `Explore`. On the right side of the header, there are buttons for `Unwatch`, `Star`, and `Fork`.

The main content area has a sidebar on the left with options: `Options`, `Collaborators` (which is selected and highlighted with a red box), `Branches`, `Webhooks`, `Notifications`, `Integrations & services`, and `Deploy keys`.

The main panel is titled `Collaborators` and contains a sub-header `Push access to the repository`. It displays a message: "This repository doesn't have any collaborators yet. Use the form below to add a collaborator." Below this is a search bar labeled "Search by username, full name or email address" with the placeholder text "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".

A search input field contains the text `ibnesayeed`, and a dropdown list shows a result: `ibnesayeed Sawood Alam`. To the right of the search input is a button labeled `Add collaborator`, which is also highlighted with a red box.

The footer of the page includes links for `© 2019 GitHub, Inc.`, `Terms`, `Privacy`, `Security`, `Status`, `Help`, `Contact GitHub`, `Pricing`, `API`, `Training`, `Blog`, and `About`.

Collaborators

GitHub, Inc. [US] | https://github.com/cs531bot/http-server-tutor/settings/collaboration

Search or jump to... Pull requests Issues Marketplace Explore

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Security Insights Settings

Push access to the repository

Options

Collaborators

Sawood Alam Awaiting ibnesayeed's response

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

1 of 3 collaborators

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Contact GitHub Pricing API Training Blog About

Watch the Course Discussion Repository and Introduce Yourself

<https://github.com/cs531-s26/cs531-s26.github.io/discussions>

github.com/cs531-f22/cs531-f22.github.io

cs531-f22 / cs531-f22.github.io (Public)

Unwatch 3 Fork 2 Star 0

Notifications

Participating and @mentions
Only receive notifications from this repository when participating or @mentioned.

✓ All Activity
Notified of all notifications on this repository.

Ignore
Never be notified.

Custom
Select events you want to be notified of in addition to participating and @mentions.

Get push notifications on iOS or Android.

main 1 branch 0 tags

ibnesayeed Merge pull request #3 from darinmclain/main · a7ad656 5 days ago

_data Darin McLain - Added line break to end of members.csv

_includes Add course name in the intro paragraph

_layouts Initial web page release for 2022

_sass Initial web page release for 2022

assets Initial web page release for 2022

assignments Initial web page release for 2022

slides Extend Assignment 0-0 deadline

404.md Initial web page release for 2022

LICENSE Initial commit with LICENSE and README

README.md Initial commit with LICENSE and README

_config.yml Initial web page release for 2022

assignments.md Initial web page release for 2022

favicon.ico Initial web page release for 2022

index.md Initial web page release for 2022

MIT license

0 stars

3 watching

2 forks

No releases published

Create a new release

No packages published

Publish your first package

Discussions · Announcements

github.com/cs531-f22/cs531-f22.github.io/discussions/categories/announcements

Search or jump to... Pull requests Issues Marketplace Explore

cs531-f22 / cs531-f22.github.io Public

Code Issues Pull requests Discussions Actions Security Insights Settings

Announcements Introduce yourself ibnesayeed

category:Announcements

Categories Discussions

- View all
- Announcements**
- Assignment
- Ideas
- Polls
- Q&A
- Show and tell

Up 1

Introduce yourself #1
ibnesayeed on Aug 21
Hi, I am Dr. Sawood Alam, a Web and Data Scientist of the Wayback Machine at the Internet Archive....

calebkbrad replied
Hey all. I am Caleb Bradford and I am currently an undergraduate senior taking this class at the graduate level through the Linked Program. I trans...

Label New discussion

ibnesayeed announced 1 day ago in Announcements

2

https://github.com/cs531-f22/cs531-f22.github.io/discussions/1

[Introduce yourself · Discussion](#)

https://github.com/cs531-f22/cs531-f22.github.io/discussions/1

Search or jump to... Pull requests Issues Marketplace Explore

cs531-f22 / cs531-f22.github.io Public Edit Pins Unwatch Fork Star

Code Issues Pull requests Discussions Actions Security Insights Settings

Introduce yourself #1

ibnesayeed announced in Announcements

ibnesayeed 17 days ago Maintainer

Hi,

I am Dr. Sawood Alam, a Web and Data Scientist of the Wayback Machine at the Internet Archive. I will be the instructor for the CS 431/531 Web Server Design course this Fall 2022 semester. Looking forward to seeing you all in the class.

1

Category Announcements

Labels None yet

3 participants

Notifications Unsubscribe

You're receiving notifications because you're watching this repository.

Lock conversation Transfer this discussion
Edit pinned discussion Unpin discussion
Create issue from discussion Delete discussion

Write Preview

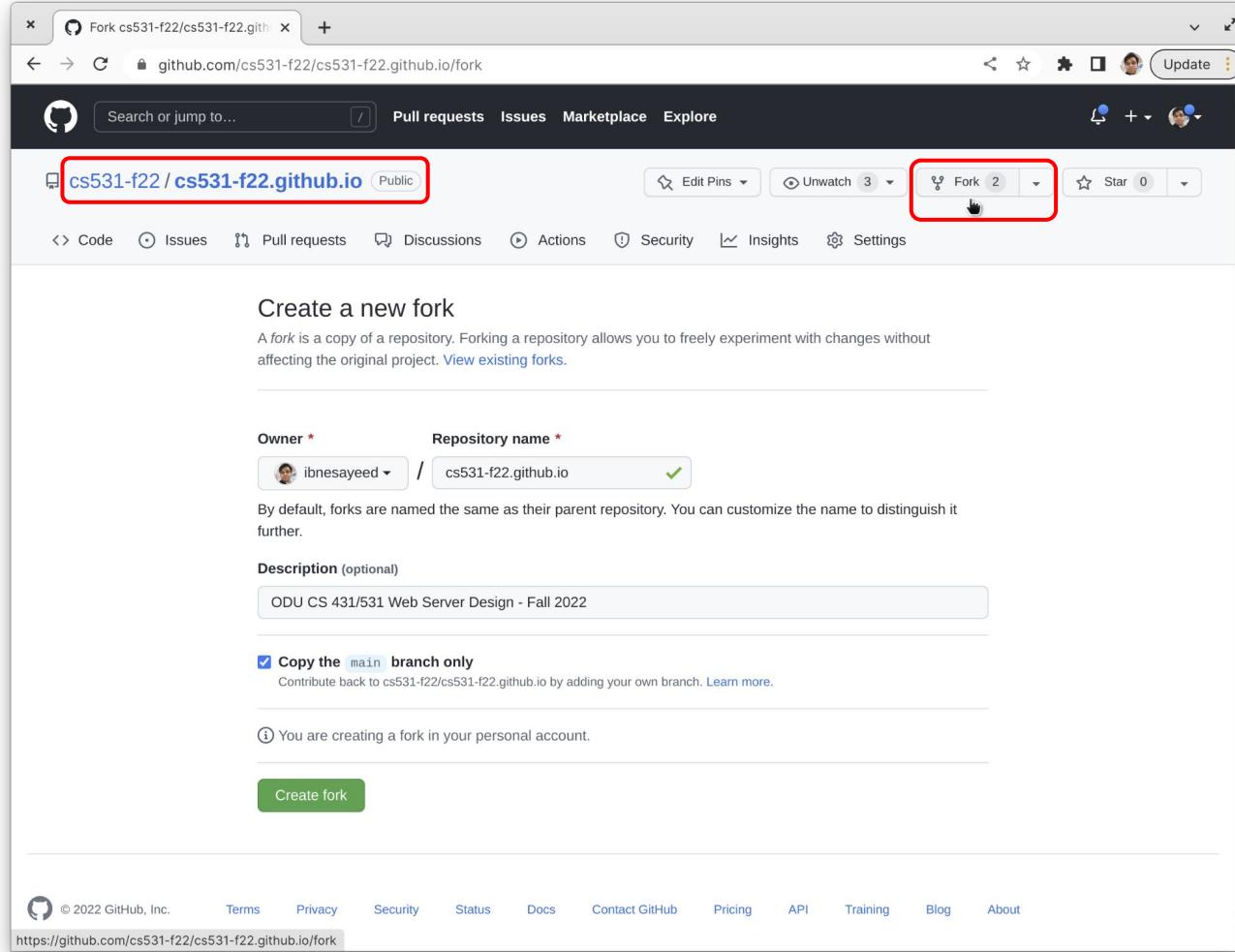
Hello,
I am...

Comment

Remember, contributions to this repository should follow our GitHub Community Guidelines.

Fork the Course Repository, Add Your Details in the Members List, and Create a Pull Request

<https://github.com/cs531-s26/cs531-s26.github.io/>

A screenshot of a web browser window showing the GitHub fork page for the repository `cs531-f22/cs531-f22.github.io`. The URL in the address bar is `https://github.com/cs531-f22/cs531-f22.github.io/fork`. The page title is "Fork cs531-f22/cs531-f22.github.io". The GitHub logo is in the top left corner. The top navigation bar includes links for "Pull requests", "Issues", "Marketplace", and "Explore". On the right side of the header, there are icons for notifications, a plus sign, and user profile. A red box highlights the repository name "cs531-f22 / cs531-f22.github.io (Public)". Another red box highlights the "Fork 2" button, which has a cursor icon pointing at it. Below the header, there are tabs for "Code", "Issues", "Pull requests", "Discussions", "Actions", "Security", "Insights", and "Settings".

Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project. [View existing forks.](#)

Owner * **Repository name ***

 / `cs531-f22.github.io` 

By default, forks are named the same as their parent repository. You can customize the name to distinguish it further.

Description (optional)

`ODU CS 431/531 Web Server Design - Fall 2022`

Copy the main branch only
Contribute back to `cs531-f22/cs531-f22.github.io` by adding your own branch. [Learn more.](#)

 You are creating a fork in your personal account.

Create fork

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`https://github.com/cs531-f22/cs531-f22.github.io/fork`

ibnesayeed/cs531-f22.github.io

github.com/ibnesayeed/cs531-f22.github.io

Search or jump to... Pull requests Issues Marketplace Explore

ibnesayeed / cs531-f22.github.io Public forked from cs531-f22/cs531-f22.github.io

Pin Watch Fork Star

Code Pull requests Actions Projects Security Insights Settings

main 1 branch 0 tags

Go to file Add file ▾ <> Code ▾

This branch is up to date with cs531-f22/cs531-f22.github.io:main

ibnesayeed Merge pull request cs531-f22#3 from darinmcain...
_data Darin McLain - Added links to assignments and slides.
_includes Add course name in the header.
_layouts Initial web page release.
_sass Initial web page release.
assets Initial web page release for 2022.
assignments Initial web page release for 2022.
slides Extend Assignment 0-0 deadline.
404.md Initial web page release for 2022.
LICENSE Initial commit with LICENSE and README.
README.md Initial commit with LICENSE and README.
_config.yml Initial web page release for 2022.
assignments.md Initial web page release for 2022.

Local Codespaces

Clone

HTTPS SSH GitHub CLI

https://github.com/ibnesayeed/cs531-f22

Use Git or checkout with SVN using the web URL.

Download ZIP

About

ODU CS 431/531 Web Server Design - Fall 2022

cs531-f22.github.io

Readme MIT license 0 stars 0 watching 3 forks

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

Languages

```
x                                     root@b3f3471a7ebf: ~
+ x      sawood
cs531@linux:~$ git config --global user.name "Sawood Alam"
cs531@linux:~$ git config --global user.email "salam@cs.odu.edu"
cs531@linux:~$ git clone https://github.com/ibnesayeed/cs531-f22.github.io.git
Cloning into 'cs531-f22.github.io'...
remote: Enumerating objects: 134, done.
remote: Counting objects: 100% (134/134), done.
remote: Compressing objects: 100% (112/112), done.
remote: Total 134 (delta 40), reused 113 (delta 21), pack-reused 0
Receiving objects: 100% (134/134), 10.93 MiB | 7.98 MiB/s, done.
Resolving deltas: 100% (40/40), done.
cs531@linux:~$
```

```
x                                     root@b3f3471a7ebf: ~
+ x      sawood
cs531@linux:~$ cd cs531-f22.github.io
cs531@linux:~/cs531-f22.github.io$ ls -l
total 36
-rw-r--r-- 1 root root   66 Sep  7 19:04 404.md
-rw-r--r-- 1 root root 1068 Sep  7 19:04 LICENSE
-rw-r--r-- 1 root root  183 Sep  7 19:04 README.md
-rw-r--r-- 1 root root  506 Sep  7 19:04 _config.yml
drwxr-xr-x 1 root root  132 Sep  7 19:04 _data
drwxr-xr-x 1 root root  260 Sep  7 19:04 _includes
drwxr-xr-x 1 root root   54 Sep  7 19:04 _layouts
drwxr-xr-x 1 root root  138 Sep  7 19:04 _sass
drwxr-xr-x 1 root root   28 Sep  7 19:04 assets
drwxr-xr-x 1 root root  354 Sep  7 19:04 assignments
-rw-r--r-- 1 root root  979 Sep  7 19:04 assignments.md
-rw-r--r-- 1 root root 1150 Sep  7 19:04 favicon.ico
-rw-r--r-- 1 root root  926 Sep  7 19:04 index.md
-rw-r--r-- 1 root root  276 Sep  7 19:04 lectures.md
drwxr-xr-x 1 root root 1000 Sep  7 19:04 slides
-rw-r--r-- 1 root root  159 Sep  7 19:04 syllabus.md
cs531@linux:~/cs531-f22.github.io$ nano _data/members.csv
```

x root@b3f3471a7ebf: ~

+ x sawood

GNU nano 6.2 _data/members.csv *

csid,name,ghid,repo
salam,Sawood Alam,ibnesayeed,cs531-webserver

[Read 3 lines]

^G Help **^O** Write Out **^W** Where Is **^K** Cut **^T** Execute **^C** Location
^X Exit **^R** Read File **^V** Replace **^U** Paste **^J** Justify **^/** Go To Line

```
x                                     root@b3f3471a7ebf: ~
+ x      sawood
cs531@linux:~/cs531-f22.github.io$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   _data/members.csv

no changes added to commit (use "git add" and/or "git commit -a")
cs531@linux:~/cs531-f22.github.io$ git diff
diff --git a/_data/members.csv b/_data/members.csv
index 6a44a61..fa469c2 100644
--- a/_data/members.csv
+++ b/_data/members.csv
@@ -1 +1,2 @@
 csid.name.ghid.repo
+salam,Sawood Alam,ibnesayeed,cs531-webserver
cs531@linux:~/cs531-f22.github.io$
```

```
x                                     root@b3f3471a7ebf: ~
+ x      sawood
cs531@linux:~/cs531-f22.github.io$ git add _data/members.csv
cs531@linux:~/cs531-f22.github.io$ git commit -m "Add Sawood to members list"
[main 46efa39] Add Sawood to members list
 1 file changed, 1 insertion(+)
cs531@linux:~/cs531-f22.github.io$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
cs531@linux:~/cs531-f22.github.io$ git push
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 387 bytes | 387.00 KiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To github.com:ibnesayeed/cs531-f22.github.io.git
  529ded3..46efa39  main -> main
cs531@linux:~/cs531-f22.github.io$
```

ibnesayeed/cs531-f22.github.io

github.com/ibnesayeed/cs531-f22.github.io

Search or jump to... Pull requests Issues Marketplace Explore

ibnesayeed / cs531-f22.github.io Public forked from cs531-f22/cs531-f22.github.io

Pin Watch Fork Star

Code Pull requests Actions Projects Security Insights Settings

main 1 branch 0 tags Go to file Add file Code Sync fork

This branch is 1 commit ahead of cs531-f22:main.

Contribute Sync fork

ibnesayeed Add Sawood to members

_data Ad

_includes Ad

_layouts Init

_sass Initial web page release for 2022

assets Initial web page release for 2022

assignments Initial web page release for 2022

slides Extend Assignment 0-0 deadline

404.md Initial web page release for 2022

LICENSE Initial commit with LICENSE and README

README.md Initial commit with LICENSE and README

_config.yml Initial web page release for 2022

... release for 2022

This branch is 1 commit ahead of cs531-f22:main.

Open a pull request to contribute your changes upstream.

18 commits 4 minutes ago 17 days ago

Open pull request

About

ODU CS 431/531 Web Server Design - Fall 2022

cs531-f22.github.io/

Readme MIT license 0 stars 0 watching 3 forks

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

Languages

Comparing cs531-f22:main...ib
github.com/cs531-f22/cs531-f22.github.io/compare/main...ibnesayeed:cs531-f22.github.io:main?expand=1

Pull requests Issues Marketplace Explore

cs531-f22 / cs531-f22.github.io Public

Code Issues Pull requests Discussions Actions Security Insights Settings

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base repository: cs531-f22/cs531-f22.github.io base: main head repository: ibnesayeed/cs531-f22.github.io compare: main ✓ Able to merge. These branches can be automatically merged.

Add Sawood to members list

Write Preview

Adding a new member to the list.

Attach files by dragging & dropping, selecting or pasting them.

Allow edits by maintainers

Create pull request

Reviewers No reviews

Assignees No one—assign yourself

Labels None yet

Projects None yet

Milestone None yet

Development Use [Closing keywords](#) in the description to automatically close issues

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

Your Job Is Done!

Now I need to take care of the rest