BIMM 143

Course Summary & GitHub Portfolio

Class 20

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UC San Diego

https://marcos-diazg.github.io/BIMM143_SP23/

Today’s Menu

- Summary of major learning goals
- Course discussion and feedback (https://board.net/p/BIMM143_SP23_DiazGay)
- Final exam
    - ➡ Test structure, guidelines and rules
    - ➡ Topics and example questions
    - ➡ Exam preparation, discussion and open study
- Polish our GitHub content and publish your own website portfolios
- SET evaluation (Link)
- **Bioinformatics in industry session! (1:30pm)**

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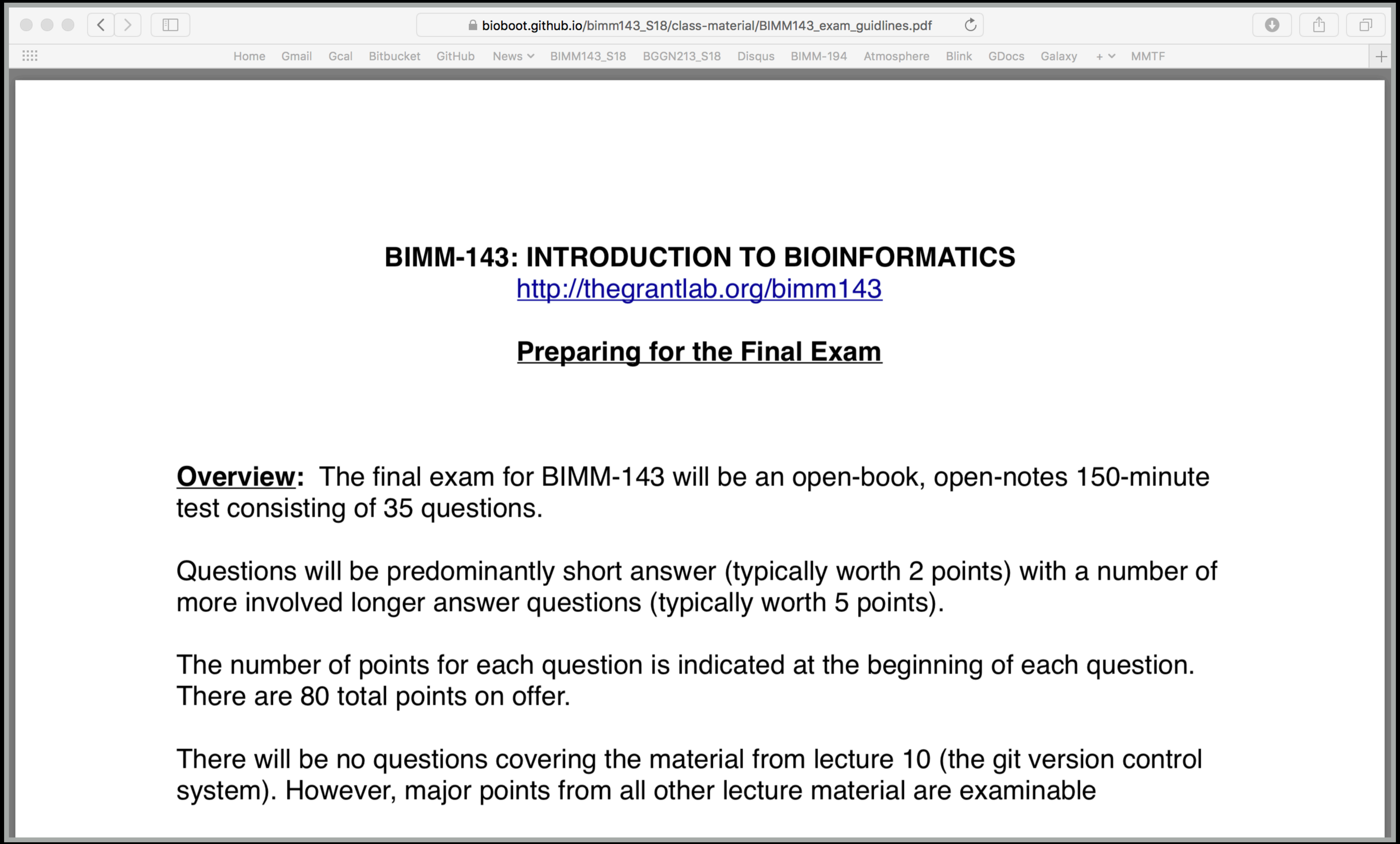
https://bioboot.github.io/bimm143_F22/class-material/BIMM143_exam_guidlines.pdf



BIMM-143: INTRODUCTION TO BIOINFORMATICS

http://thegrantlab.org/bimm143

Preparing for the Final Exam

Overview: The final exam for BIMM-143 will be an open-book, open-notes 150-minute test consisting of 35 questions.

Questions will be predominantly short answer (typically worth 2 points) with a number of more involved longer answer questions (typically worth 5 points).

The number of points for each question is indicated at the beginning of each question. There are 80 total points on offer.

There will be no questions covering the material from lecture 10 (the git version control system). However, major points from all other lecture material are examinable

Q1. Did you enjoy this course in relation to others you have experienced at UCSD?

Q2. Should this course be offered again? Still in-person or fully remotely?

Q3. If so what changes would you recommend for this course? (e.g., more/less DataCamp & Projects)

Q4. Was the course effectively organized (lecture and lab material online vs handout or Canvas site)?

Q5. What advice would you give to another student who is considering taking this course?

Q6. Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this course and the instructional team?

Q7. Do you agree or disagree - The course developed my abilities and skills for the subject?

Q8. On average, how many hours per week have you spent on this course? (including attending classes, doing homeworks, and assignments)

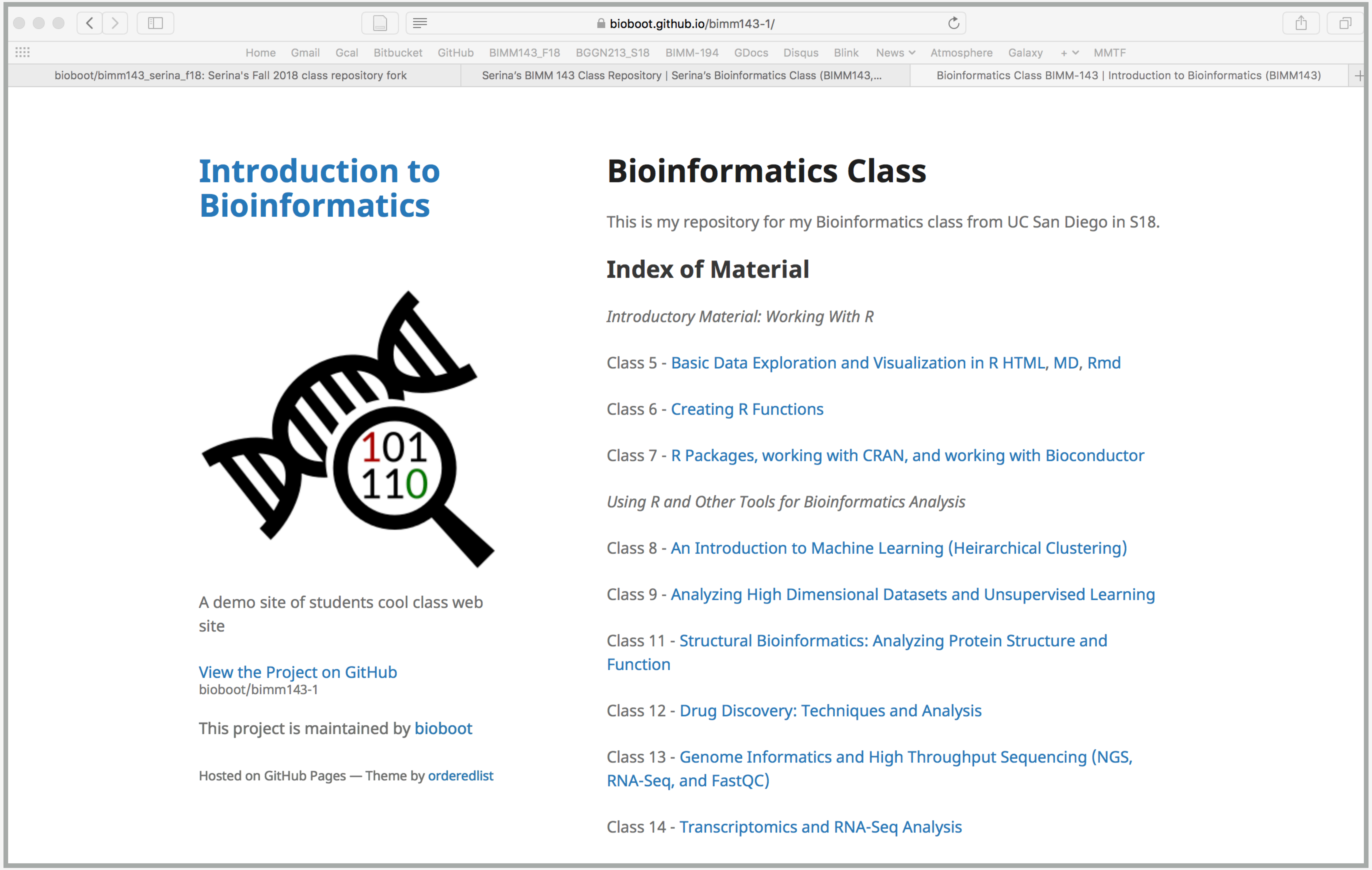
Q9. Any other comments you would like to share?

EtherPad Version: https://board.net/p/BIMM143_SP23_DiazGay

Form Version: https://forms.gle/phWPQtPpknDgoCMa6

Thank you very much!

GitHub Spit & Polish



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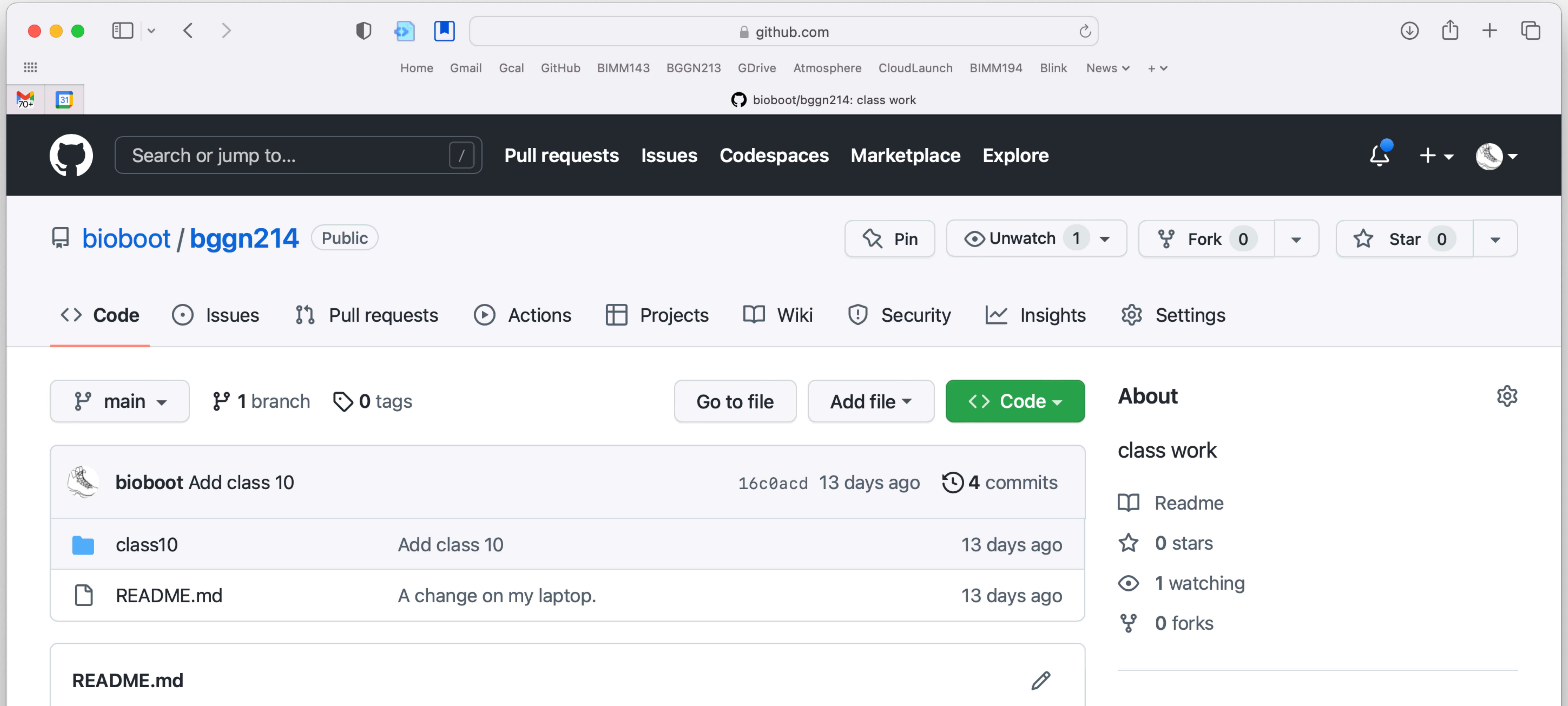
Class 14 - Transcriptomics and RNA-Seq Analysis

In your web browser navigate to your GitHub class repository < https://github.com/ >

Side-note:

To find the link to your GitHub repository from RStudio, open one of your past class projects and in the terminal type:

```
git remote -v
```

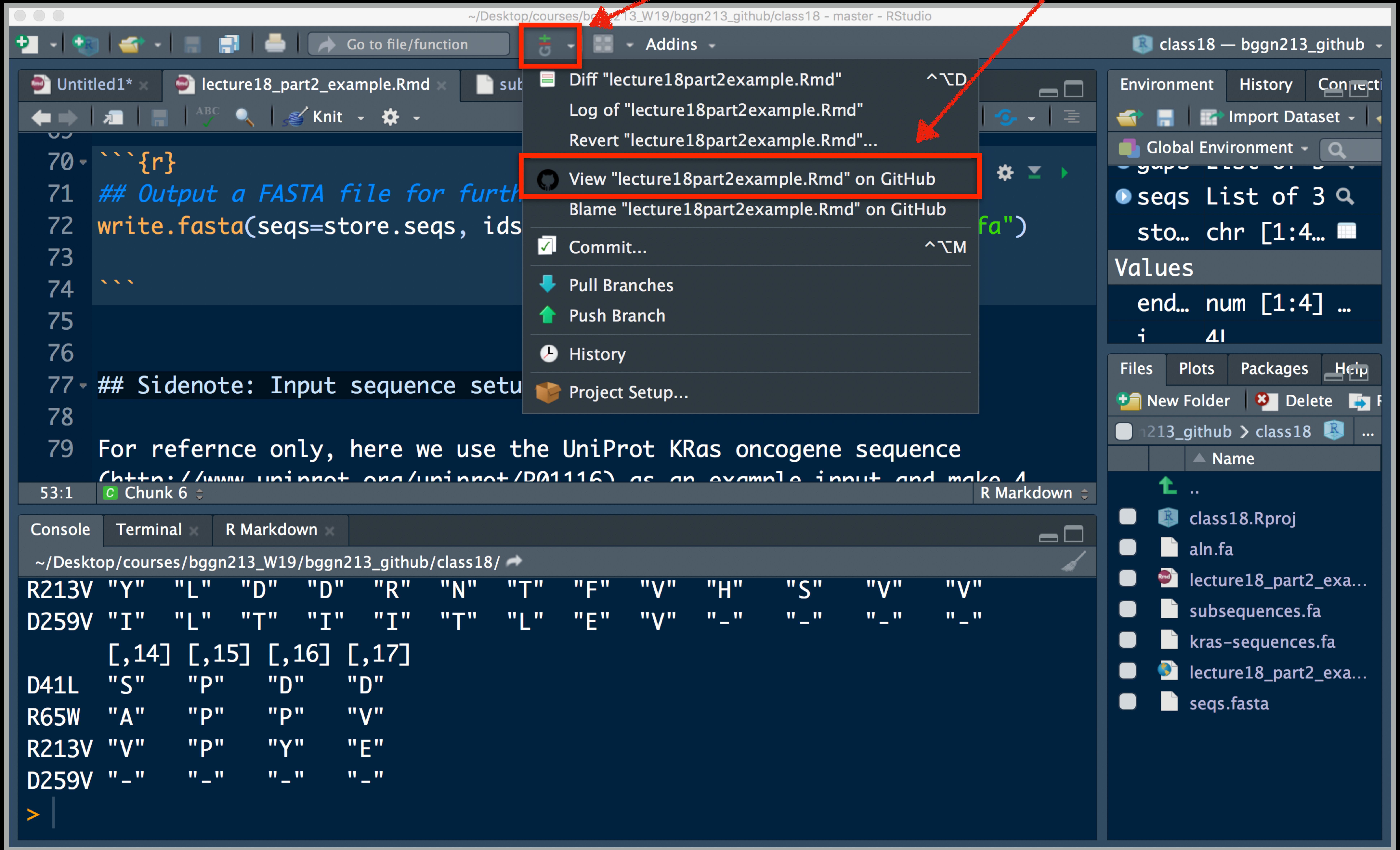


bioboot Add class 10 16c0acd 13 days ago 4 commits

class10	Add class 10	13 days ago
README.md	A change on my laptop.	13 days ago

README.md

Or for a given GitHub tracked file click GIT icon and "VIEW on GITHUB"



~~~
```{r}
## Output a FASTA file for furth
write.fasta(seqs=store.seqs, ids                                  fa")

~~~

Sidenote: Input sequence setu

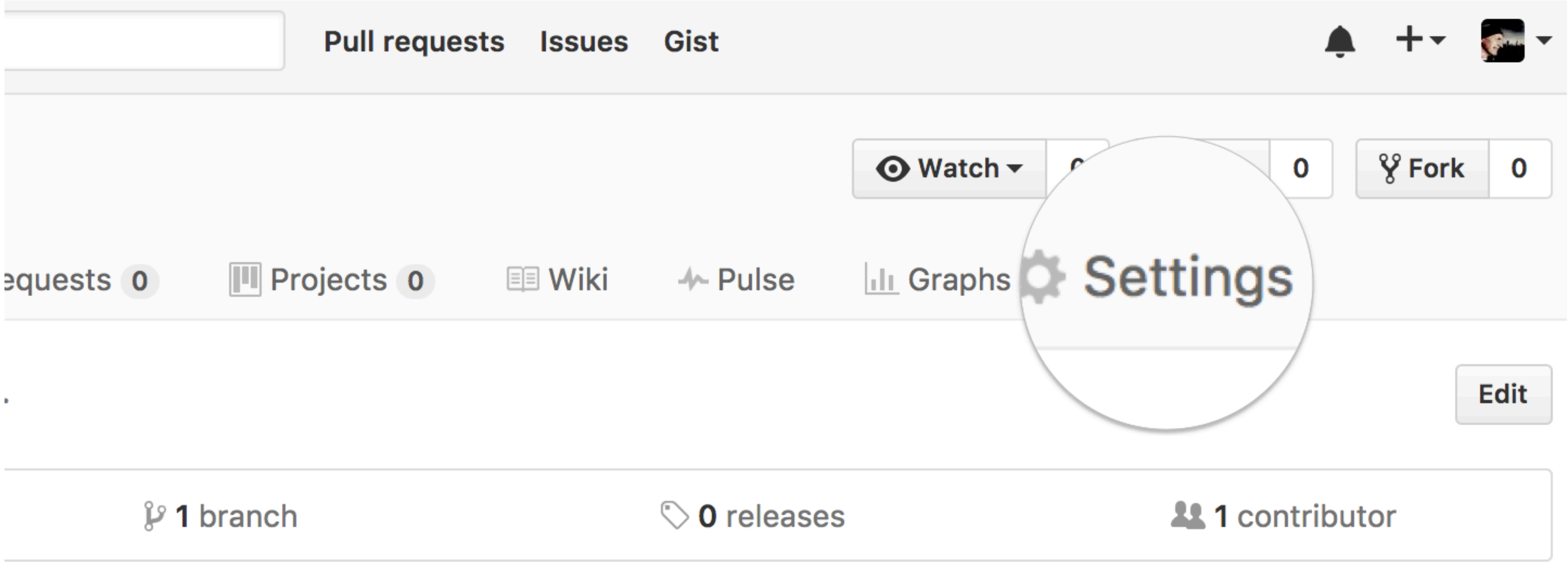
For refernce only, here we use the UniProt KRas oncogene sequence
```

```
~/Desktop/courses/bggn213_W19/bggn213_github/class18/
R213V "Y"   "L"   "D"   "D"   "R"   "N"   "T"   "F"   "V"   "H"   "S"   "V"   "V"
D259V "I"   "L"   "T"   "I"   "I"   "T"   "L"   "E"   "V"   "-"   "-"   "-"   "-"
      [,14] [,15] [,16] [,17]
D41L  "S"   "P"   "D"   "D"
R65W  "A"   "P"   "P"   "V"
R213V "V"   "P"   "Y"   "E"
D259V "-"   "-"   "-"   "-"
>
```
```

1

# Repository Settings

**Head over to your GitHub class repository (where you are "pushing" all your class work)**

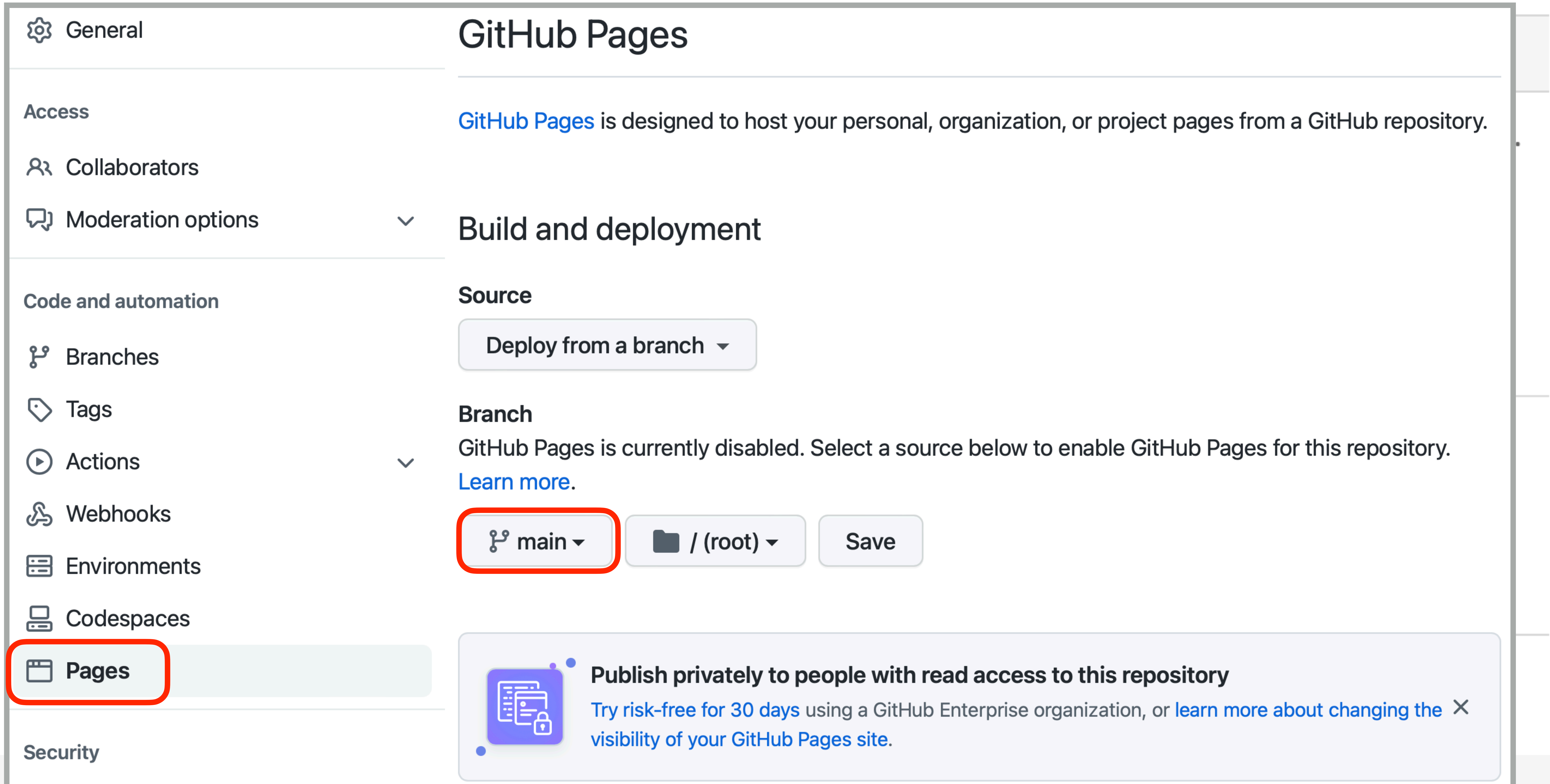
**Click on the Settings tab.**



2

# Theme chooser

Go to the **Pages** section in the sidebar. Then change the **Branch** **from “None” to “main”.**



General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Actions

Webhooks

Environments

Codespaces

Pages

Security

## GitHub Pages

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

### Build and deployment

**Source**

Deploy from a branch

**Branch**

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

main | / (root) | Save

**Publish privately to people with read access to this repository**

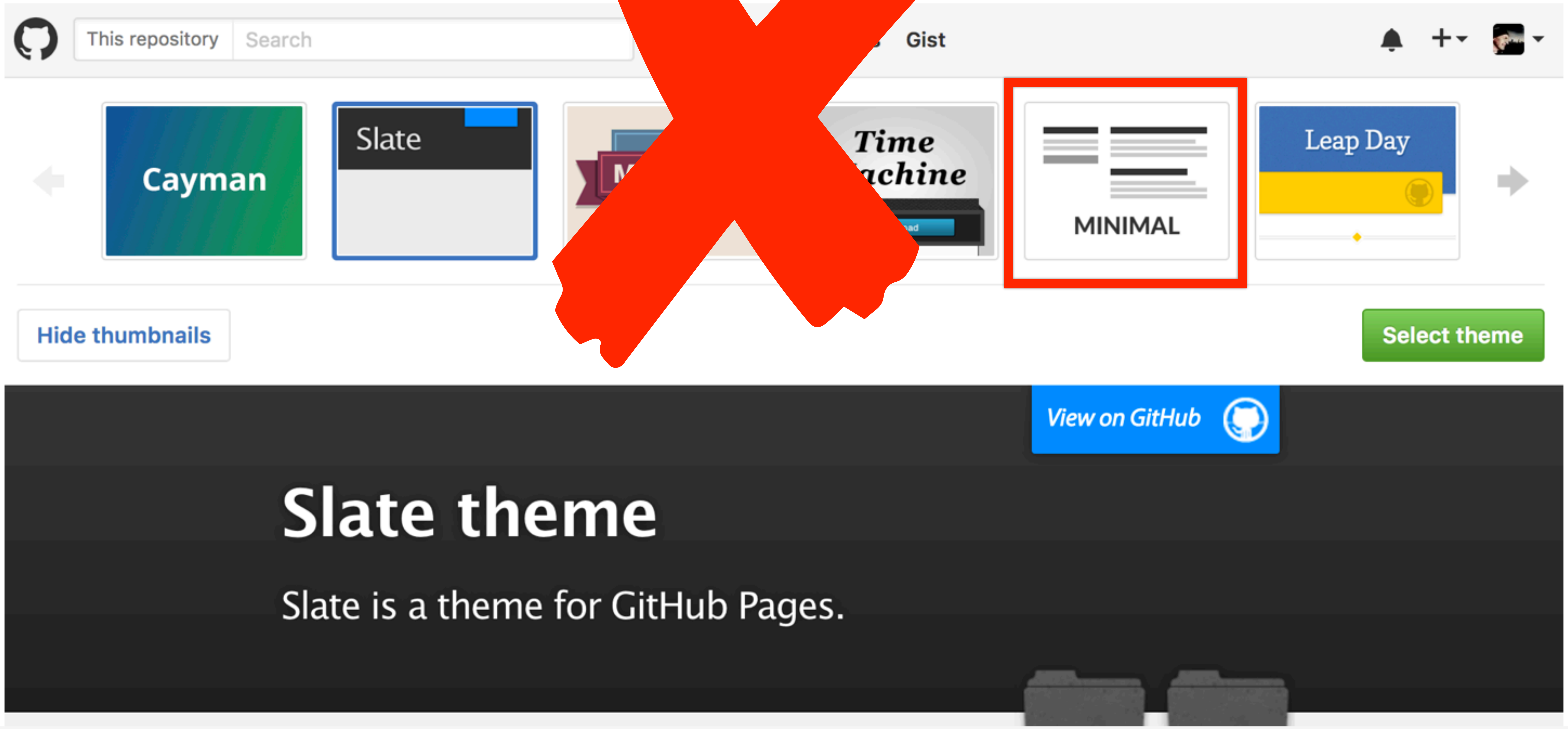
Try risk-free for 30 days using a GitHub Enterprise organization, or learn more about changing the visibility of your GitHub Pages site.

3

# Pick a theme

Choose one of the themes from the carousel at the top.

When you're don[illegible] click **Select** [illegible]me on the right.



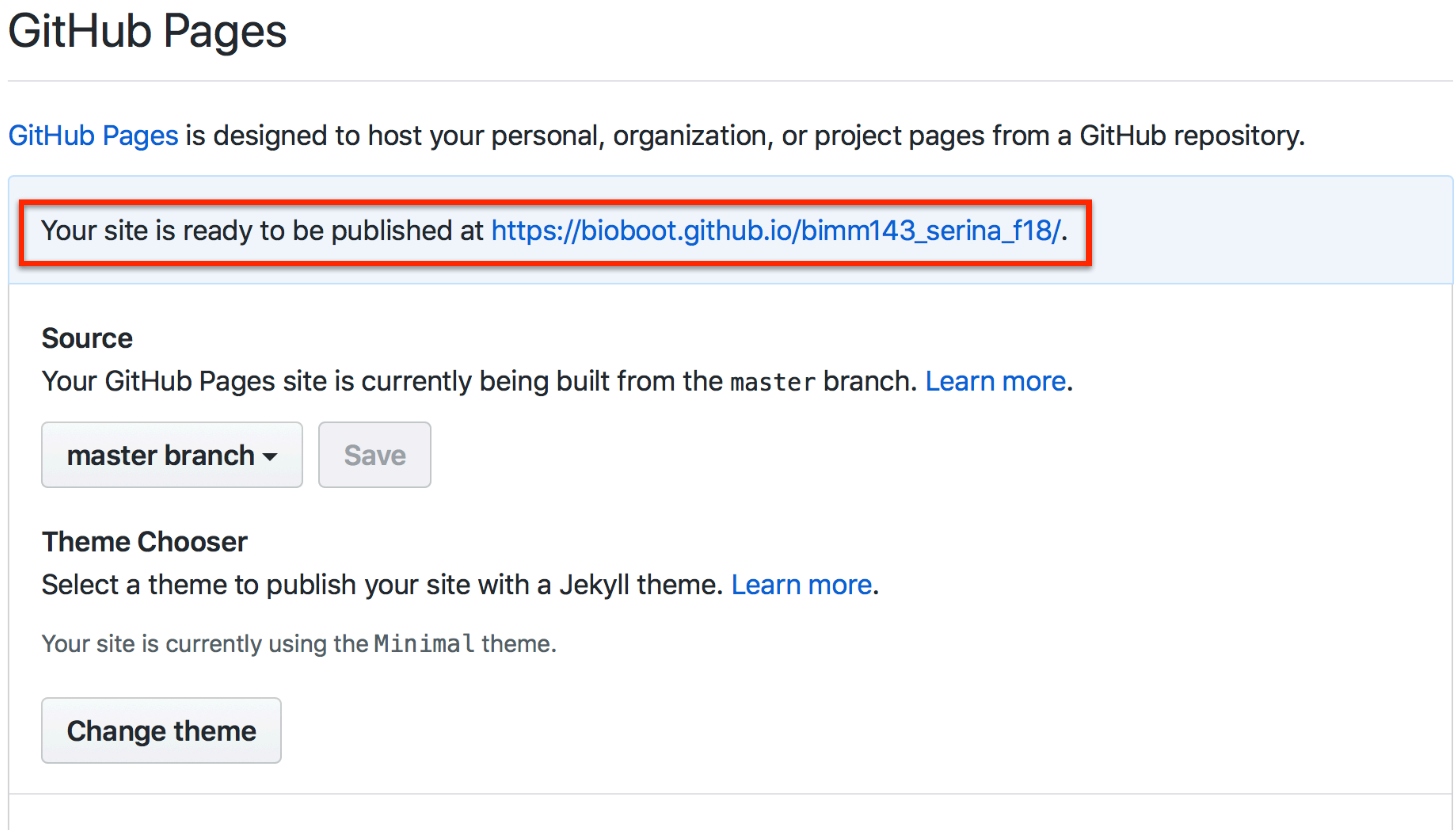
Slate theme

Slate is a theme for GitHub Pages.

4

# Side-note:

**Scroll down again to the GitHub Pages section to find the link to your new website.**
**Open this link in a New Tab of your browser:**



## GitHub Pages

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://bioboot.github.io/bimm143_serina_f18/.

**Source**

Your GitHub Pages site is currently being built from the `master` branch. Learn more.

**Theme Chooser**

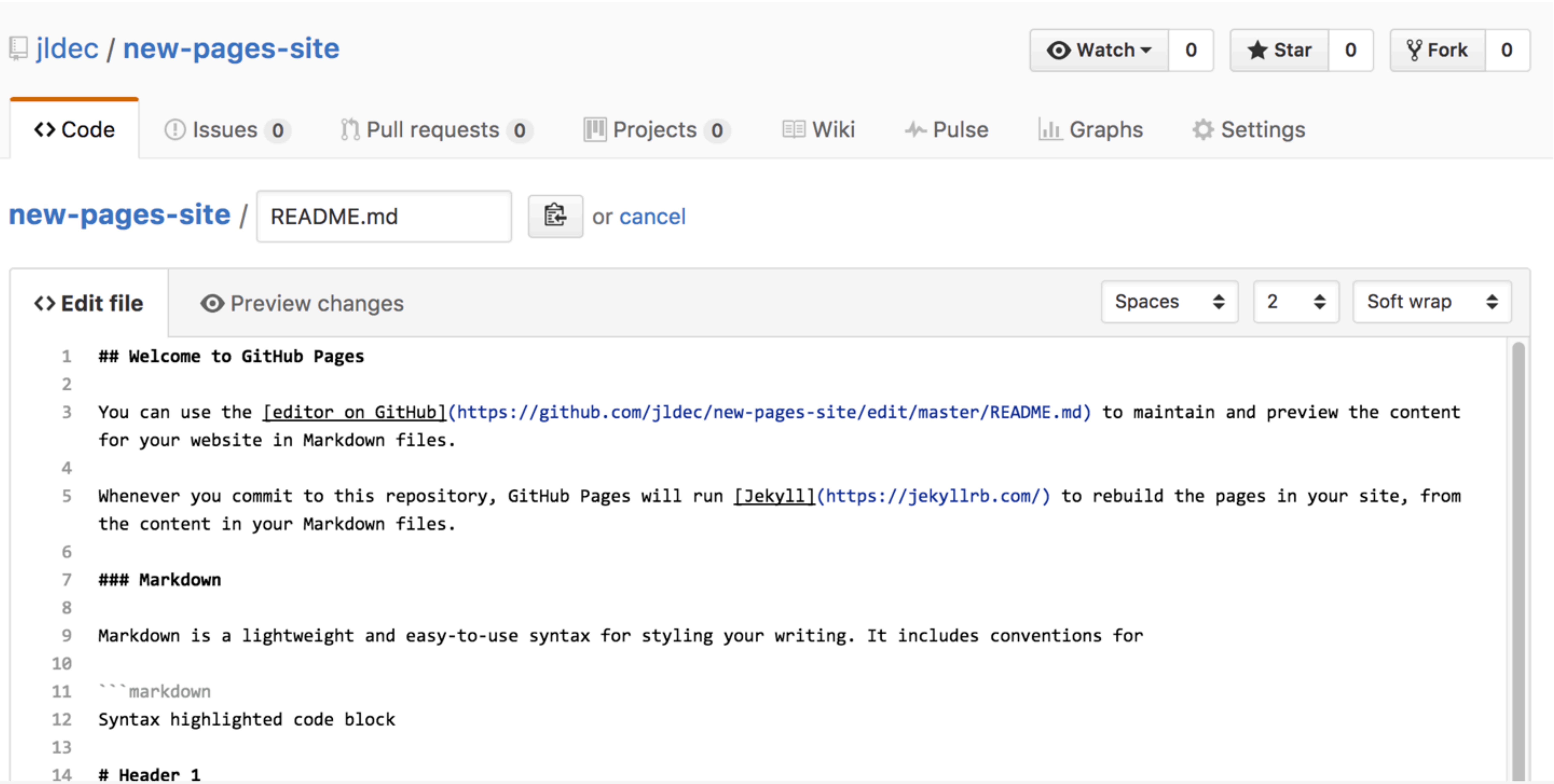
Select a theme to publish your site with a Jekyll theme. Learn more.

Your site is currently using the `Minimal` theme.

4

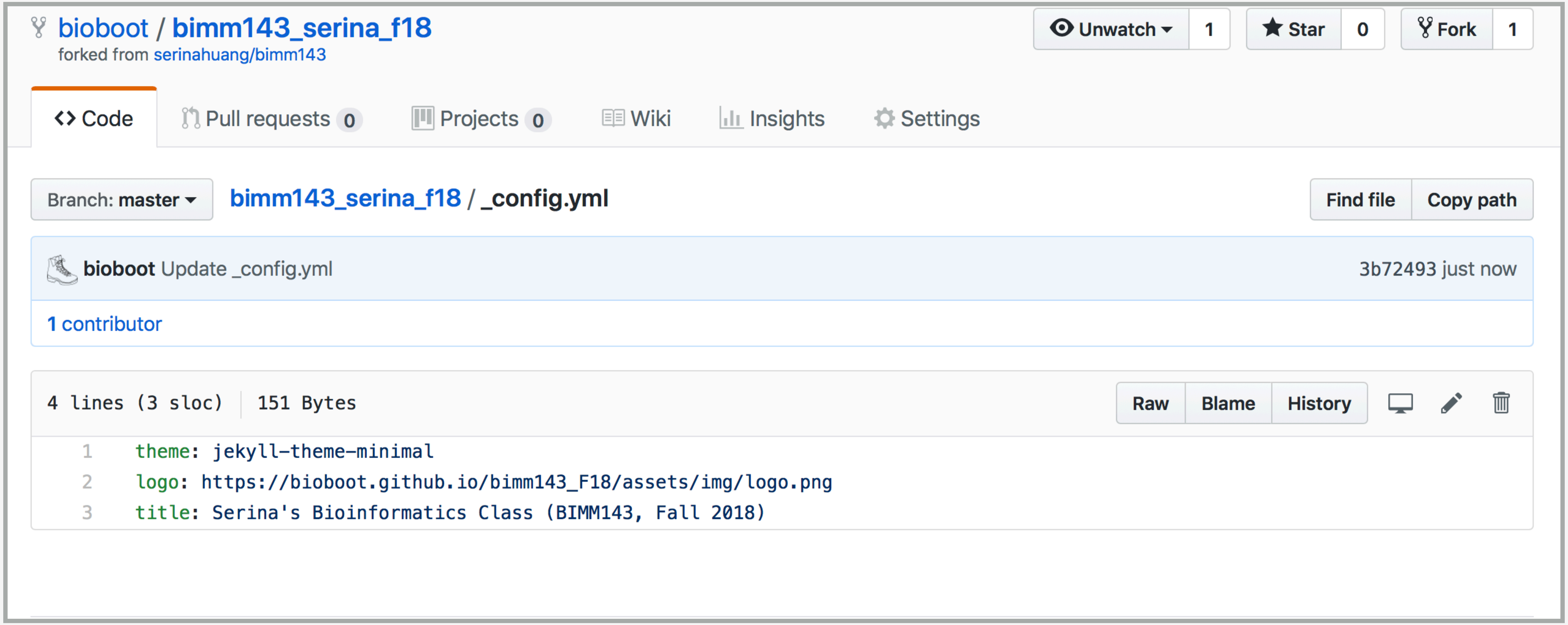
# Edit content

**Back on the repository main page use the GitHub online editor to add content. In particular, add links to each classes .MD file**



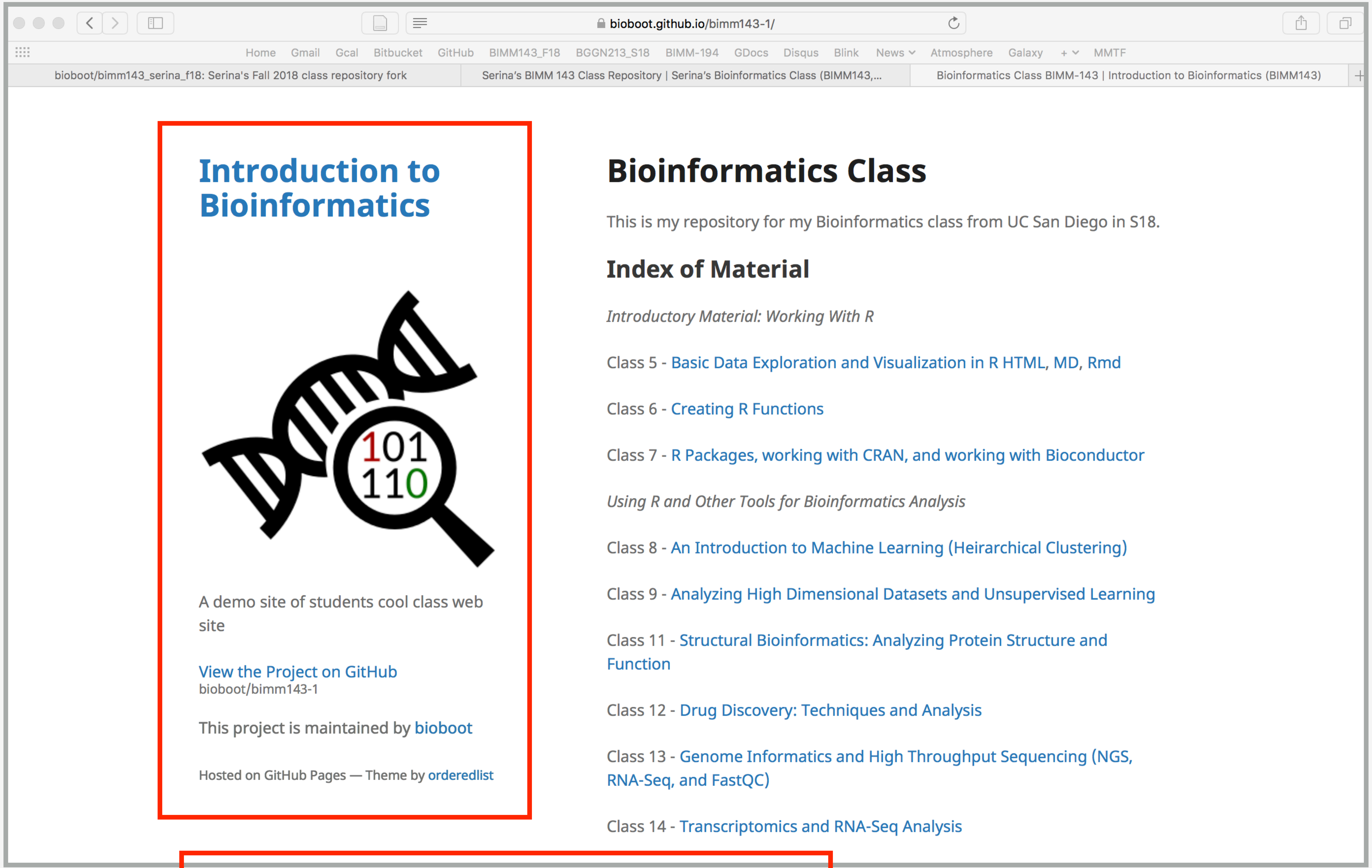
README.md

~~~
## Welcome to GitHub Pages

You can use the [editor on GitHub](https://github.com/jldec/new-pages-site/edit/master/README.md) to maintain and preview the content for your website in Markdown files.

Whenever you commit to this repository, GitHub Pages will run [Jekyll](https://jekyllrb.com/) to rebuild the pages in your site, from the content in your Markdown files.

### Markdown

Markdown is a lightweight and easy-to-use syntax for styling your writing. It includes conventions for

```markdown
Syntax highlighted code block

# Header 1
~~~



```
theme: jekyll-theme-minimal
logo: https://bioboot.github.io/bimm143_F18/assets/img/logo.png
title: Serina's Bioinformatics Class (BIMM143, Fall 2018)
```

(4.1) Edited _config.yml (adding logo and title), (4.2) Edited README.md



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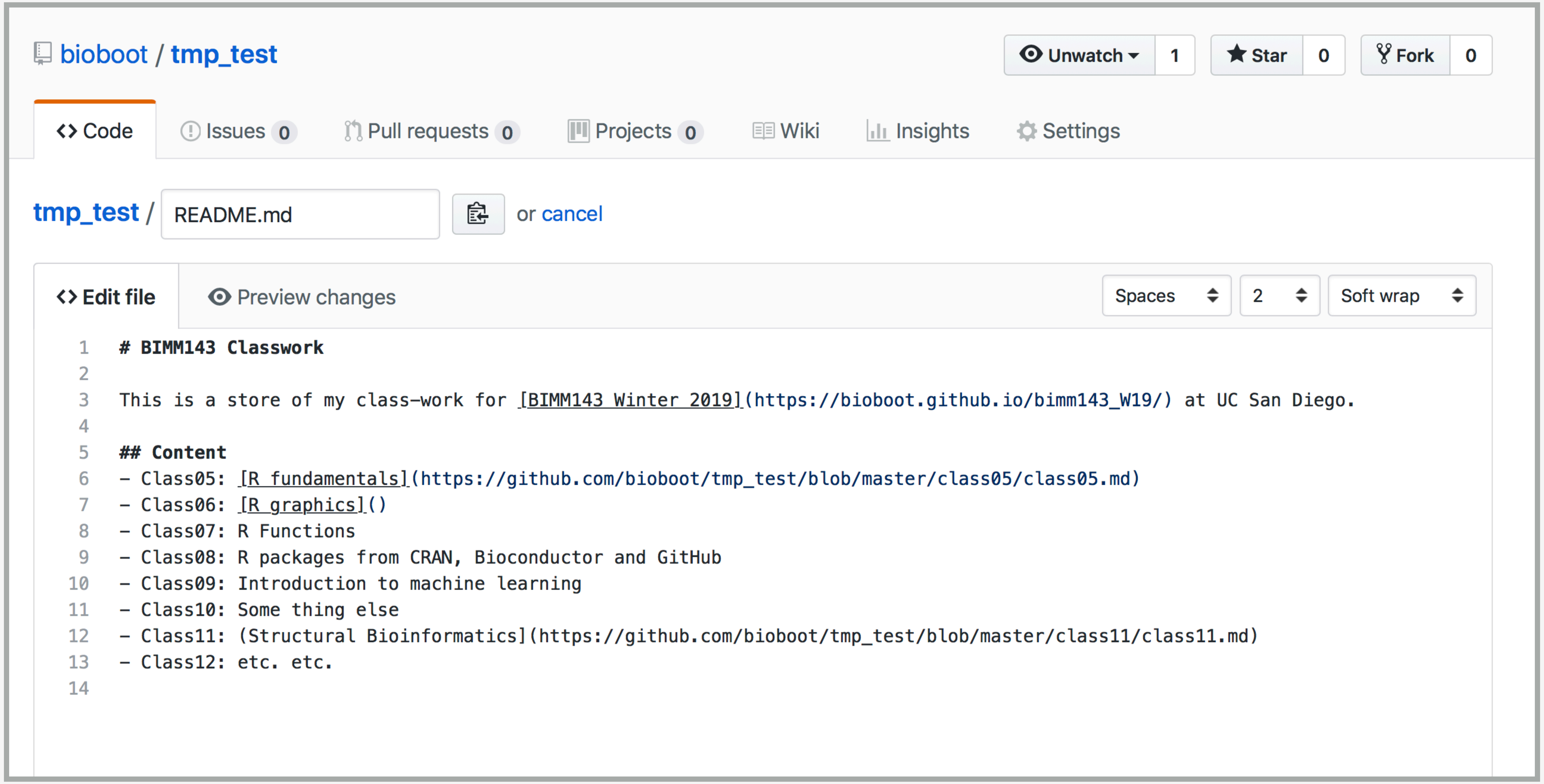


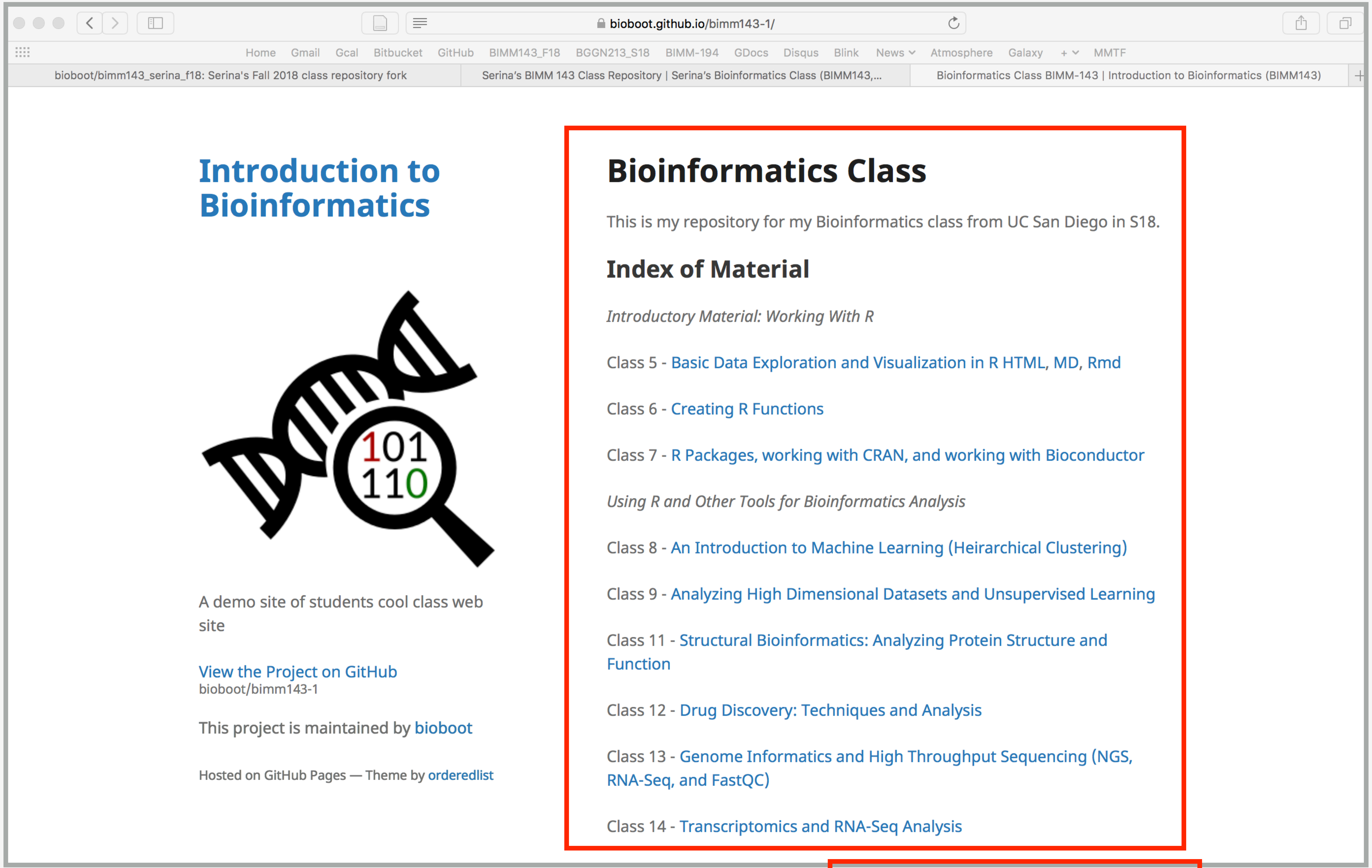
```
# BIMM143 Classwork

This is a store of my class-work for [BIMM143 Winter 2019](https://bioboot.github.io/bimm143_W19/) at UC San Diego.

## Content
- Class05: [R fundamentals](https://github.com/bioboot/tmp_test/blob/master/class05/class05.md)
- Class06: [R graphics]()
- Class07: R Functions
- Class08: R packages from CRAN, Bioconductor and GitHub
- Class09: Introduction to machine learning
- Class10: Some thing else
- Class11: (Structural Bioinformatics](https://github.com/bioboot/tmp_test/blob/master/class11/class11.md)
- Class12: etc. etc.

```

(4.1) Edited _config.yml (adding logo and title), (4.2) Edited README.md



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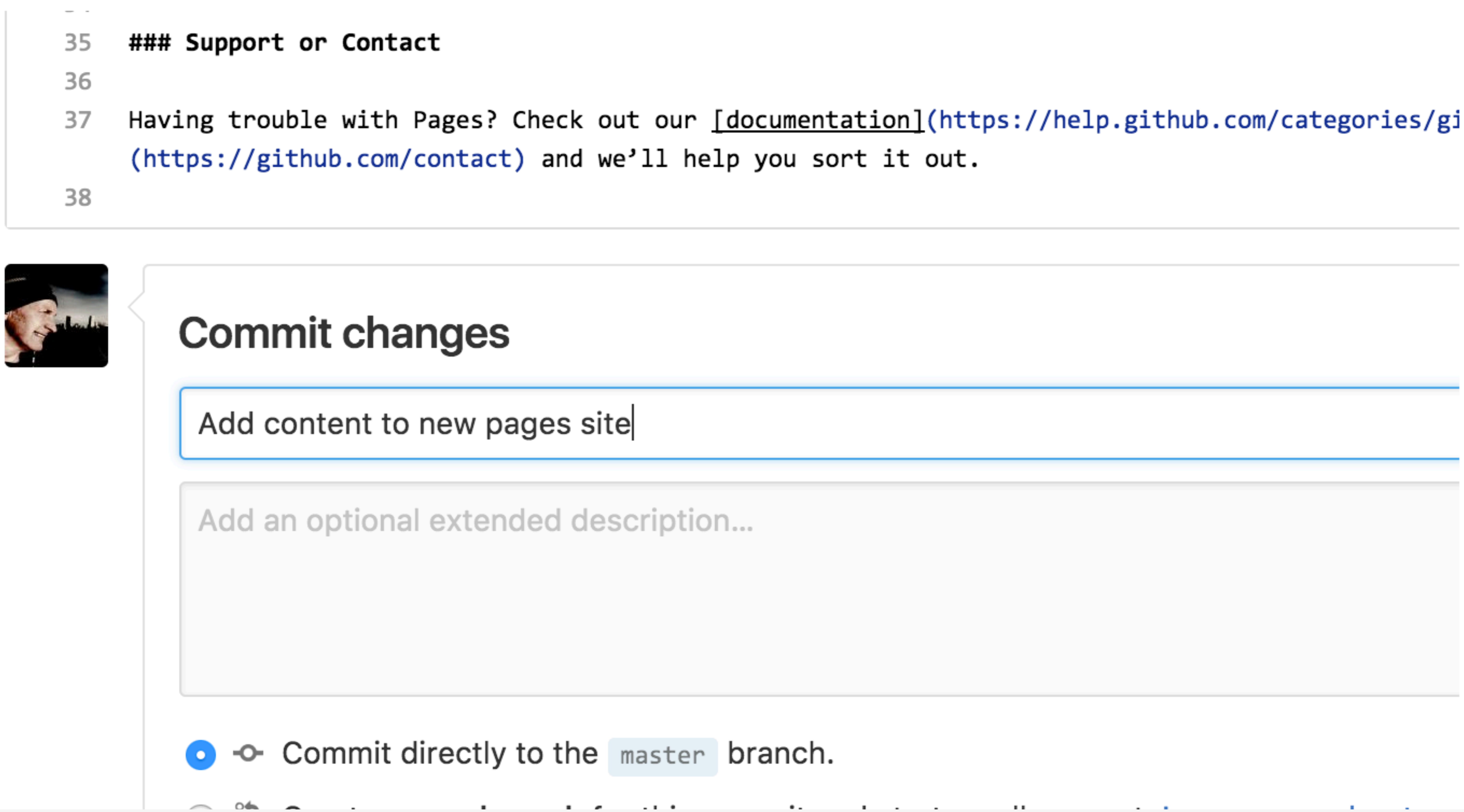
5

Commit

Enter a commit comment and click on **Commit changes** below the editor.



```
### Support or Contact

Having trouble with Pages? Check out our [documentation](https://help.github.com/categories/gi
(https://github.com/contact) and we’ll help you sort it out.

```

Commit changes

Add content to new pages site

Add an optional extended description...

● Commit directly to the `master` branch.

6

...and you're done!

Fire up a browser and go to **http://*username*.github.io/*repository***.

✓

Thank you very much!

Thank you very much!

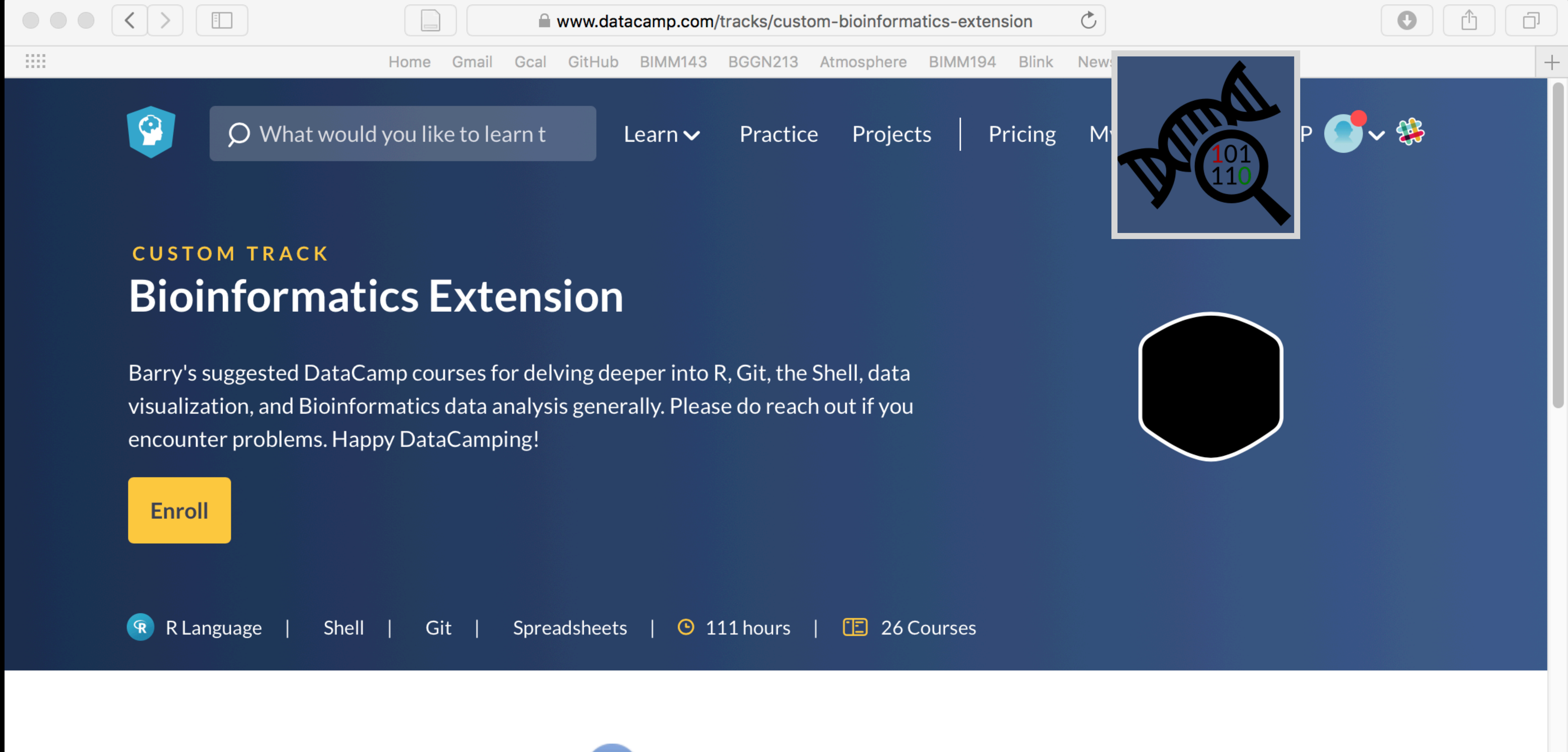
Post your GitHub Pages portfolio URL to GradeScope!

Remember: Late Due Date for all past assignments -> Friday, June 16 at 12pm

Bonus:

Going Further With DataCamp

https://marcos-diazg.github.io/BIMM143_SP23/class-material/class20/datacamp_extras.pdf



CUSTOM TRACK

Bioinformatics Extension

Barry's suggested DataCamp courses for delving deeper into R, Git, the Shell, data visualization, and Bioinformatics data analysis generally. Please do reach out if you encounter problems. Happy DataCamping!

SET evaluations

Please fill out the new Student Evaluations of Teaching (SET) if you have a chance.
It is important to the courses we offer in the future and how we teach them!

Announcement!

Bonus:
Bioinformatics & Genomics in Industry (2020 edition)
Live Stream Video

Enjoy a set of short interviews from leading genomic scientists at **Illumina Inc.**, **Synthetic Genomics Inc.**, and the **La Jolla Institute for Immunology**

The End!

https://marcos-diazg.github.io/BIMM143_SP23/

Thank You!

https://marcos-diazg.github.io/BIMM143_SP23/