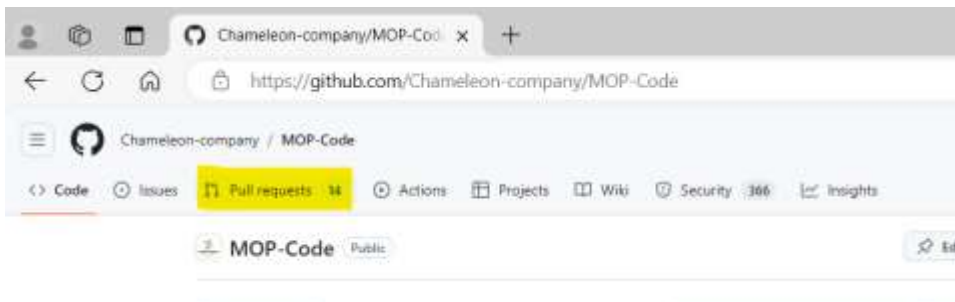


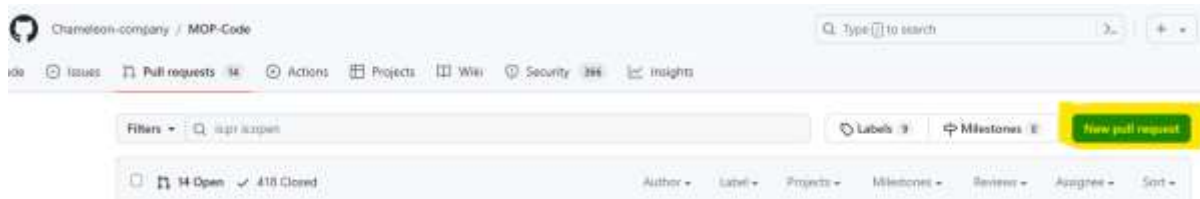
The following documentation is a pictorial guide of how to make and how to review a pull request.

Making a Pull Request

Select the pull request tab



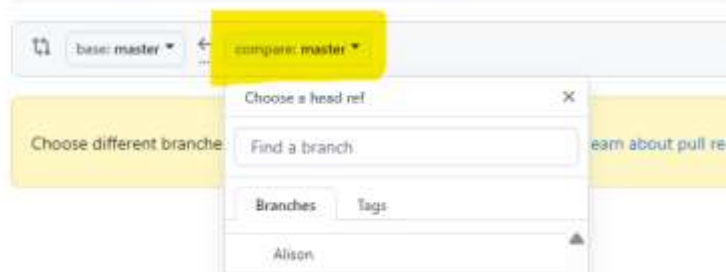
Select open new pull request



Select your branch from the drop down list in “compare”

Compare changes

Compare changes across branches, commits, tags, and more below. If you need to, you can also



Select “create pull request”

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#) or [learn more about diff comparisons](#).

base: master
compare: Alison
✓ Able to merge. These branches can be automatically merged.

Discuss and review the changes in this comparison with others. [Learn about pull requests](#)

Create pull request

3 commits
3,425 files changed
At 1 contributor

Add title and description for your pull request

Title must include which team you are (DATA SCIENCE or WEBDEV)

Name of what you are working on (This should match what is on your Trello card)

Percentage of completion of your use case from Trello

Description must include reason for pull, e.g. use case completed, Sprint 1 pull request.

Description must include a list of the changes that have been made to your folder since last making a pull request.

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](#). [Learn more about diff comparisons](#)

base: master
compare: Alison
✓ Able to merge. These branches can be automatically merged.

Add a title

DATA SCIENCE TEAM Apple Issues GET 78 Level New Use Case - 80% complete

Add a description

Write Preview

Week 5 pull request for review from Sprint 1

Use case includes:

- Use case introduction
- Import data using API v2.1 GET request with /exports extension
- Filtering of `dataframes`
- Use of date time to resample data by different time increments
- Box plots from a `dataframe` to view datasets
- Scatterplots from a `dataframe` to identify variable relationships
- `Pairplots` from a `dataframe` to identify variable relationships
- Use Pearson correlation heatmap to identify linear variable relationships
- Use distance calculation to identify non-linear variable relationships
- Linear regression for predictive analysis
- Random Forest for predictive analysis
- Calculate feature importance, r-squared value and accuracy from predictive analysis

Markdown is supported Paste, drop, or click to add files

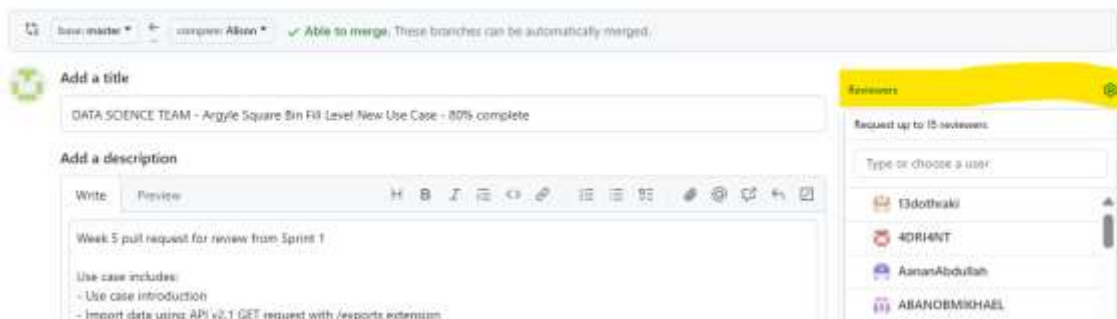
Select reviewers and choose 2 reviewers

One reviewer can be any member of your team, the other MUST be a leadership student.

You should message students first to check if they are happy to review for you. You can find a list of GitHub user names to add reviewers on the Melbourne Open Playground team list in Teams.

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](#). [Learn more about diff comparisons here](#).



Check you have added two reviewers

DATA SCIENCE Pedestrians Bus Stops Use Case 100% completed #489

[Open](#) AllCott wants to merge 23 commits into 'chameleon-main:master' from 'AllPullRequest' 

Conversation  Comments  Checks  Files changed  +154,482 -1,053 

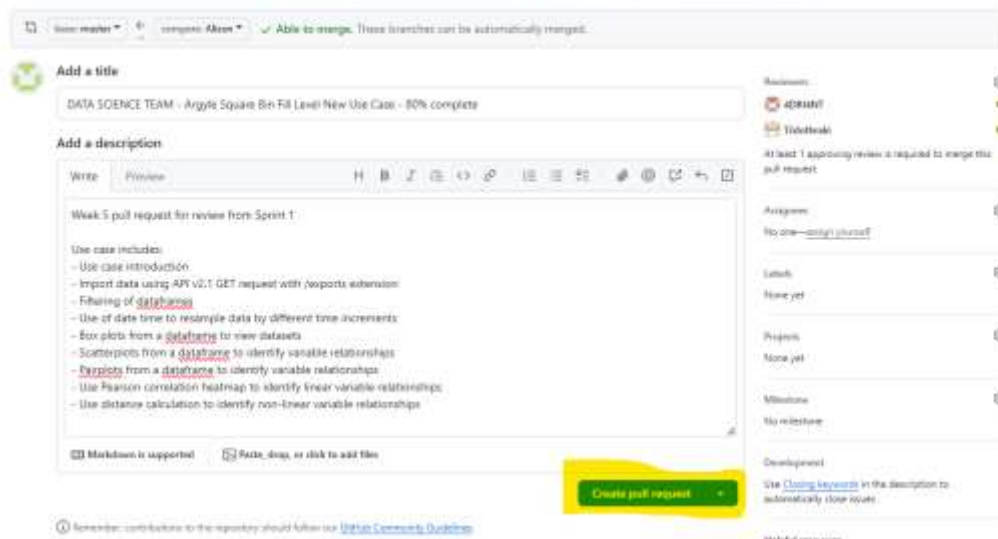


Create your pull request

Create your pull request by pressing the green “create pull request” button

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](#). [Learn more about diff comparisons here](#).



After Making a Pull Request

Check your emails

You will be emailed when your pull request receives comments or approvals.

[Chameleon-company/MOP-Code] Use case updated (PR #476)



This sender [notifications@github.com](#) is from outside your organisation. Attachments and pictures have been blocked.

[Block sender](#) | [Show blocked content](#)

Check GitHub Conversation for Feedback

After reviewing, your team members will leave you feedback in GitHub.

Open your pull request, and scroll down to the comments section to see this. If you need to make changes you will need to do so in your IDE and then push to GitHub again.

DATA SCIENCE Pedestrians Bus Stops Use Case 100% completed #489

Edit <> Code

Open AliColli wants to merge 23 commits into Chameleon-company:master from AliColli:master

Conversation 4 Commits 23 Checks 0 Files changed 3

+154,482 -1,053



AliColli commented 2 days ago

Member

Pedestrians bus stops use case:

- Import data using API v2.1 GET request with /exports extension
- Import libraries, check for missing /null values in order to have a clean dataset

Reviewers

twar9432

yashdawaree

Requested changes must be addressed to merge this pull request.



twar9432 requested changes 2 days ago

[View reviewed changes](#)

twar9432 left a comment

Member

Overall, the use case looks good. There's clear comments of the code and good analysis.

Note: There's a plot shown as a 'map' with the axes as longitude and latitude, however without any background it's difficult to

After making changes

Once you have updated your code and pushed again you will see a new comment automatically generated

AliColli and others added 2 commits 1 minute ago

Pedestrian Counts and Bus Stops API update - folium map of overlap lo...

115bcc6

Merge branch 'Chameleon-company:master' into master

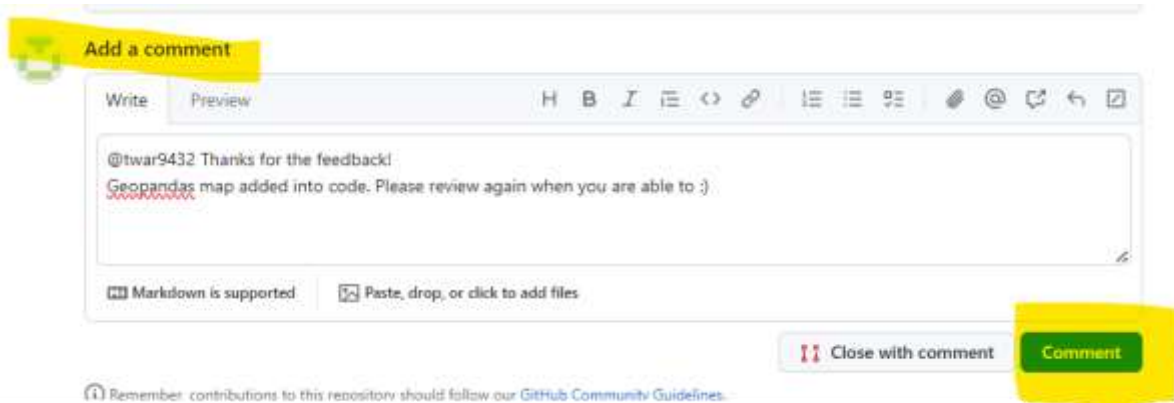
Verified

324790d

You will need to also add a comment to email your reviewers so that they know you have updates your work and that it is ready to be re-reviewed.

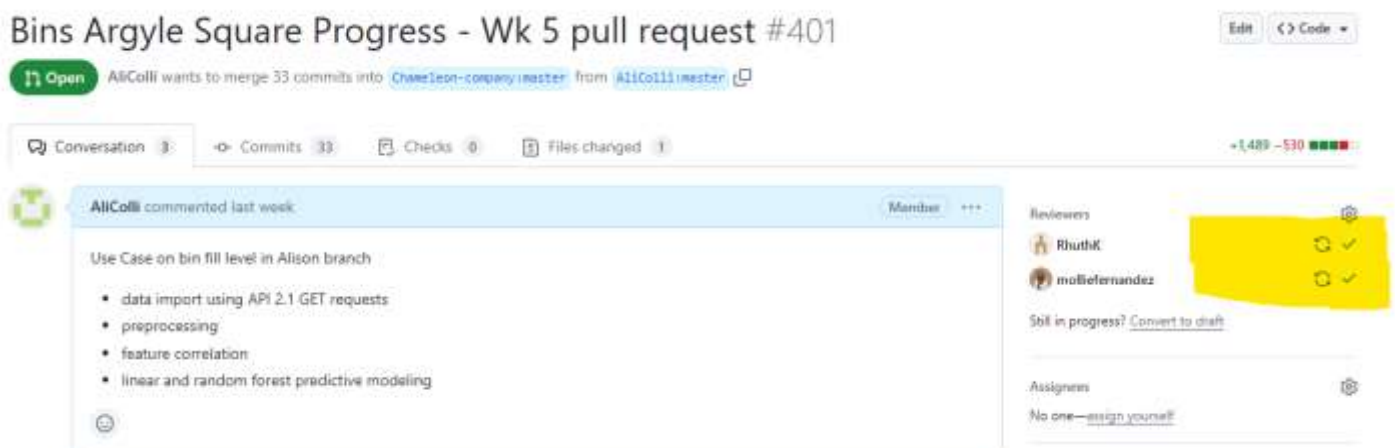
Be sure to write @ next to their GitHub name so they receive an email notification.

Be sure to press the green “comment” option to keep your pull request open.



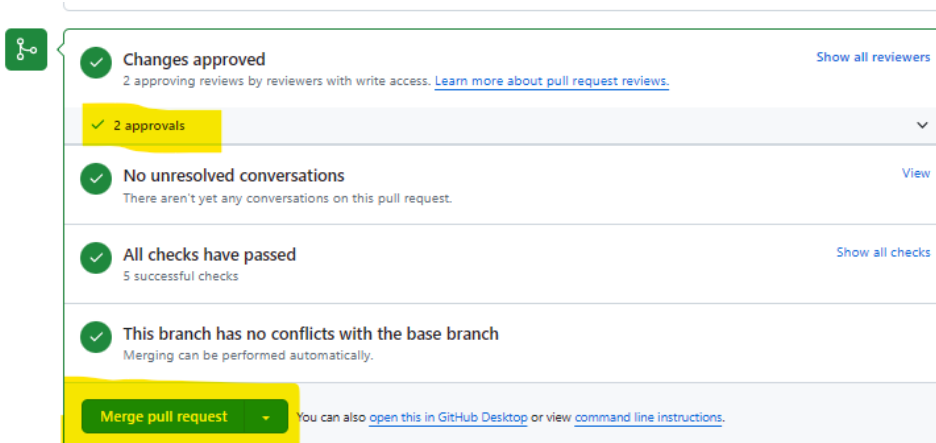
Check review status

Check both reviewers have approved your pull request. Look for green ticks against reviewers names



Merge pull request

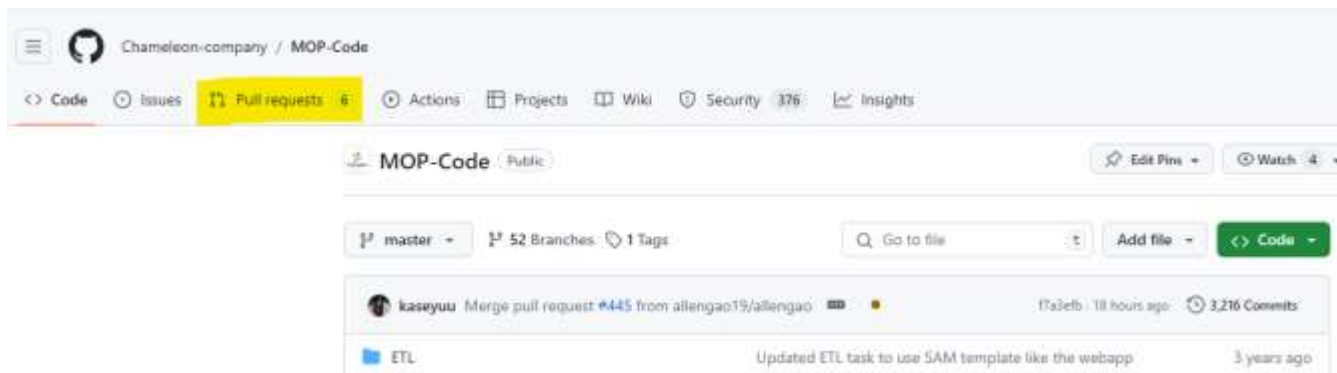
Once you have two approvals, Merge your pull request!



Reviewing a Pull request

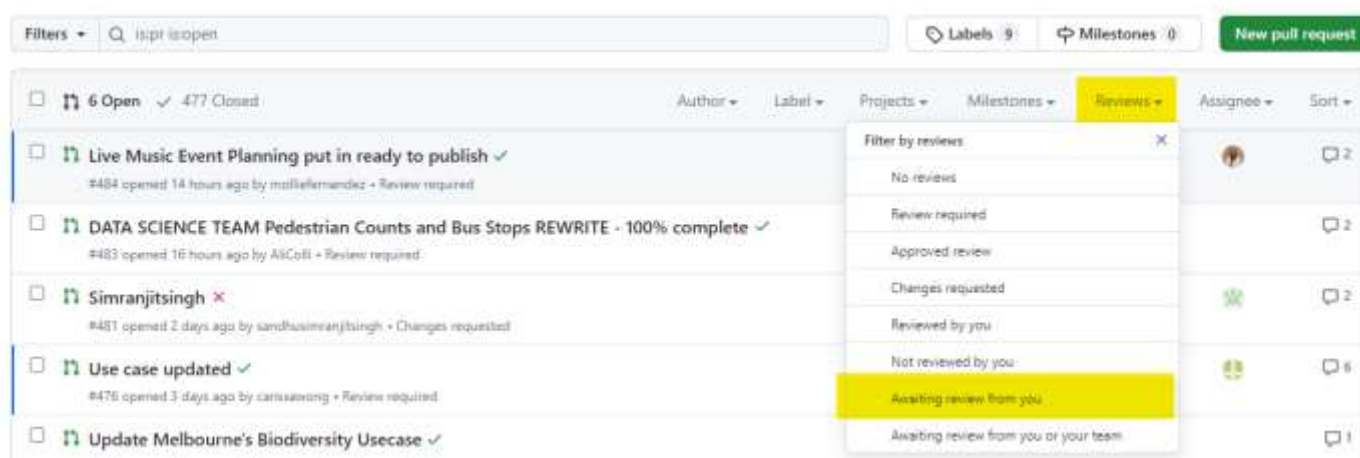
View open pull requests

On GitHub, select “Pull requests”



Select a Use Case to review

Select the “Reviews” tab and the “Awaiting review from you”



OR

Check your emails for review requests

Follow the link to the use case from your email

[Chameleon-company/MOP-Code] Use case updated (PR #476)



This sender notifications@github.com is from outside your organisation. Attachments and pictures have been blocked.

Block sender | Show blocked content

View the Use Case

When the use case is open, select the files changed tab. If the use case is large, you will get a load diff alert. In this case, select the three dots on the right hand side and go to view file.



Things to check for in the “Preview” view:



Dataset import

- Must be API v2.1
- API key must NOT be visible

IMPORT DATASETS

Import datasets using API v2.1 GET request with /exports/

```
from io import StringIO

# Function to collect datasets using API
def datasetcollect(dataset_id):
    base_url = "https://data.melbourne.vic.gov.au/api/explore/v2.1/catalog/datasets/"
    dataset_id = dataset_id
    format = 'csv'

    url = f'{base_url}{dataset_id}/exports/{format}'
    params = {
        'select': '*',
        'limit': -1, # all records
        'lang': 'en',
        'timezone': 'UTC',
        'api_key': apikey
    }

    # GET request
    response = requests.get(url, params=params)

    if response.status_code == 200:
        # StringIO to read the CSV data
        url_content = response.content.decode('utf-8')
        dataset = pd.read_csv(StringIO(url_content), delimiter=',')
        return dataset
    else:
        print(f'Request failed with status code {response.status_code}')

# Report stage activity dataset
dataset_id = 'moped-bus-stop-type-1'
stage_activity_all = datasetcollect(dataset_id)
print(len(stage_activity_all))
stage_activity_all.head()
```

Code sections

- Code must be clear and easily readable
- Comments must have a space and capital letter for first word
- Explain code in a way that can be easily followed

```
# BIN DATASET PREPROCESSING
# Filter unwanted values from bin dataset

# Keep only rows with bin sensors in the stage area
filtered_bin_sensor = bin_sensor_cols[bin_sensor_cols["dev_"]
filtered_bin_sensor.head(3)

# Check max and min values in bin fill levels
# Max and min of filllevel column
print(filtered_bin_sensor['filllevel'].agg(['min', 'max']))
```

Markdown style, colours in graphs and tables

- Adhere to Chameleon Company requirements
- Details in use Case publishing guide on page 3

[MOP-Code/datascience/documentation/Use case publishing guide.pdf at master · Chameleon-company/MOP-Code \(github.com\)](#)

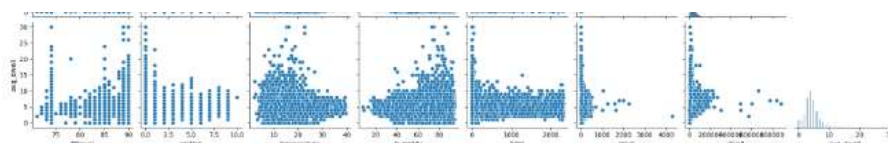
Written explanations

- Reason for methods chosen
- Explanations of output

Remember: the use case is written

to teach people how to do this!

So explanation is important!



The pairs plot shows a relationship between some variables. Temperature, humidity and light have the strongest relationship. The strongest linear relationship is between total and dwell. The pairs plots only compare numerical data.

Pearson correlation is used to determine extent of linear relationship between each pair of variables.

```
# Calculate correlation heatmap for all columns
matrix = fmd.corr(method = 'pearson').round(2)
mask = np.triu(np.ones_like(matrix, dtype=bool))
sns.heatmap(matrix, annot=True, cmap='viridis_r', mask=mask)

plt.show()
```

Things to check for in the “Code” view:



HTML in code

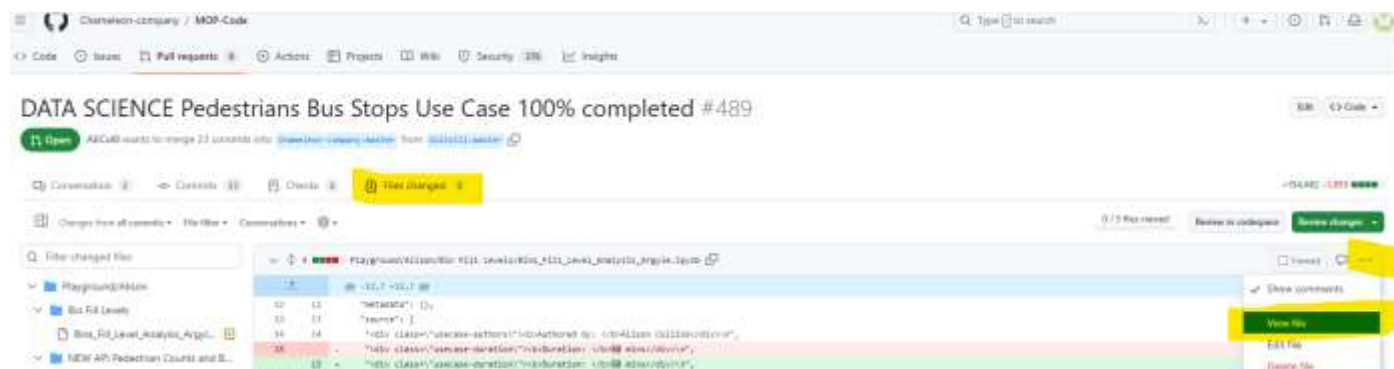
- HTML as per usecase TEMPLATE



Troubleshooting viewing:

If the Use Case or parts of it (graphs, tables, folium maps) will not render on GitHub, copy the link from the GitHub and open in <https://nbviewer.org/>

Select the files changed tab, three dots on the right and then view file



Copy the address bar



Paste into <https://nbviewer.org/> and press go

nbviewer

A simple way to share Jupyter Notebooks

Enter the location of a Jupyter Notebook to have it rendered here:

<https://github.com/Chameleon-company/MOP-Code/blob/8c411890c4fc0eef43c4a634770d918befdbfb6/Playground/Alison/NEW API Pedestrian Counts and Bus Stops / Pedestrians Counts and Bus-stops.ipynb> Go!

Further reading

Capstone Pull Requests: [5. Navigating Pull Requests on GitHub | Capstone \(verdant-raindrop-f3e404.netlify.app\)](#)

Capstone Reviewing Pull Requests: [6. Reviewing Pull Requests | Capstone \(verdant-raindrop-f3e404.netlify.app\)](#).

Author

Alison Collins, 2024