

Introduction to GitHub page

Mirror Education pioneer - GitHub page tutorial

February 28, 2022

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1 General introduction

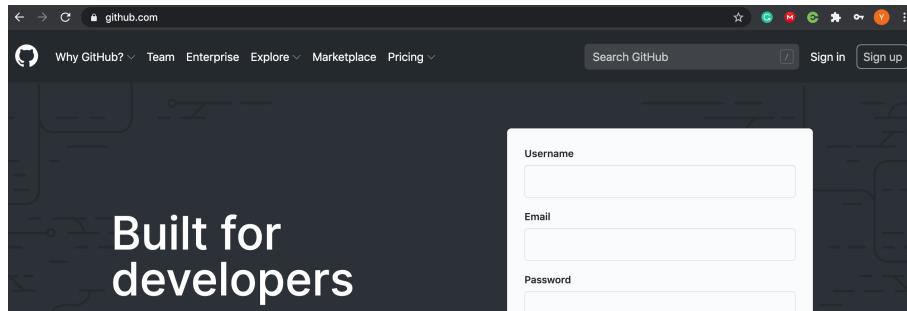
Welcome to the Mirror education pioneer program. At the end of the pioneer program, some of you are required to present either your project or lab report on a website. Building up your website from scratch is a bit complex and time-consuming for students with a little computer science background; Therefore, we would like to introduce a useful tool - the GitHub page, to help you present your project or lab report on a website-based form and allow you to share your website with others via sending the link.

2 Steps in brief

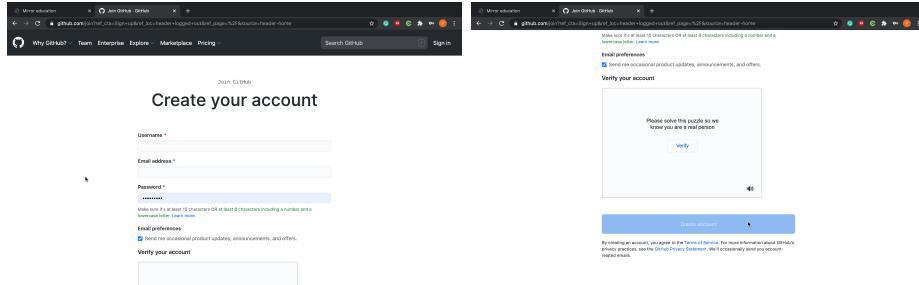
1. Set up your *GitHub* account.
2. Download *GitHub desktop*.
3. Edit your HTML5 template(i.e., add your project or report content).
4. Set up the *GitHub* page(i.e., upload your HTML5 file onto *GitHub*).

3 Set up your *GitHub* account

1. Fire up a search engine(i.e., Google chrome or Safari) and type the following website link into the search bar(or simply clicking on the hyperlink): <https://GitHub.com/>.

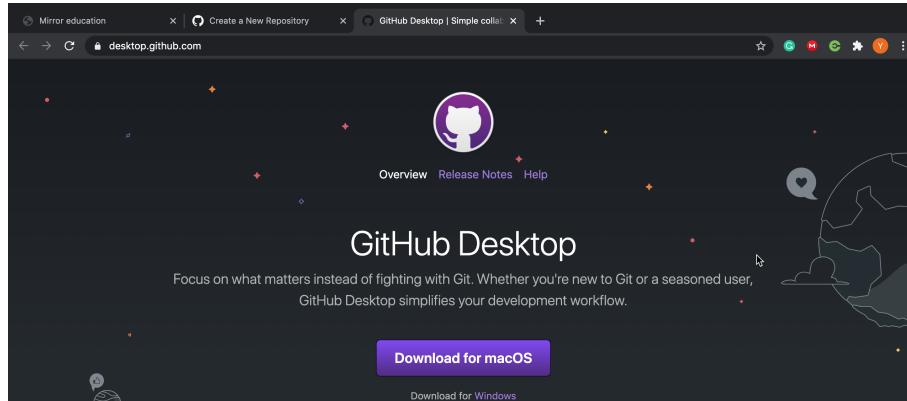


2. Create your *GitHub* account and verify it.



4 Download *GitHub desktop*

1. Fire up a search engine(i.e., Google chrome or Safari) and type the following website link into the search bar(or simply clicking on the hyperlink): <https://desktop.GitHub.com/>.



2. Download the correct *GitHub desktop* version. For instance, If you are a *macOS* user, then download the *macOS* version.
3. After downloaded, open up the *GitHub desktop* and sign in your account, either using your browser or username and password. (The appearance of the *GitHub desktop* maybe different on different devices.)
4. Clicking on the instruction: *create a new repository*. As a side-note, a GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images).

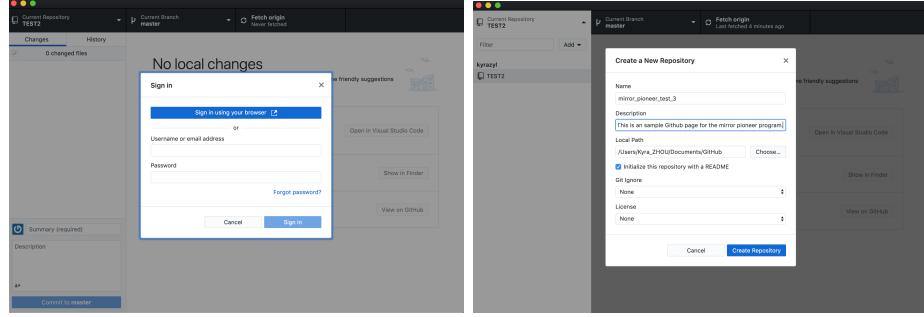


Figure 1: Sign in and create a new repository

- Enter your repository name, description(the purpose or brief introduction of your project) and local path(which folder on your computer do you want to store your repository); tick the box “initialise the repository with a README file”. The README file is used to enter more detailed description of your project which might be useful in your future development of the project.

If you are still confused, please take a detailed look at figure 1.

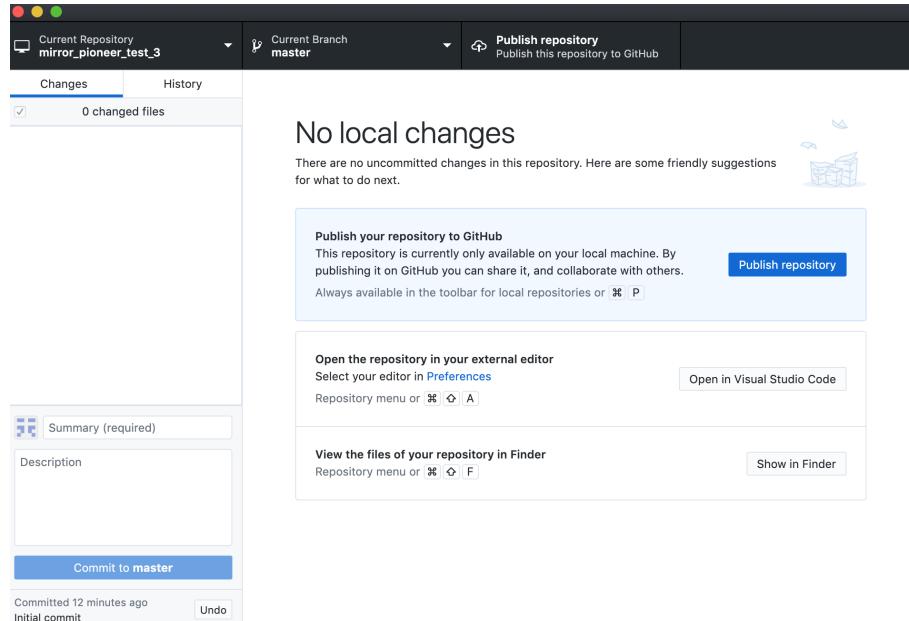


Figure 2: Clicking on “show in finder”

- Clicking on the instruction “show in finder” or equivalent statements if you are a *Windows* user, please look at figure 2 if you not clear about the above step. Figure out the position of the repository folder on

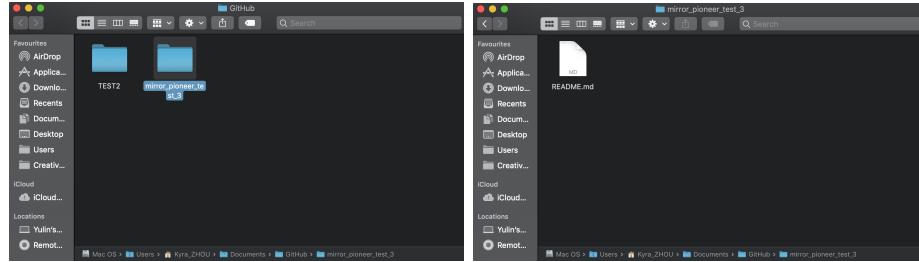


Figure 3: Figure out the position of the repository folder on your computer

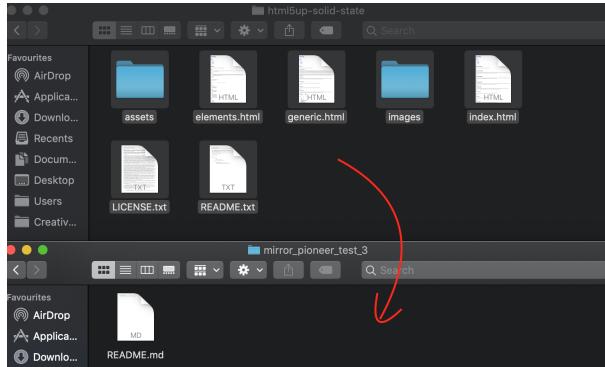


Figure 4: Drag the HTML5 template into the your repository folder

your computer(see figure 3), and drag the whole HTML5 template into the folder(see figure 4). We will provide three HTML5 templates which are suitable for presenting the pioneer project or lab report.

You can either choose one from the three templates we offered, or download a new HTML5 template from the web. However, we would advise you to choose from the three standard templates because the HTML5 codes inside it have been simplified and are suitable for displaying your projects.

Please take a glance at figure 5 to find your preferred template. For further details of the templates, please click on the bellowing links; it

may take a few minutes to load the website the first time, please be patient.

Template 1: <https://mirroredu.github.io/web-template-up-dimension/>
Template 2: <https://mirroredu.github.io/web-template-future-imperfect/>
Template 3: <https://mirroredu.github.io/web-template-ethereal/>

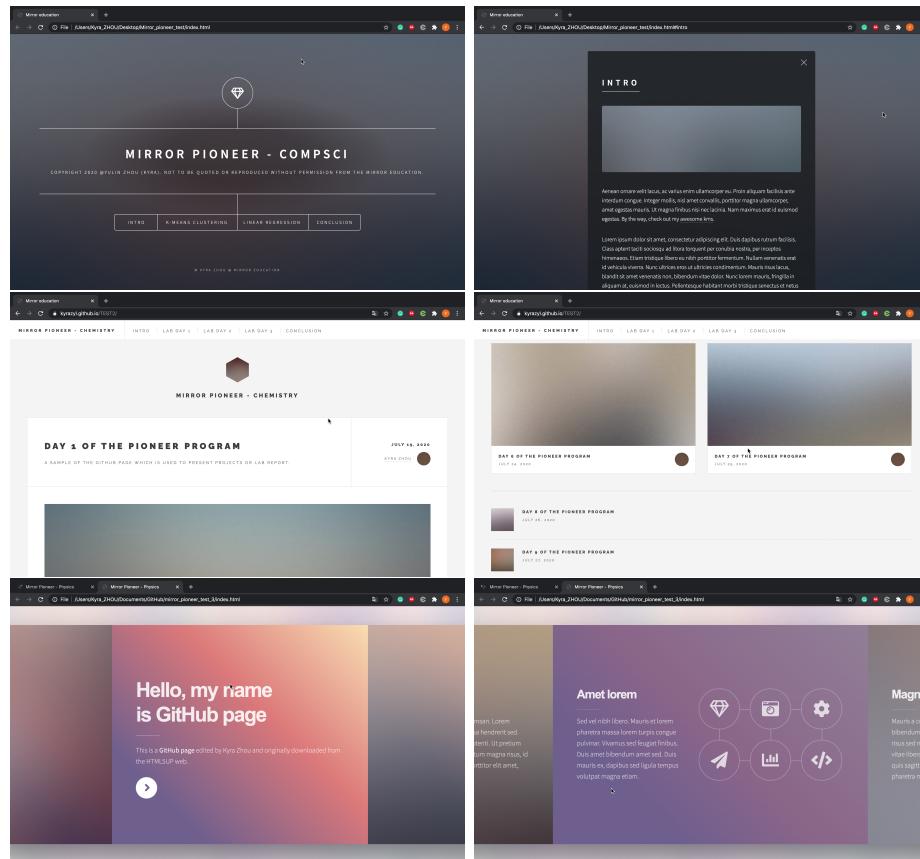


Figure 5: The three HTML5 standard template in order

7. Now we have the whole HTML5 template inside your local repository folder and we can start build up your website on your local computer.

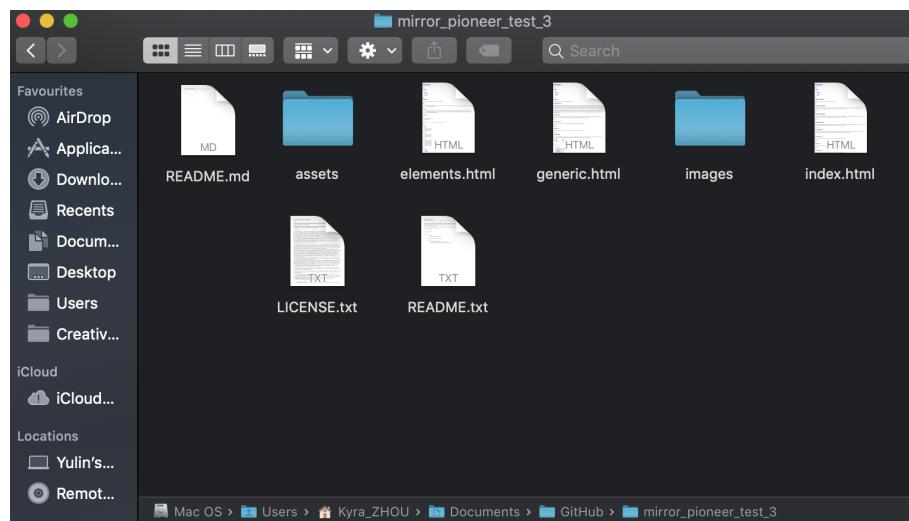
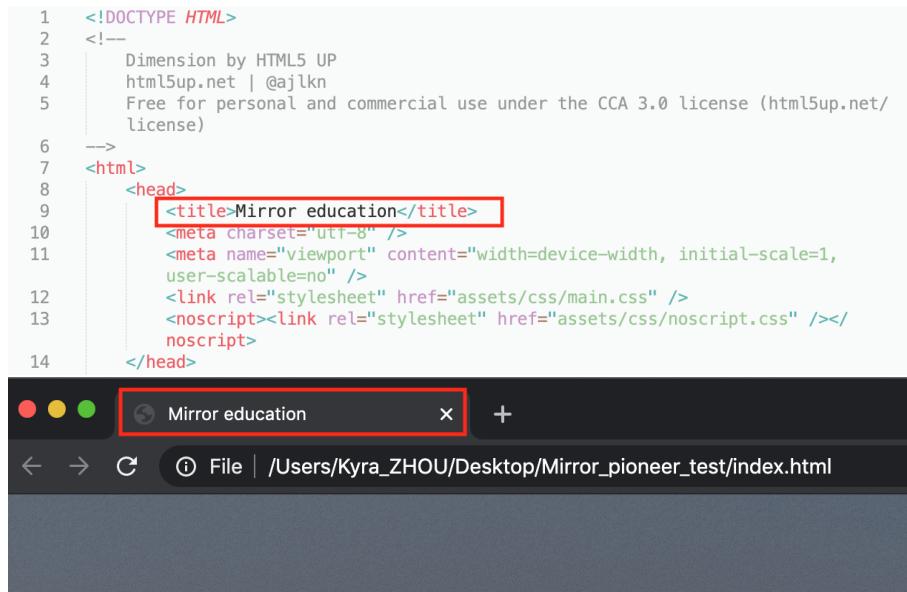


Figure 6: Your local repository folder

5 Edit your HTML5 template

Open the “*index.html*” file in your favourite text editor and start personalise the webpage template. The three standard templates has been simplified so that the only thing you need to do is to add your contents and photos. However, we will introduce some basic HTML tags which might enable you to better understand the HTML codes.

- Tab name: this is your webpage tab name, you can edit it in the head section of the “*index.html*” file. See figure 7 for more details.



The screenshot shows a code editor displaying an HTML file. The code is as follows:

```
1  <!DOCTYPE HTML>
2  <!--
3   Dimension by HTML5 UP
4   html5up.net | @ajlkn
5   Free for personal and commercial use under the CCA 3.0 license (html5up.net/
6   license)
7  -->
8  <html>
9   <head>
10  <title>Mirror education</title>
11  <meta charset="utf-8" />
12  <meta name="viewport" content="width=device-width, initial-scale=1,
13   user-scalable=no" />
14  <link rel="stylesheet" href="assets/css/main.css" />
15  <noscript><link rel="stylesheet" href="assets/css/noscript.css" /></
16  noscript>
17 </head>
```

The title tag, `<title>Mirror education</title>`, is highlighted with a red box. Below the code editor is a browser window showing the tab bar with the title "Mirror education" also highlighted with a red box. The status bar at the bottom of the browser window shows the file path: "/Users/Kyra_ZHOU/Desktop/Mirror_pioneer_test/index.html".

Figure 7: Change tab name

- Text formats: there are several text formats available, you can choose any of them from figure 8.
- Text sizes: we have six levels of text sizes, H1 is the biggest and is suitable for a webpage title while H6 is the smallest one. Visualise them in figure 9 before choosing the one to use.
- Quotations: If you want to quote some words from others, use the quotation block shown in figure 10.

```
<p>This is <b>bold</b> and this is <strong>strong</strong>. This is <i>italic</i> and this is <em>emphasized</em>. This is <sup>superscript</sup> text and this is <sub>subscript</sub> text. This is <u>underlined</u> and this is code: <code>for (;;) { ... }</code>. Finally, <a href="#">this is a link</a>.</p>
```



Figure 8: Available text format

```
<h1>Heading Level 1</h1>
<h2>Heading Level 2</h2>
<h3>Heading Level 3</h3>
<h4>Heading Level 4</h4>
<h5>Heading Level 5</h5>
<h6>Heading Level 6</h6>
```



Figure 9: Six levels of text sizes

```
<blockquote>Lorem ipsum dolor sit amet. Felis sagittis eget tempus euismod. Vestibulum ante ipsum primis in vestibulum. Blandit adipiscing eu iaculis volutpat ac adipiscing volutpat ac adipiscing faucibus.</blockquote>
```

Blockquote

*Lorem ipsum dolor sit amet. Felis sagittis eget tempus euismod.
 Vestibulum ante ipsum primis in vestibulum. Blandit adipiscing eu
 iaculis volutpat ac adipiscing volutpat ac adipiscing faucibus.*

Figure 10: Quotation block

- Code blocks: if you are going to do your project using any programming languages and would like to present your codes on your webpage, then

use the code block provided by HTML, see figure 11 for more details.

The image shows a code editor interface with a light gray background. On the left, there is a vertical toolbar with several icons. In the main area, there is a red header bar with the word "Preformatted" in white. Below this, a code block is displayed in a white box:

```
<pre><code>
i = 0;
while (!deck.isInOrder()) {
print 'Iteration ' + (i++);
deck.shuffle();
}
print 'It took ' + i + ' iterations to sort the deck.';
</code></pre>
```

Figure 11: Code block

- Unordered list: In figure 12, there are two forms of unordered lists, you shall choose the one which is more appropriate for your project.

The image displays two examples of unordered lists. On the left, the HTML code is shown in a white box:

```
<h4>Unordered</h4>
<ul>
  <li>Lorem ipsum dolor sit.</li>
  <li>Dolor pulvinar etiam.</li>
  <li>Etiam vel felis viverra.</li>
</ul>

<h4>Alternate</h4>
<ul class="alt">
  <li>Lorem ipsum dolor sit.</li>
  <li>Dolor pulvinar etiam.</li>
  <li>Etiam vel felis viverra.</li>
  <li>Felis enim feugiat.</li>
</ul>
```

On the right, the resulting output is shown in a red box:

Lists

Unordered

- Lorem ipsum dolor sit.
- Dolor pulvinar etiam.
- Etiam vel felis viverra.

Alternate

• Lorem ipsum dolor sit.

• Dolor pulvinar etiam.

• Etiam vel felis viverra.

• Felis enim feugiat.

Figure 12: Two formats of the unordered list

- Ordered list: In figure 13, the list is ordered using Arabic numerals, it is

useful when you have a series of steps which follow a specific sequence.

The figure shows a side-by-side comparison. On the left, a code editor displays the HTML code for an ordered list:

```
<h4>Ordered</h4>
<ol>
    <li>Lorem ipsum dolor sit.</li>
    <li>Dolor pulvinar etiam.</li>
    <li>Etiam vel felis viverra.</li>
    <li>Felis enim feugiat.</li>
    <li>Etiam vel felis lorem.</li>
</ol>
```

On the right, a red box contains the visual output of the code, showing a numbered list from 1 to 5.

Figure 13: The code and format of the ordered list

- Paragraph: Using the pair of tags `<p>` and `</p>` to enclose your paragraphs.
- Hyperlinks: You can either insert an webpage url or a html file link in the hyperlink tag, when users click on the hyperlink, the page will automatically jump to the webpage you directed to. See more examples in figure 14.

The figure shows a screenshot of a website template named "DIMENSION". The template includes a header with navigation links and a main content area with a title and descriptive text. The code for the template is shown on the left, illustrating how external links are implemented using the `a href="url"` attribute.

```
<h1 class="major">Hello, my name<br />
is Ethereal</h1>
<p>This is <strong>Ethereal</strong>, a free site template by AJ for <a href="https://html5up.net">HTML5 UP</a>. It's fully responsive, built on HTML5 and CSS3, and released entirely for free under the Creative Commons license. Hope you dig it!</p>
<ul class="actions">
    <li><a href="#">First</a> <span>button primary color1 circle icon solid fa-angle-right</span> <a href="#">Next</a></li>
</ul>
<!-- Header --&gt;
&lt;header id="header"&gt;
    &lt;h1&gt;&lt;a href="index.html"&gt;Mirror pioneer – Chemistry&lt;/a&gt;&lt;/h1&gt;
    &lt;nav class="links"&gt;
        &lt;ul&gt;
            &lt;li&gt;&lt;a href="#"&gt;Intro&lt;/a&gt;&lt;/li&gt;
            &lt;li&gt;&lt;a href="#"&gt;Lab day 1&lt;/a&gt;&lt;/li&gt;
            &lt;li&gt;&lt;a href="#"&gt;Lab day 2&lt;/a&gt;&lt;/li&gt;
            &lt;li&gt;&lt;a href="#"&gt;Lab day 3&lt;/a&gt;&lt;/li&gt;
            &lt;li&gt;&lt;a href="#"&gt;Conclusion&lt;/a&gt;&lt;/li&gt;
        &lt;/ul&gt;
    &lt;/nav&gt;
&lt;/header&gt;</pre>


DIMENSION



A FULLY RESPONSIVE SITE TEMPLATE DESIGNED BY HTML5 UP AND RELEASED FOR FREE UNDER THE  
CREATIVE COMMONS LICENSE.


```

Figure 14: Hyperlink examples

- Images: There is a folder called “images” in your local repository folder, drag the images you want to use inside this “images” folder and write

down the address of the image in your HTML file. The standard image tag in HTML is written in figure 15.

As a side note, *src* is the address of the image in your repository folder, *alt* is the alternating texts for the image, it will occur either when you hover your mouse onto the photo, or when the photo can not display properly.

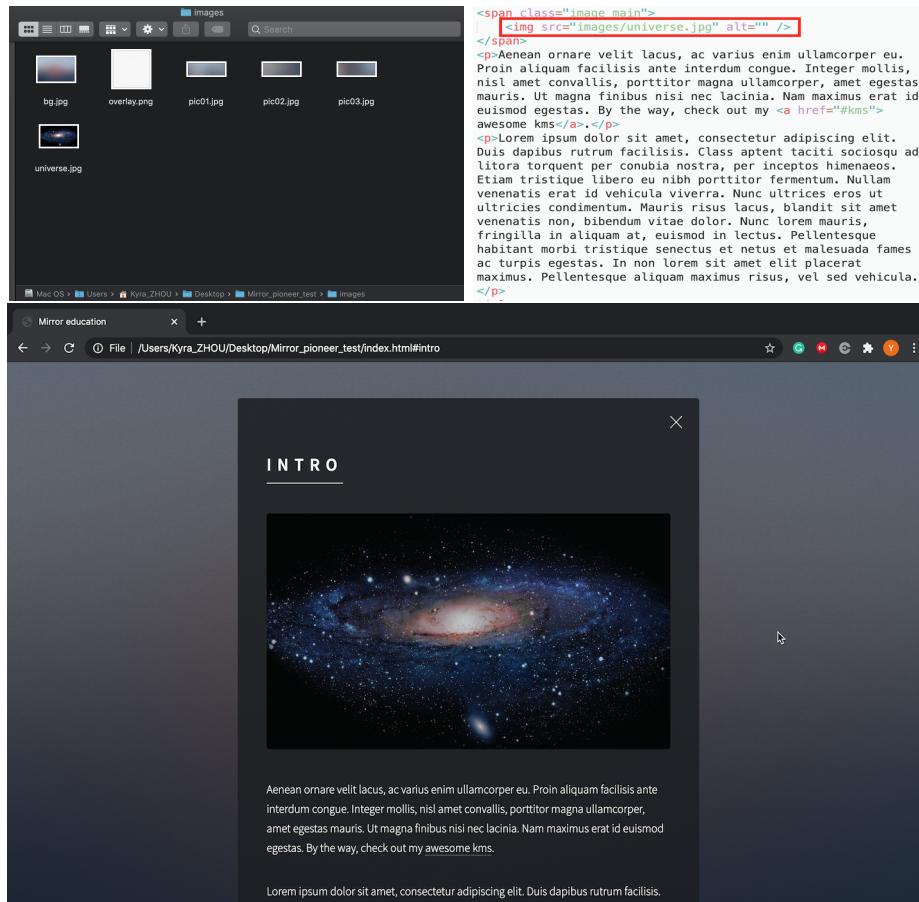


Figure 15: Add image into the webpage

- Tables: There are two types of tables available as well, follow the instructions in figure 16 to visualise them in your webpage.

Default		
Name	Description	Price
Item One	Ante turpis integer aliquet porttitor.	29.99
Item Two	Vis ac commodo adipiscing arcu aliquet.	19.99
Item Three	Morbi faucibus arcu accumsan lorem.	29.99
Item Four	Vitae integer tempus condimentum.	19.99
		100.00

Alternate		
Name	Description	Price
Item One	Ante turpis integer aliquet porttitor.	29.99
Item Two	Vis ac commodo adipiscing arcu aliquet.	19.99
Item Three	Morbi faucibus arcu accumsan lorem.	29.99
Item Four	Vitae integer tempus condimentum.	19.99
		100.00

Figure 16: Two formats of the tables

6 Set up the *GitHub* page

After editing your HTML5 file, you can start setting up the *GitHub* page.

1. Write a summary, commit to master and publish your repository. In the previous steps, you can only visualise your webpage on your local computer; However, after publishing the local repository to *Github*, we are able to build up a public webpage which can be searched using a

search engine. Please following the steps in figure 17 to publish your local repository to *GitHub*.

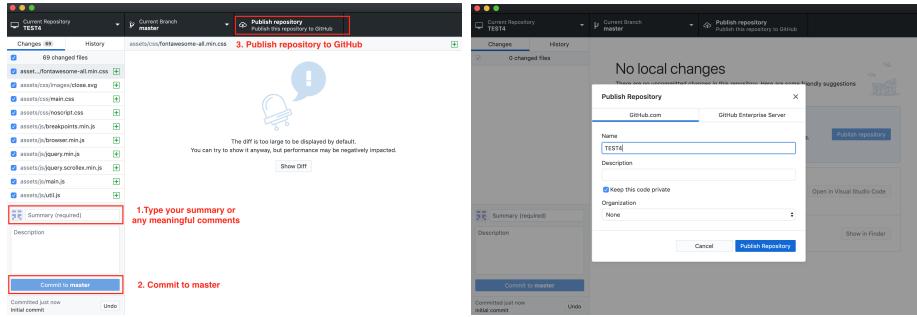


Figure 17: Write a summary, commit to master and publish your repository.

2. Sign in your *GitHub* account on the *GitHub* webpage(<https://github.com/>) and find your uploaded repository. See figure 18 for more details.

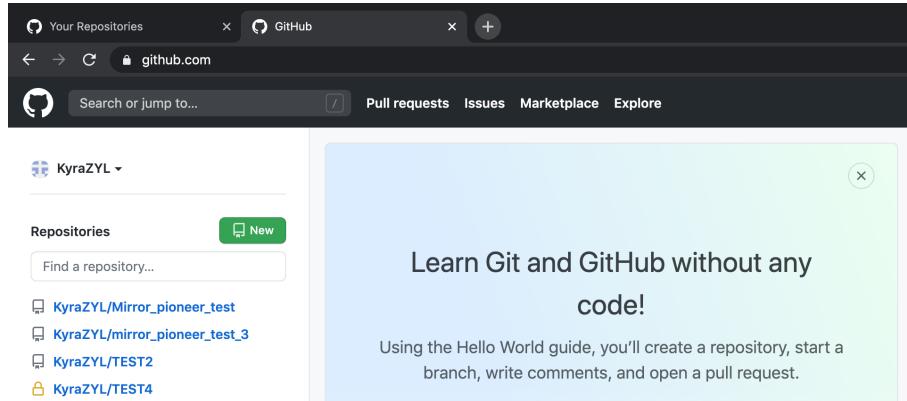


Figure 18: Find your uploaded repository.

3. Clicking on the “settings” button:

- Scroll down the page to the bottom and change the repository visibility to public. See figure 20 for further details.
- In the “setting” section, scroll down to find the “GitHub pages” section. Change the source from *none* to *master branch*. Change or select a theme. The choice of the theme does not matter because

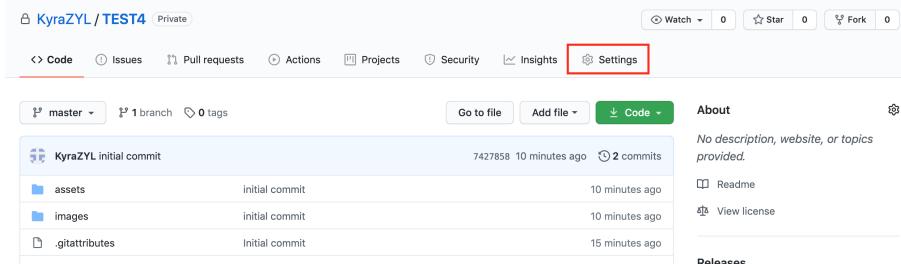


Figure 19: Clicking on the “settings” button

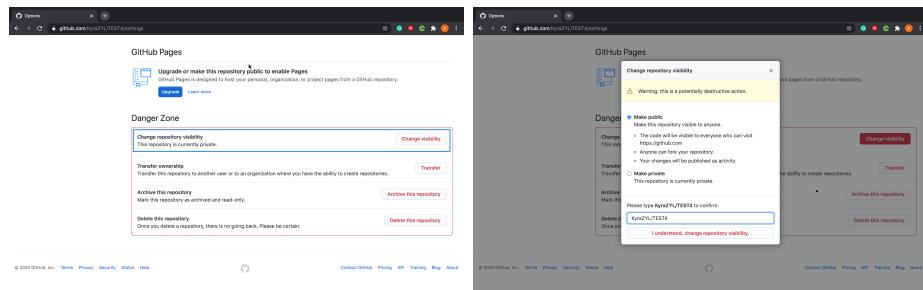


Figure 20: Change the repository visibility to public

our HTML5 template will overwrite the selected theme. Follow the instructions on figure 21 if you are confused.

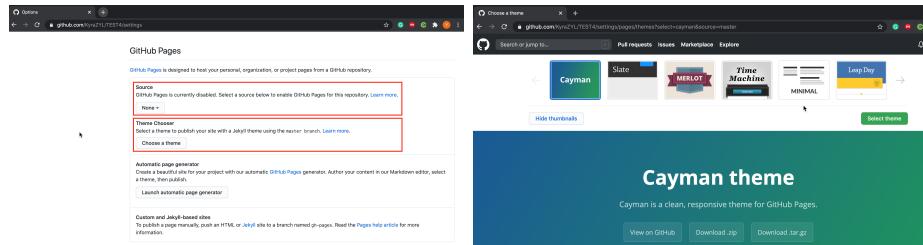


Figure 21: Change the source and the theme

- Wait and refresh the webpage until there is a green box (see figure 22) showing the *GitHub* page is published at an address. The address is your webpage link which you can share with others.

4. In future development, if you want to change your webpage, after edit

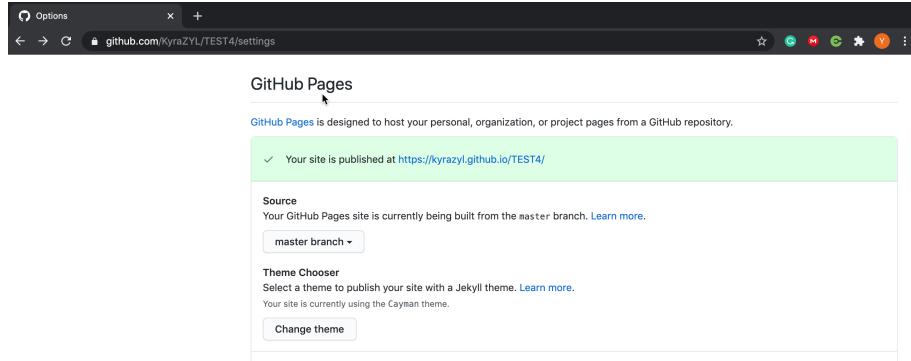


Figure 22: Wait and refresh the webpage until there is a green box.

the HTML5 file on your local computer, simply open up your *GitHub desktop*, write a summary, commit to master and push to origin, if there is an instruction “pull origin”, then make sure to pull origin first. See figure 23 for more details.

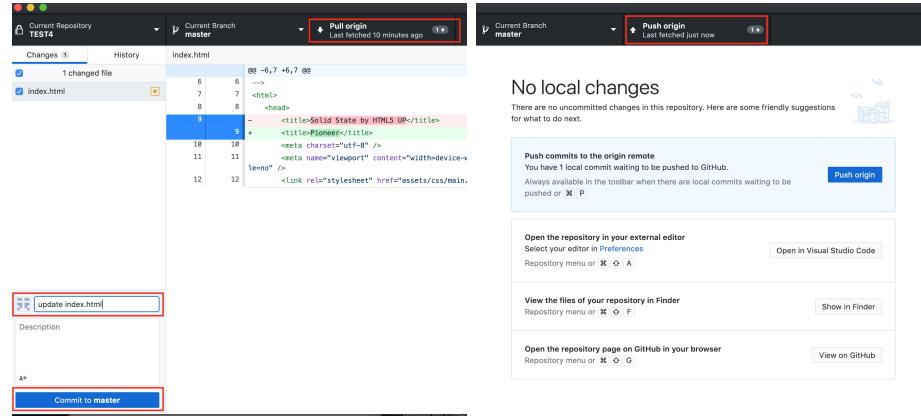


Figure 23: Further development