



UPDATING ORB UNIVERSITY

FIRST THINGS FIRST

This guide will help you (hopefully) update the ORB University website whenever there's a new lesson. It involves editing code, and uploading a video to YouTube, nothing too crazy.

SOFTWARE TO USE

You'll need two pieces of software to get, edit, and upload the code to the GitHub repository (think of it as an Autodesk Construction Cloud, but for code) so the changes can be seen on the website. Please download them both and install them.

- [Visual Studio Code](#): it's like the Revit for editing code, building websites/webapps, software, scripts, and more. It's free and open source.
- [Git](#): a version control system, a tracker for any changes in the code where you can restore to previous versions if needed, free and open source too.

ACCOUNTS

There are two accounts you will need access to:

- Google account (for YouTube)
 - Email: orbarchitecture@gmail.com
 - Password: orbarchitecture2023!
- GitHub (where the code repository is stored in the cloud)
 - orbarchitecture@gmail.com
 - orbarchitecture23

GETTING THE RECORDING

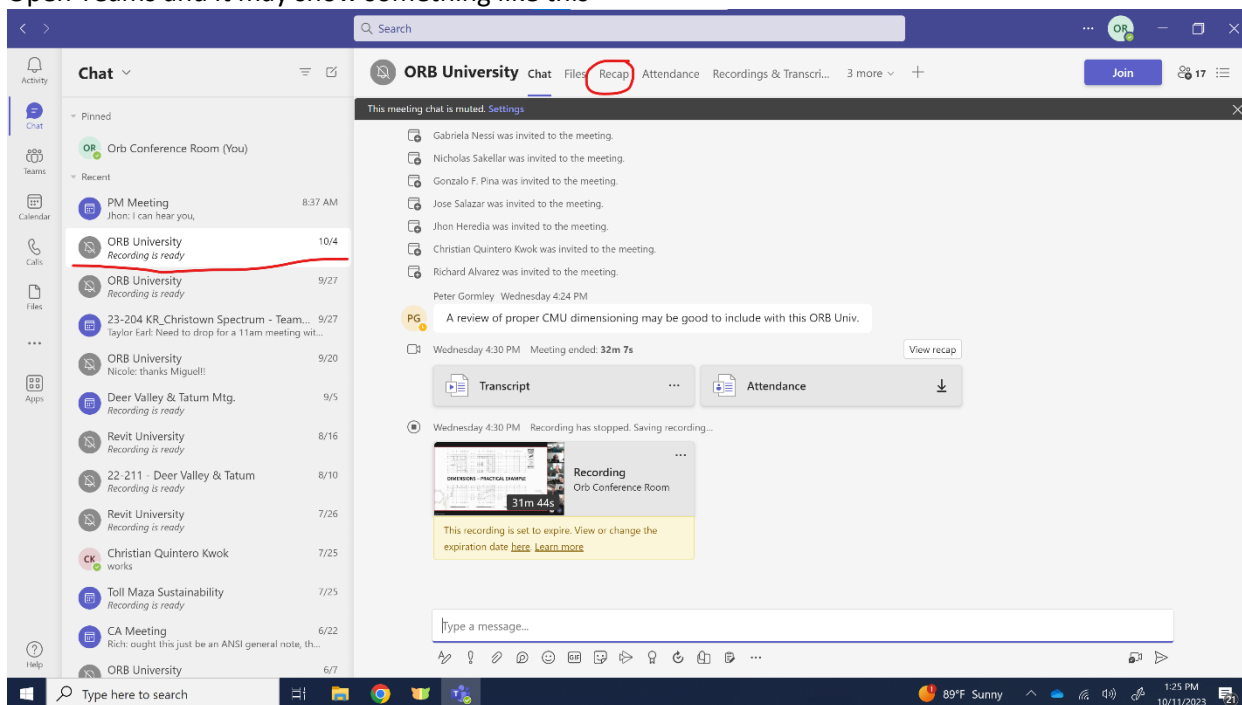
Usually whenever there's an ORB University hour, it starts to record automatically (if not, please record it manually inside the Teams window), and is saved in the ORB Conference Room Microsoft account. Follow the next steps to retrieve it:

1. Go to the conference room, yes you need to get up from your desk.
2. Log-in to the computer using the credentials inside the folder that's usually over the conference table.



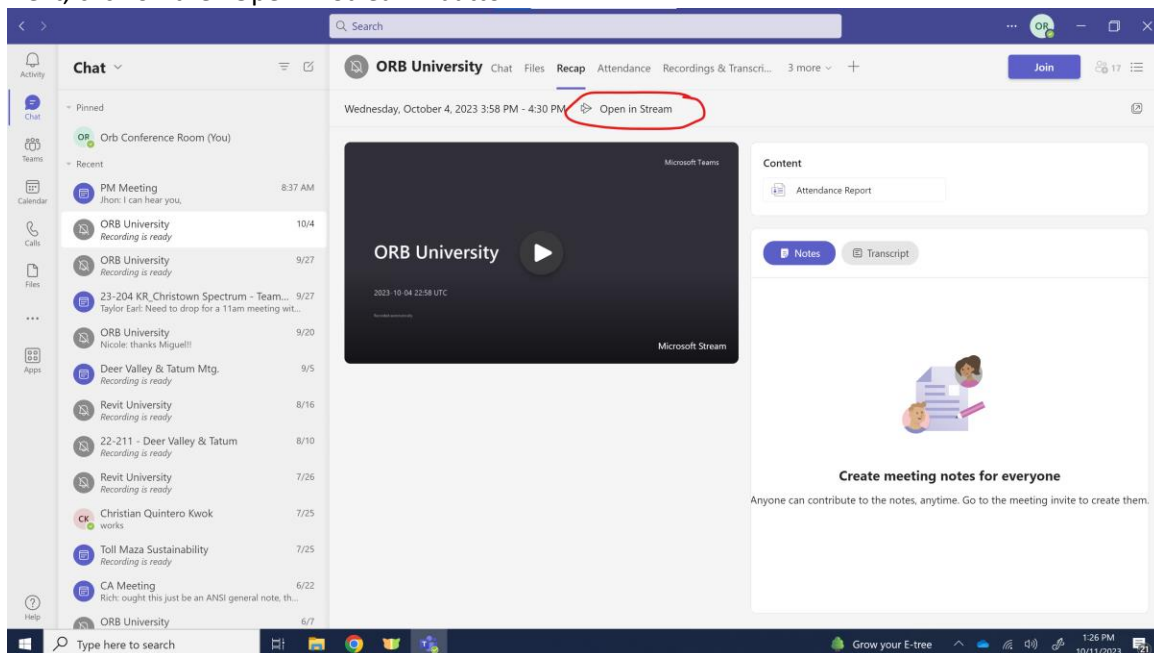
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3. Open Teams and it may show something like this



Make sure to be in the most recent ORB University chat and click on “Recap” just on the right side of the chat header.

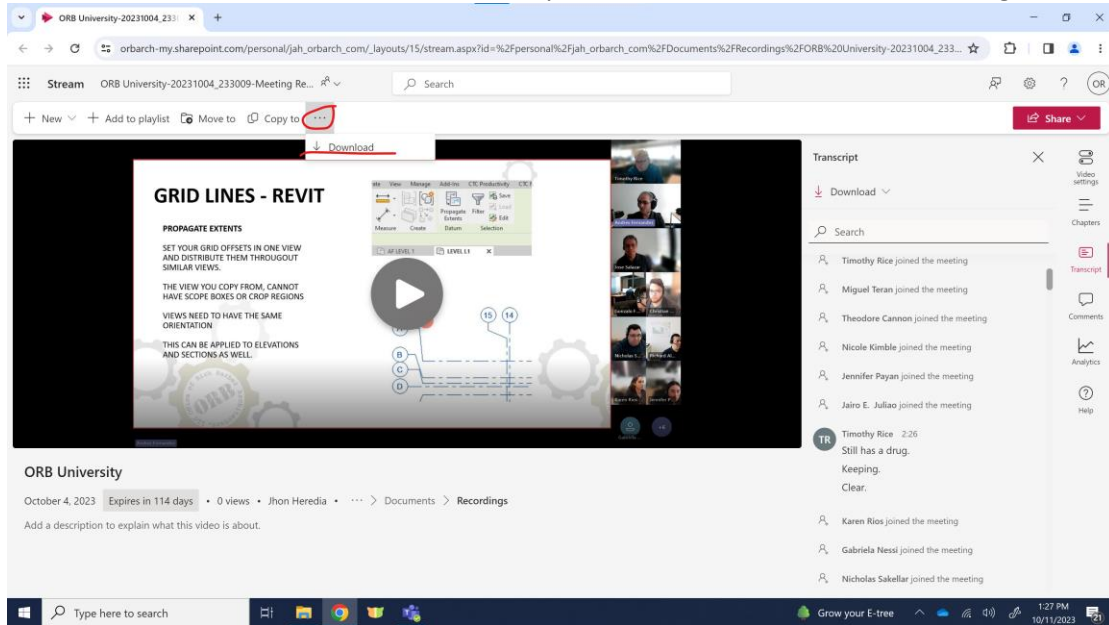
4. Next, click on the “Open in Stream” button





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5. It will open a browser window with the recording in it, click on the 3-dot icon just below the title, where a “Download” button will show up, click on it to download the recording.



6. When the download finishes, please place the archive in the folder located in “T:\Orb\ORB Resource Library\ORB University\2023 ORB\Date Lesson name” whereas it should be already a folder created, if not, please create one using the convention showed in the address.

UPLOADING THE VIDEO

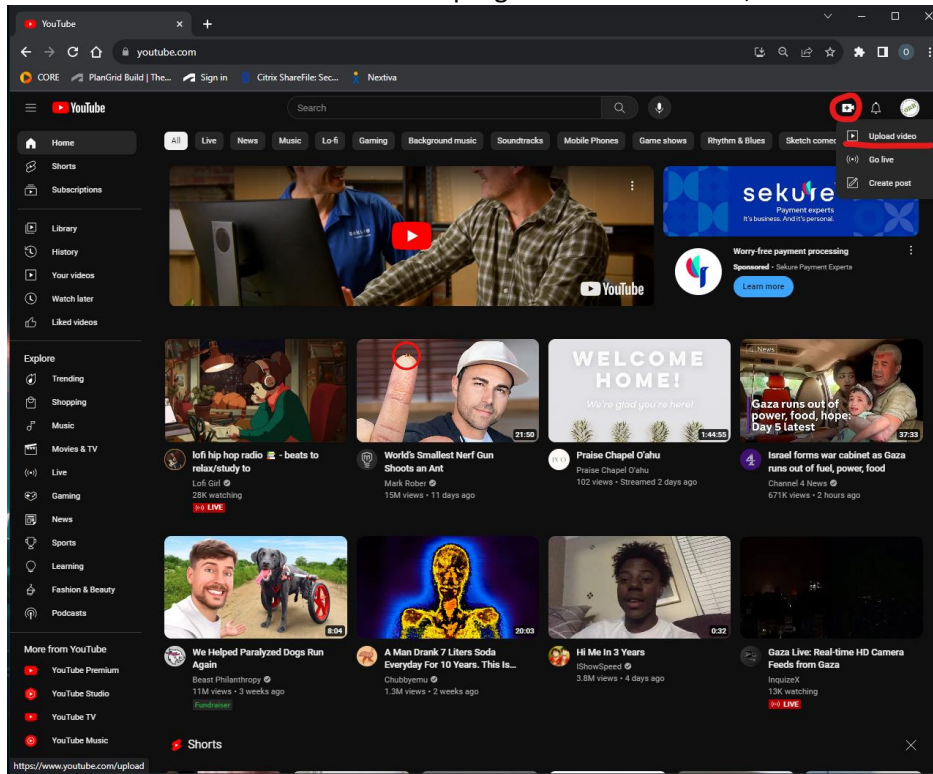
In order to not have any file duplicates for the recordings, and make the site data efficient, the videos are uploaded to the ORB Google account, in order to do that, follow these steps:

1. Open YouTube in a web browser, and sign-in using the credentials provided earlier.

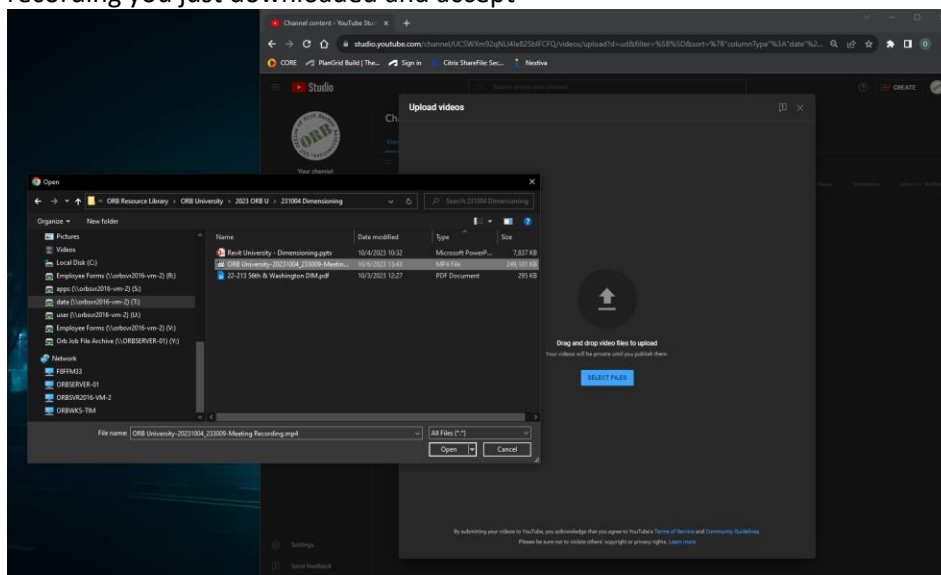


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2. Click on the “Create” button at the top-right corner of the site, and then in “Upload video”



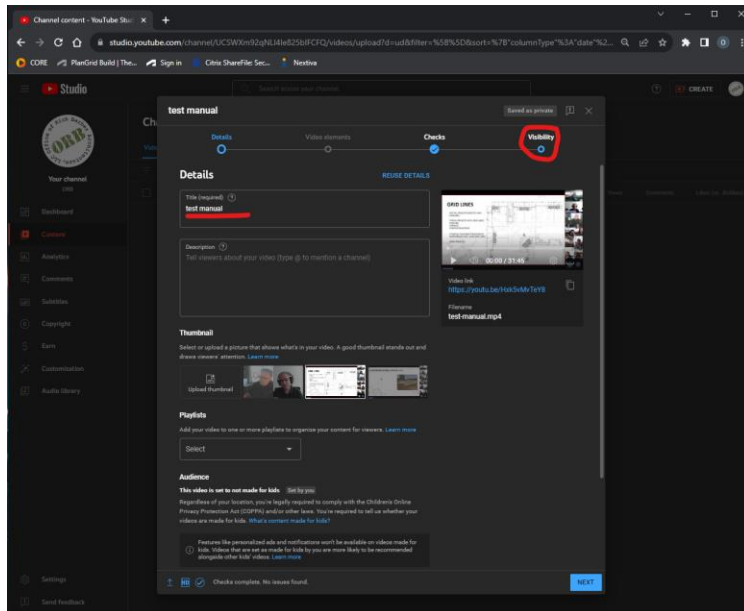
3. Next, click on the “Select Files” button, and an explorer window will pop-up, search for the recording you just downloaded and accept



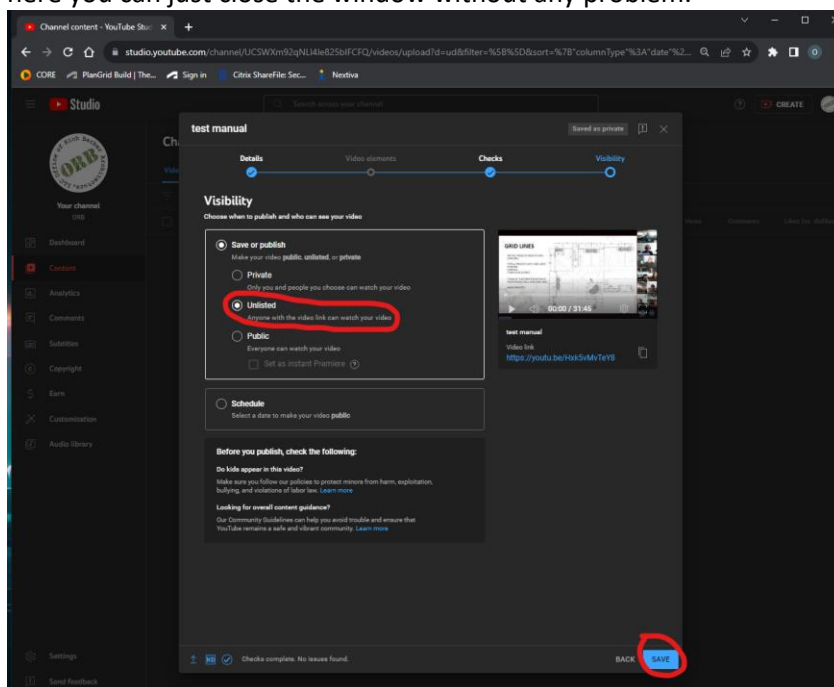


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4. Change the video title if needed, and click on the “Visibility” button at the end of the progress bar



5. There, change the Visibility to “Unlisted”, and click “Save” at the bottom. Don’t close the window until the video finishes to upload, once completed, the video will be processed which in here you can just close the window without any problem.





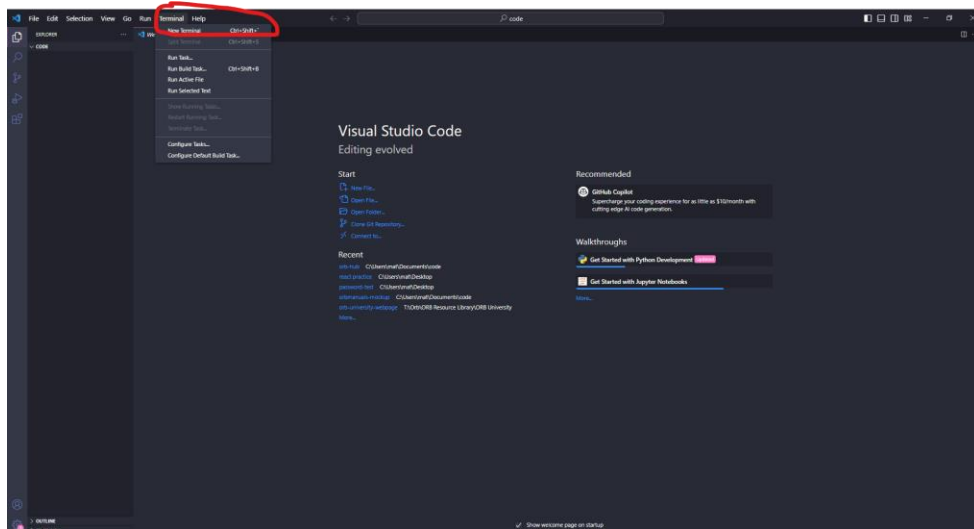
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GETTING THE CODE

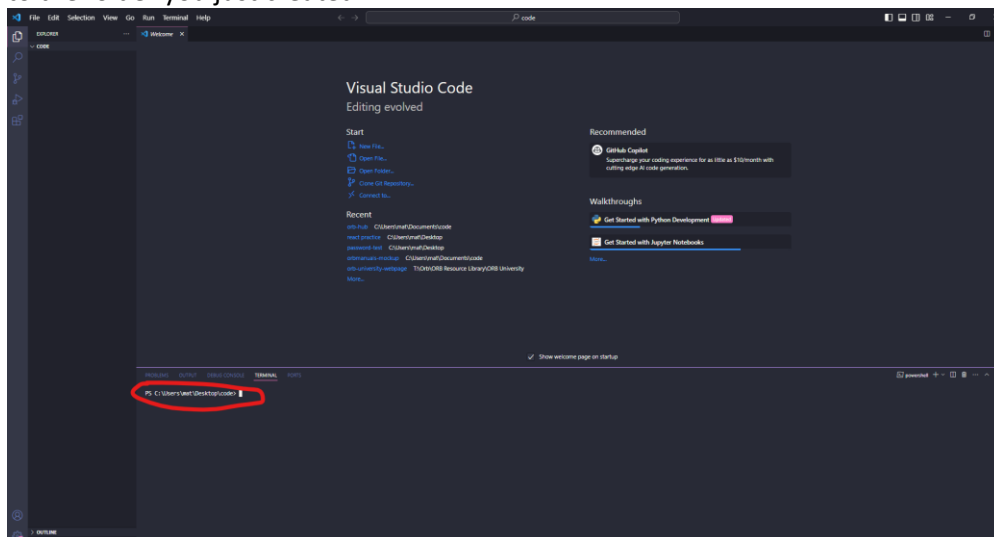
BEFORE DOING ANY CHANGES, NOTIFY THE WEBSITE MANAGER.

With VS Code and Git installed, create a new folder wherever you like locally in your hard drive, then follow these steps:

1. Open VS Code, then drag the folder you created to VS Code and trust the directory.
2. At the menu bar, click on "Terminal" and then choose "New Terminal" in the drop-down menu.



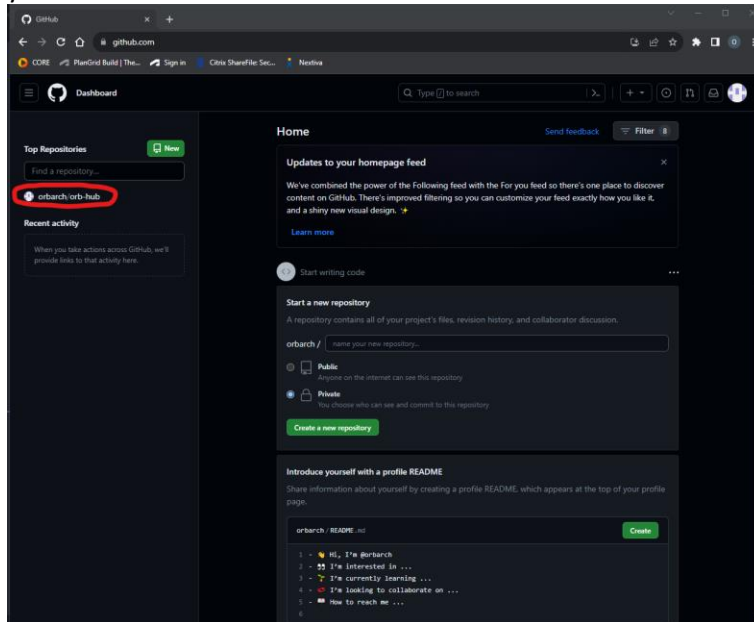
3. A terminal should pop-up at the bottom area of the window, with the directory address pointed to the folder you just created.



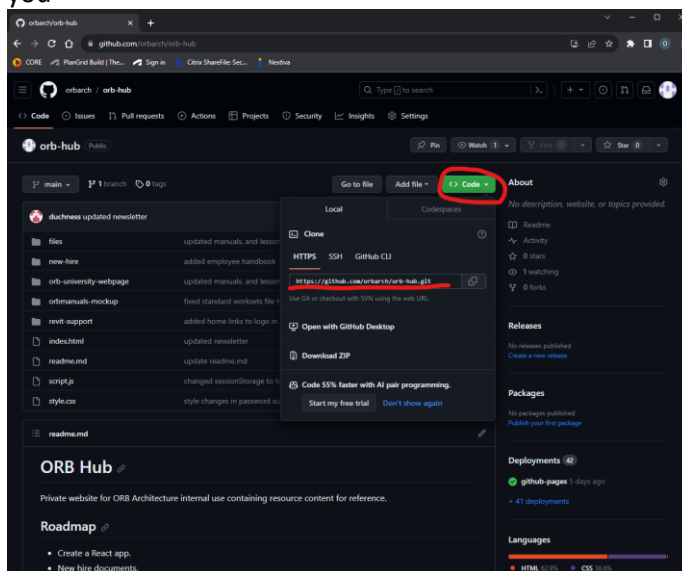


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4. In a new web browser window, go to [GitHub](https://github.com) and sign in using the credentials provided earlier, you should be able to see this:



5. Inside the left sidebar, click on the repository link “orbarch/orb-hub”, it’ll take you to the ORB-Hub repository.
6. In the new window, click on the green button that says “Code”, and copy the HTTPS link it gives you

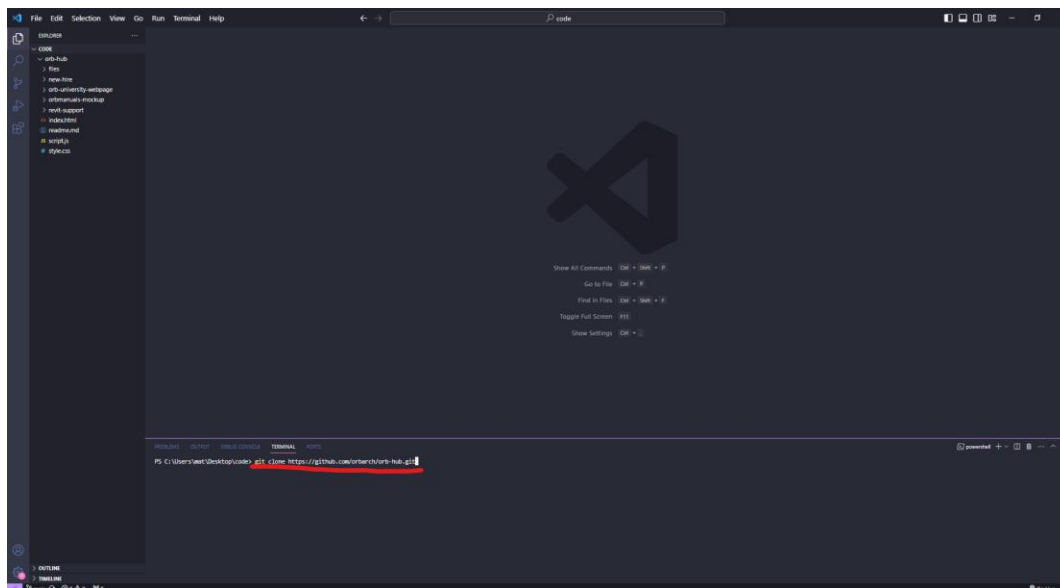




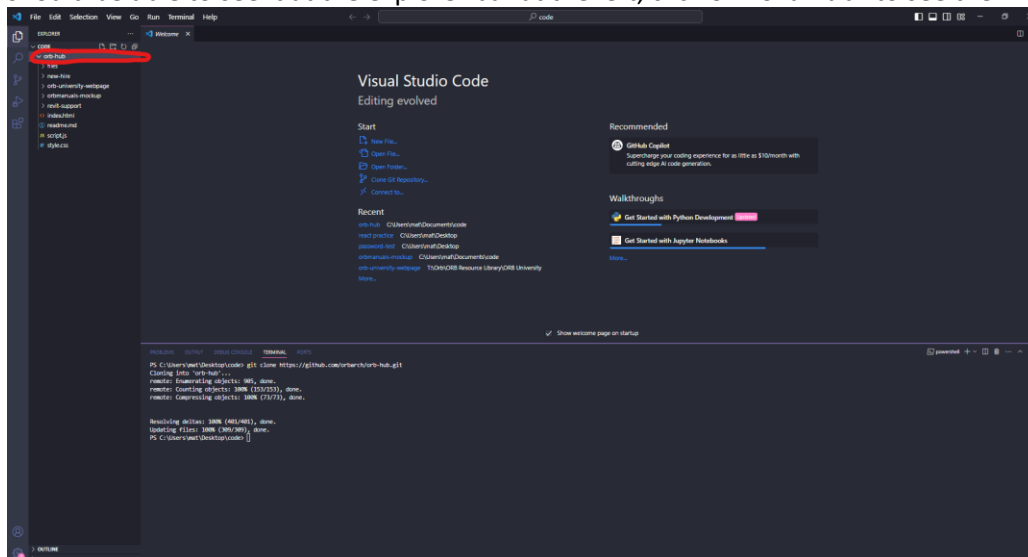
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7. Now go back to VS Code, and inside the terminal you opened type the following command without the quotation marks and press enter:

"git clone <https://github.com/orbarch/orb-hub.git>"



8. If every step was followed correctly, VS Code downloaded the code from the repository, and you should be able to see it at the explorer bar at the left, click on "orb-hub" to see the files.



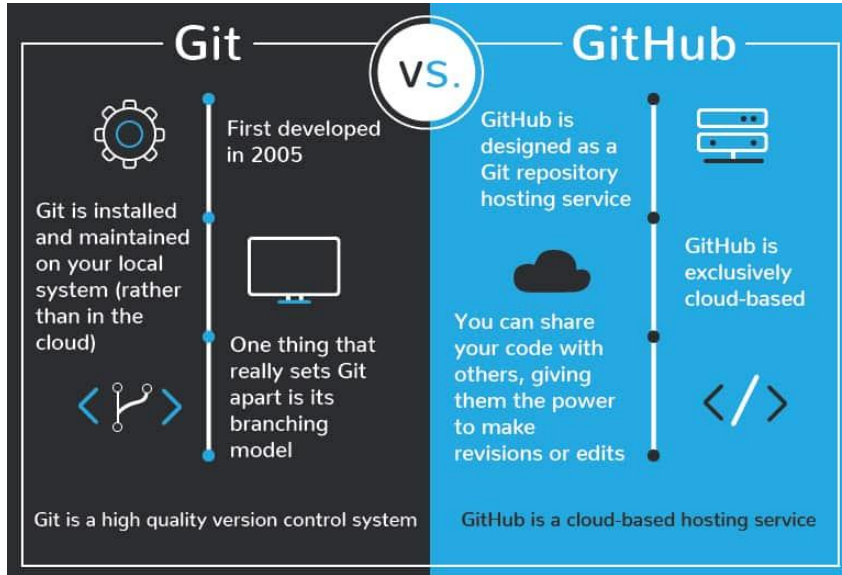
9. Congratulations!
You just got the code locally in your computer, now it's time to update it.



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EDITING CODE

Now the code is inside your hard drive and synced to the cloud with GitHub. Every change is locally tracked by Git. Confusing, isn't?, the next picture explains it pretty well.



They're different by nature but work in a symbiotic way, if that makes any sense.

Now to the fun part, editing the code.

In the explorer sidebar at the left of VS Code, navigate to the ORB University HTML file, click on **“orb-university-webpage”** and then double-click at the **“index.html”** that appears in the drop-down menu.

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link href="font-awesome/css/font-awesome.min.css" rel="stylesheet" />
    <link href="stylesheets/bootstrap.css" rel="stylesheet" />
    <title>ORB University</title>
  </head>
  <body>
    <div class="container">
      <div class="row">
        <div class="col-md-12">
          <div class="text-align-center">
            <h1>ORB University</h1>
            <h2>Welcome to ORB University</h2>
          </div>
          <div class="text-align-center">
            <img alt="ORB University Logo" data-bbox="400 650 600 750" />
          </div>
          <div class="text-align-center">
            <p>ORB University is a leading institution in the field of education. We are committed to providing the highest quality of education to our students. Our faculty consists of some of the best minds in the industry, and our curriculum is designed to provide students with the skills and knowledge they need to succeed in their careers. We are proud to be a part of the ORB University family, and we are committed to providing the best possible experience for our students. We are committed to providing the highest quality of education to our students. Our faculty consists of some of the best minds in the industry, and our curriculum is designed to provide students with the skills and knowledge they need to succeed in their careers. We are proud to be a part of the ORB University family, and we are committed to providing the best possible experience for our students.</p>
          </div>
        </div>
      </div>
    </div>
  </body>
</html>
```



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All the content for the ORB University website it's inside that file, now a short lesson of web development.

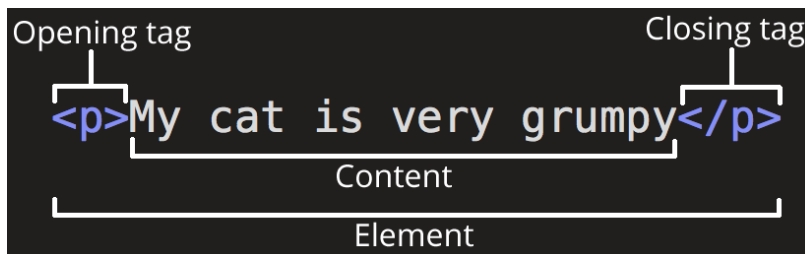
WHAT ARE ALL THESE FILES YOU'RE SEEING?

All those files you're seeing compose the entirety of the ORB-Hub, they are what the web browser takes and translates them into beautiful website you can interact with. Don't let them overwhelm you since we're editing only one HTML file.

WHAT IS HTML AND HOW DO I EAT IT?

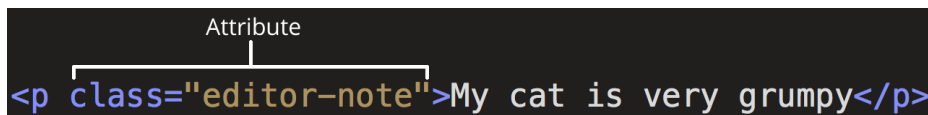
HTML is the skeleton of a website, how its structured, its content, and information. There're other things like CSS that gives it the style and the *aesthetic*, and JavaScript the functionality and interactivity, but we're not messing with those two.

As you can see in the file, every piece of content is *sandwiched* between an opening and closing tag, this tag tells the browser how to display the element. Yes, you can nest elements together and make an infinite layered sandwich.



For detailed information about this and more, I recommend visiting the [“Getting started with the web”](#) guide on Mozilla Developer Network (MDN Web Docs).

Any tag can have an attribute, and that attribute a value.



In this case, the element “p” has an attribute called “class” with its value “editor-note”.

So, what's this for?

We assign classes and its values so we can target the element and assign them styles (fonts, colors, etc.).

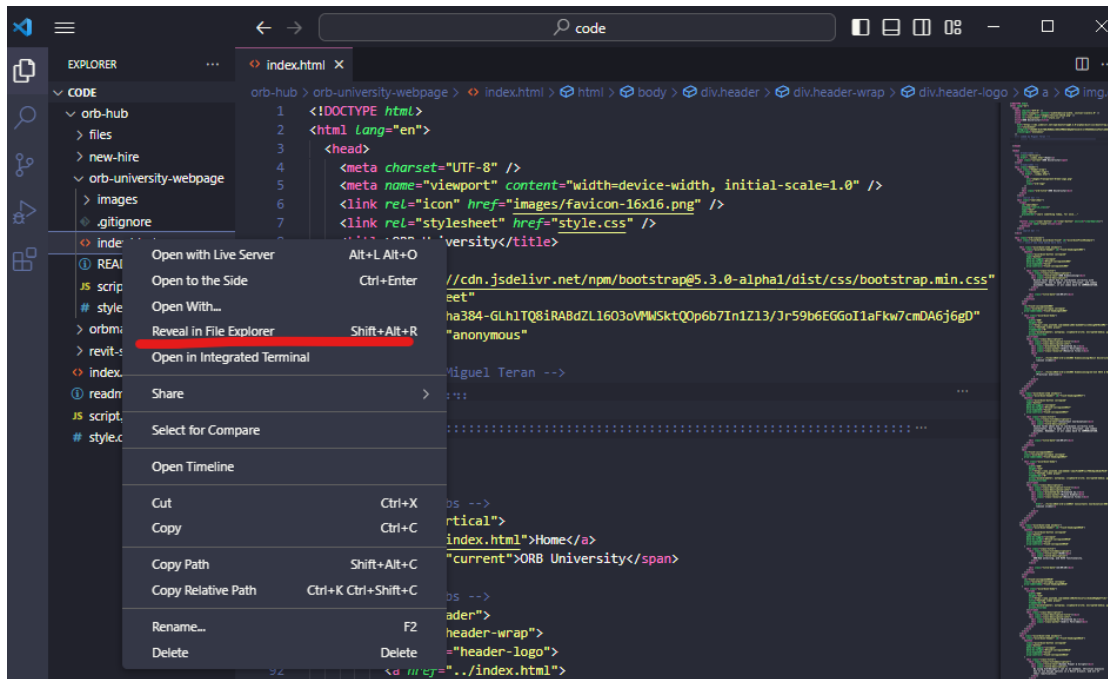
In this case, all of this is for you can make any sense of what you're seeing on screen.



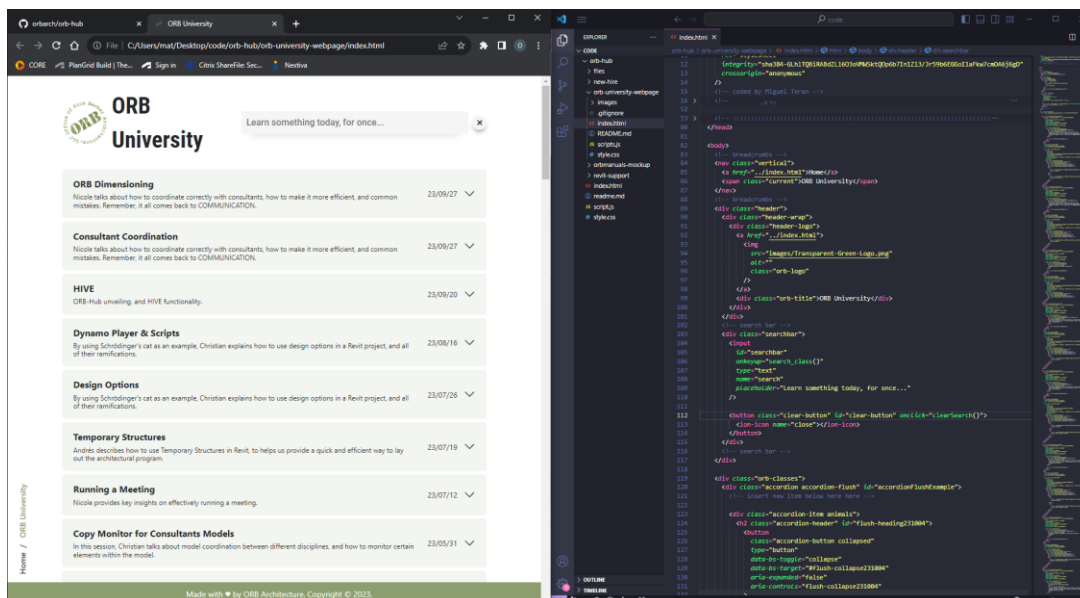
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ACTUALLY EDITING CODE

Now, inside the sidebar, left click on “index.html” you just opened, and select “Reveal in File Explorer”.



It should open a Windows Explorer window with the same files you’re seeing in VS Code. Now you can double-click the “index.html” file to open it in a web browser.





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Now with the local file opened, arrange the windows so you can see both at the same time, I recommend doing this so every time you make a change in the code, just hit refresh on the web browser to see the changes.

To try this, select all the code, delete it, save the file, and refresh the browser. You should see a blank page. Don't panic, just hit ctrl+z and save again to reverse the changes.

In an HTML file you can insert comments that are between the “<!-- comment -->” tags which the web browser will ignore, so they doesn't display in the web page.

```
<!-- insert new item below here here -->
```

Look for the comment above inside the index file, you can both scroll or use ctrl+f to find it.

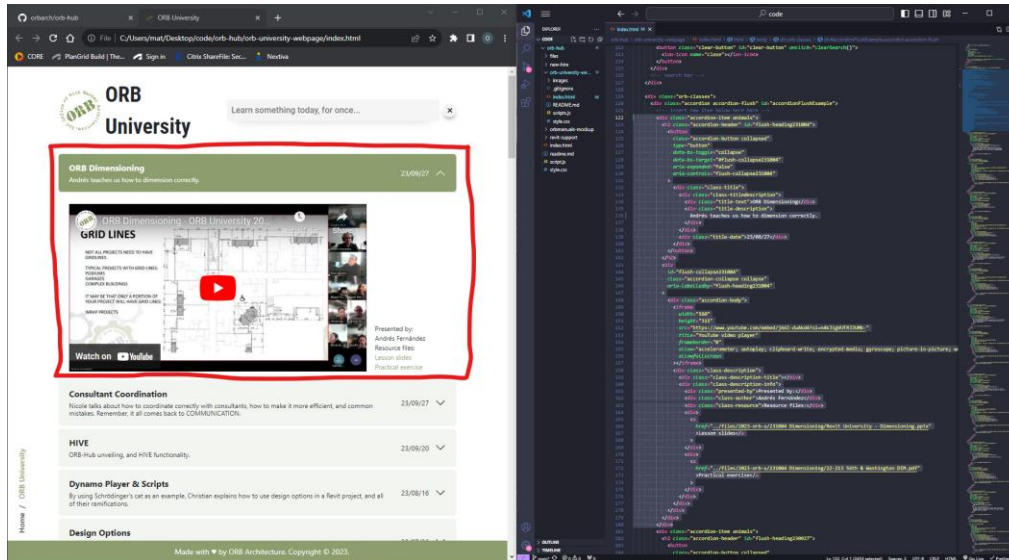
Below it, there a “<div>” element, with a lot of other nested elements inside of it. If you click on the element, a long vertical line will highlight until it gets to the closing “</div>”.

```
<!-- insert new item below here here -->
<div class="accordion-item animals">
  <h2 class="accordion-header" id="flush-heading231004">
    <button
      class="accordion-button collapsed"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#flush-collapse231004"
      aria-expanded="false"
      aria-controls="flush-collapse231004"
    >
      <div class="class-title">
        <div class="class-titledescription">
          <div class="title-text">ORB Dimensioning</div>
          <div class="title-description">
            Andrés teaches us how to dimension correctly.
          </div>
        </div>
        <div class="title-date">23/09/27</div>
      </div>
    </button>
  </h2>
  <div
    id="flush-collapse231004"
    class="accordion-collapse collapse"
    aria-labelledby="flush-heading231004"
  >
    <div class="accordion-body">
      <iframe
        width="560"
        height="315"
        src="https://www.youtube.com/embed/j66I-duAk4?si=n4k3igVUTRJJUWb-"
        title="YouTube video player"
        frameborder="0"
        allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture; w
        allowfullscreen
      ></iframe>
      <div class="class-description">
        <div class="class-description-title"></div>
        <div class="class-description-info">
          <div class="presented-by">Presented by:</div>
          <div class="class-author">Andrés Fernández</div>
          <div class="class-resource">Resource files:</div>
        </div>
        <a
          href="../../files/2023-orb-u/231004 Dimensioning/Revit University - Dimensioning.pptx"
          >Lesson slides</a>
      </div>
      <div>
        <a
          href="../../files/2023-orb-u/231004 Dimensioning/22-213 56th & Washington DIM.pdf"
          >Practical exercise</a>
      </div>
    </div>
  </div>
</div>
```



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That whole snippet of code you see in VS Code, the web browser translates it into the beautiful big green accordion button that extends once you click on it.

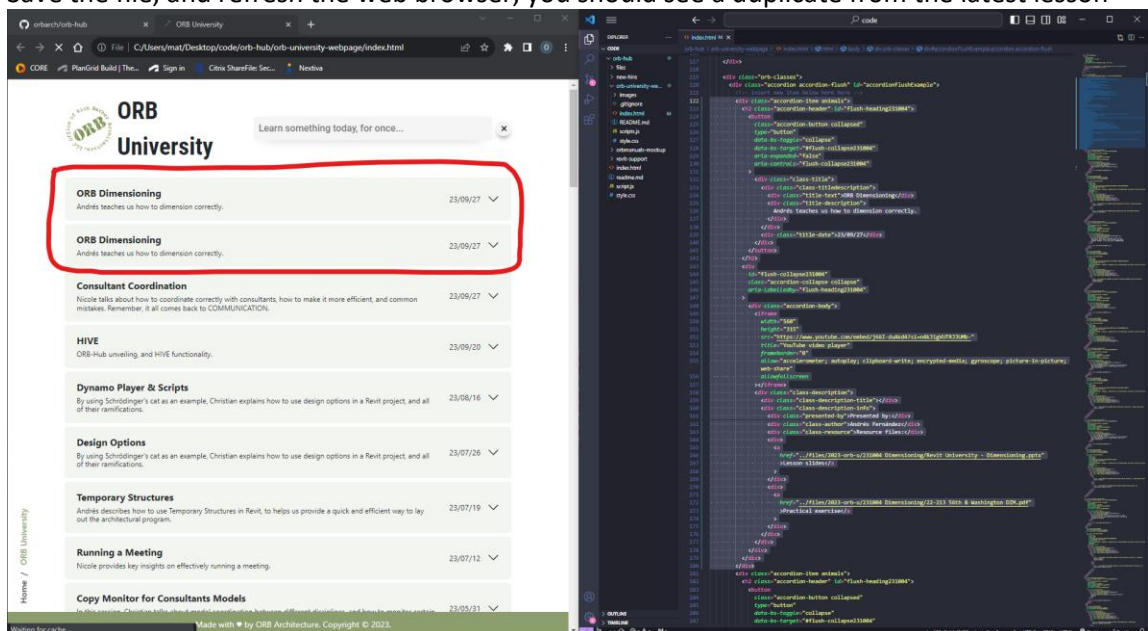


ADDING A NEW ORB UNIVERSITY LESSON

- Select the whole “<div>” element you selected before, copy and paste it in a new line below the comment:

```
<!-- insert new item below here here -->
```

- Save the file, and refresh the web browser, you should see a duplicate from the latest lesson





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- If you click on either one of the two of them, both will extend.
To fix this, in the snippet you just copied and pasted, there are 5 attribute values you will need to change:

```
<!-- insert new item below here here -->
<div class="accordion-item animals">
  <h2 class="accordion-header" id="flush-heading231004">
    <button
      class="accordion-button collapsed"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#flush-collapse231004"
      aria-expanded="false"
      aria-controls="flush-collapse231004"
    >
      <div class="class-title">
        <div class="class-titledescription">
          <div class="title-text">ORB Dimensioning</div>
          <div class="title-description">
            Andrés teaches us how to dimension correctly.
          </div>
        </div>
        <div class="title-date">23/09/27</div>
      </div>
    </button>
  </h2>
  <div
    id="flush-collapse231004"
    class="accordion-collapse collapse"
    aria-labelledby="flush-heading231004"
```


In this case, the latest lesson that was copied as the template for the new one, had “231004” inside the value of the attribute we’re going to modify. Essentially, that number is the date when the lesson was given, in this example we’ll change the new one to “231012” of all 5 of them.

```
<!-- insert new item below here here -->
<div class="accordion-item animals">
  <h2 class="accordion-header" id="flush-heading231016">
    <button
      class="accordion-button collapsed"
      type="button"
      data-bs-toggle="collapse"
      data-bs-target="#flush-collapse231016"
      aria-expanded="false"
      aria-controls="flush-collapse231016"
    >
      <div class="class-title">
        <div class="class-titledescription">
          <div class="title-text">ORB Dimensioning</div>
          <div class="title-description">
            Andrés teaches us how to dimension correctly.
          </div>
        </div>
        <div class="title-date">23/09/27</div>
      </div>
    </button>
  </h2>
  <div
    id="flush-collapse231016"
    class="accordion-collapse collapse"
    aria-labelledby="flush-heading231016"
```




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- Save and refresh the site again, now click in one of the first two lessons



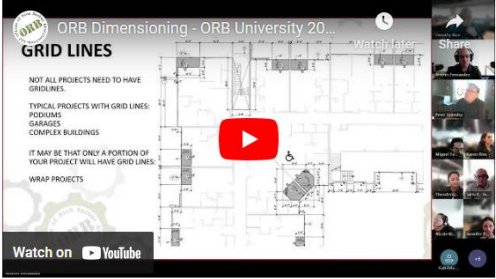
ORB
University

Learn something today, for once...

×

ORB Dimensioning
 Andrés teaches us how to dimension correctly.

23/09/27 ^



Presented by:
 Andrés Fernández
 Resource files:
 Lesson slides
 Practical exercise

ORB Dimensioning
 Andrés teaches us how to dimension correctly.

23/09/27 v

Only one of them should open if done correctly.

CHANGING THE LESSON INFORMATION

- Locate the “div’s” displayed below:

```

<div class="class-title">
  <div class="class-titledescription">
    <div class="title-text">ORB Dimensioning</div>
    <div class="title-description">
      Andrés teaches us how to dimension correctly.
    </div>
  </div>
  <div class="title-date">23/09/27</div>
</div>
</button>
</h2>
<div
  id="flush-collapse231016"
  class="accordion-collapse collapse"
  aria-labelledby="flush-heading231016"
>
  <div class="accordion-body">
    <iframe
      width="560"
      height="315"
      src="https://www.youtube.com/embed/j66I-duAkd4?si=n4kJigVUTRJ3UMb-"
      title="YouTube video player"
      frameborder="0"
      allow="accelerometer; autoplay; clipboard-write; encrypted-media;
      gyroscope; picture-in-picture; web-share"
      allowfullscreen
    ></iframe>
    <div class="class-description">
      <div class="class-description-title"></div>
      <div class="class-description-info">
        <div class="presented-by">Presented by:</div>
        <div class="class-author">Andrés Fernández</div>
        <div class="class-resource">Resource files:</div>
      </div>
    </div>
  </div>
</div>

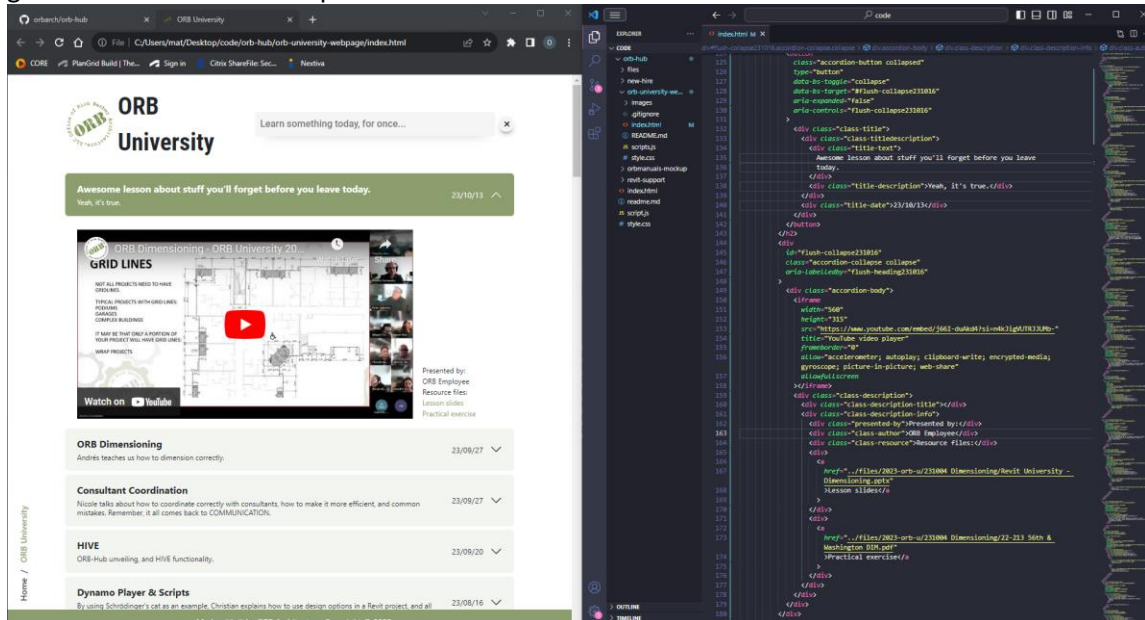
```

In order as they follow: title, description, date, presented by, and class author.



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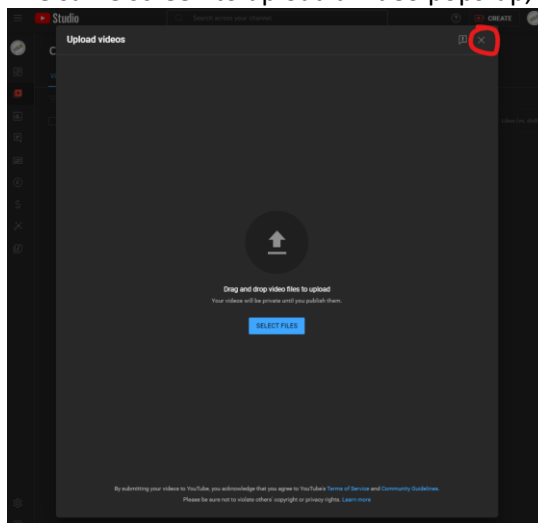
- Change the data according to the actual lesson information given. In this case we'll use some generic names as an example



- Save and refresh, and you should see the changes.

ADDING THE LESSON RECORDING

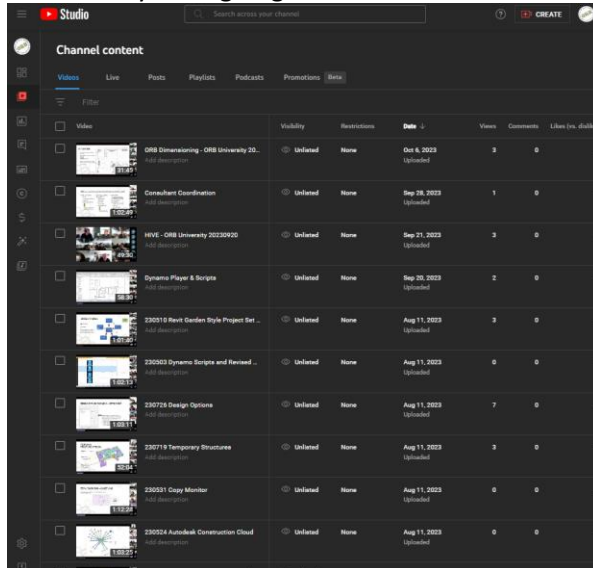
- Go to YouTube and login if needed again to the ORB Gmail account.
- Click on the upper right button as in if you were to upload a video again.
- The same screen to upload a video pops-up, just close it



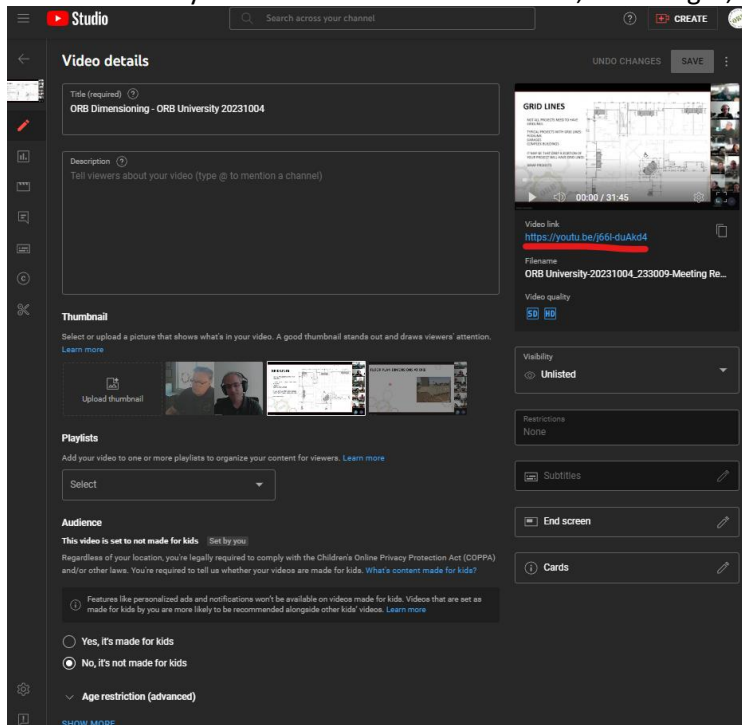


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- Now what you're going to see is a list of all the videos uploaded to the YouTube channel.



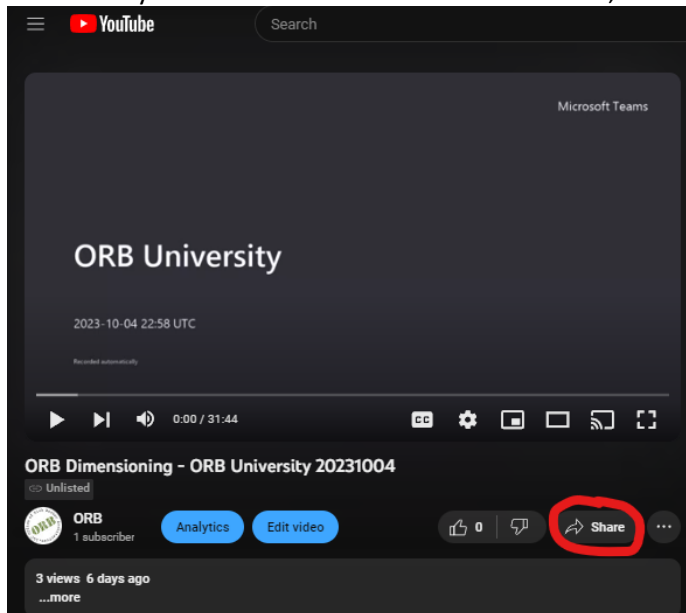
- Click on the first one, it should be the latest one you uploaded in the first part of this manual.
- It should show you the information of the video, At the right, there's the video link, click on it.



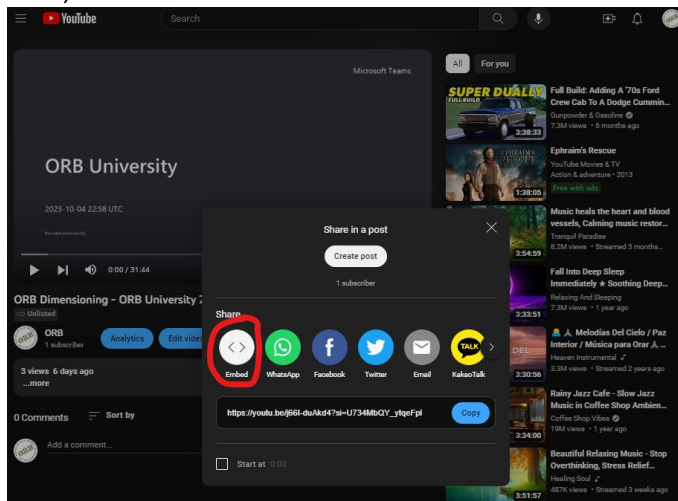


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- It will lead you to the “normal” YouTube video site, below the video click on the “Share” button



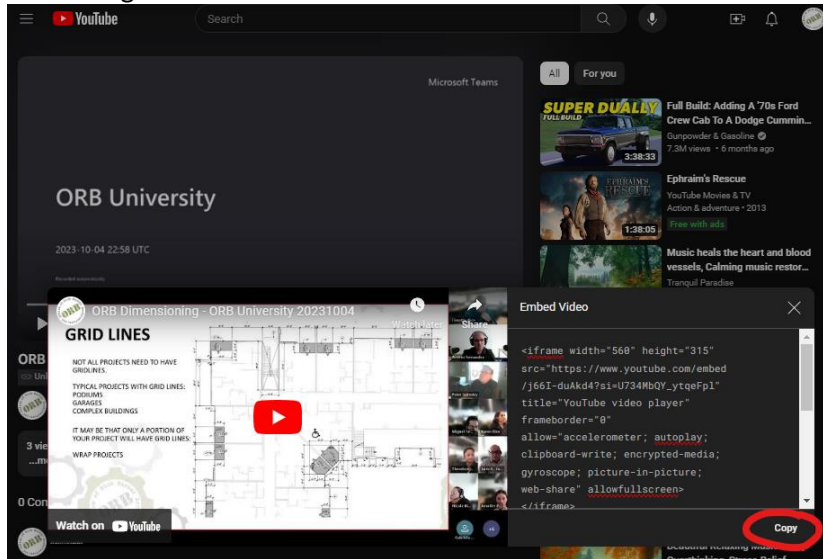
- Next, click on the “Embed” button



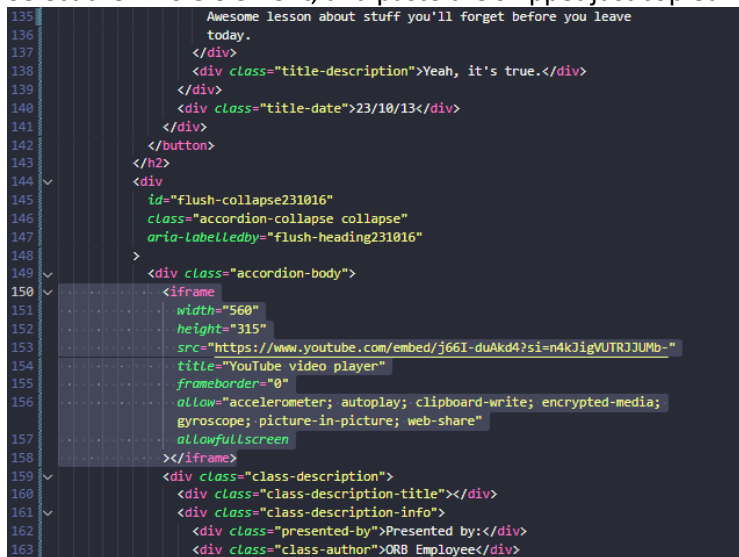


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- A snippet of code should appear, you can select and copy it, or just click on “Copy” in the bottom right corner



- Now go back to VS Code, and in between the lesson information you just edited, there’s an “<iframe>” element, that’s the embedded YouTube video.
- Select the whole element, and paste the snippet just copied from YouTube to replace it



- Save again and refresh, and the video should be changed by now.

ADDING RESOURCE FILES

Now let’s add what’s typically the lesson slides.

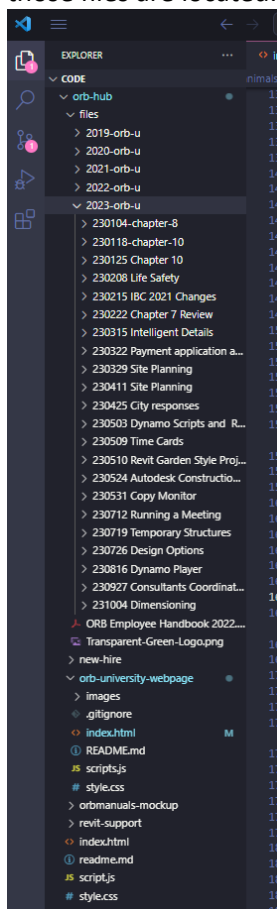


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- After the “<iframe>” element you just replaced, there’s the author and resource files lines, and after them should be one or two “<a>” elements, being the lesson slides and support files.
- If you look closely, the “<a>” element has a “href” attribute and its value is an address to a folder.

```
166 <a
167   href="../../files/2023-orb-u/231004 Dimensioning/Revit University -
168   Dimensioning.pptx"
169 >Lesson slides</a>
170 </div>
171 <div>
172   <a
173     href="../../files/2023-orb-u/231004 Dimensioning/22-213 56th &
174     Washington DIM.pdf"
175   >Practical exercise</a>
```

- Where the hell are those files?, you’re probably asking yourself. Remember there’s an explorer sidebar in VS Code you can navigate to the exact directory where those files are located.

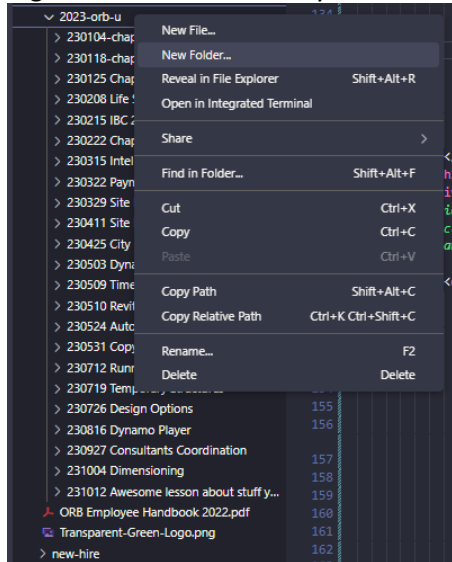


- We can see all the folders and files inside that compromise the entire ORB-Hub repository.

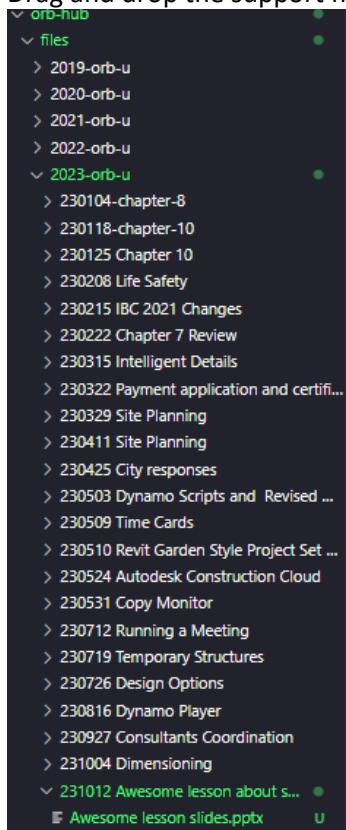


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- Right-click on the current year directory, and create a new folder for the latest lesson to upload.



- Drag and drop the support files for the lesson inside the folder you just created





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- Now in the code, change the directory to the destination you placed the lesson slides

```
166 <a  
167 href="../../files/2023-orb-u/231004 Dimensioning/Revit  
University - Dimensioning.pptx"  
168 >Lesson slides</a  
169 >
```

To this

```
166 <a  
167 href="../../files/2023-orb-u/231012 Awesome lesson about  
stuff you'll forget before you leave today/Awesome lesson  
slides.pptx"  
168 >Lesson slides</a  
169 >
```

You'll notice that as you start typing, it'll give you the option to autocomplete until you reach the desired location of the file.

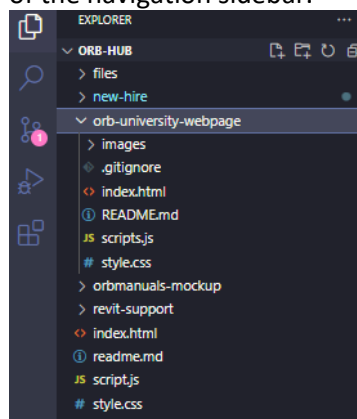
- If the lesson just has the lesson slides, please delete the other "<a>" element, if not, do the same for the other existing files.
- Save and refresh and you should be done editing the code, please double-check if you embedded the right video, typos, and links working correctly.

SYNCING CODE

By now, you've edited the code and seen the changes reflected locally; this means only you and/or people with access to the local files can see what's changed. Now it's time to sync these changes to the cloud so everyone who has the ORB-Hub link can see them reflected.

Here's where Git and Github come to play.

When you were editing the code, you must have seen a little badge appear in one of the icons at the left of the navigation sidebar.





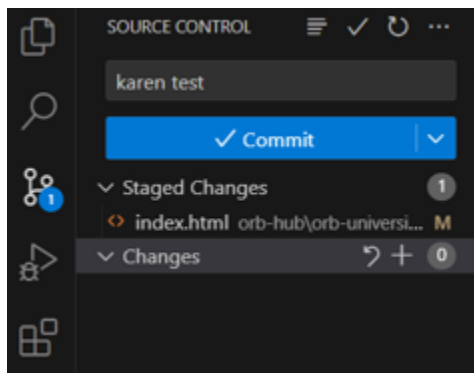
UPDATING ORB UNIVERSITY

That's the button to view the "Source Control sidebar" (or version control). This is where you can view every change, from a very miniscule single character deleted or replaced, to infinite lines of edited code.

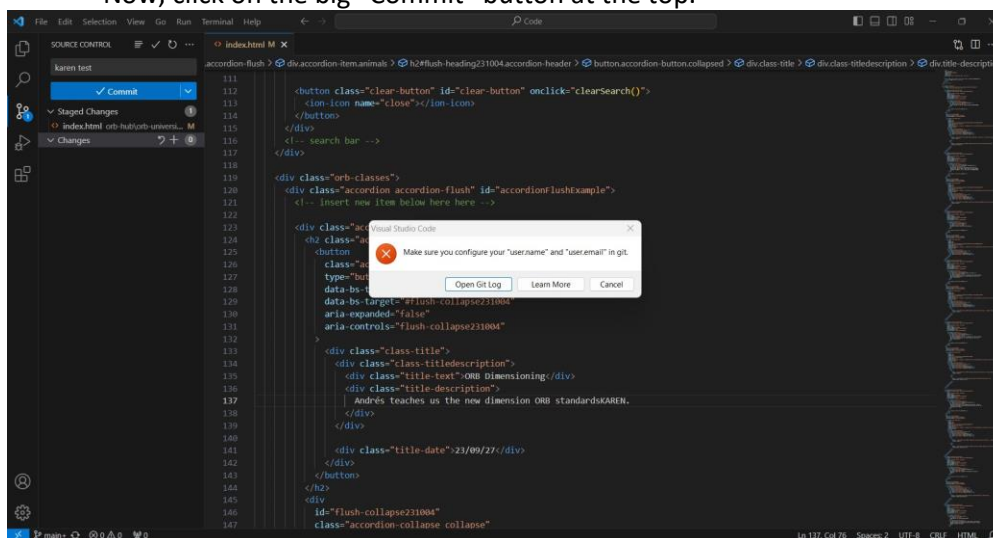
Git takes all the credit here, making our lives a little bit easier. In here, you can review, revert, and/or discard any change, before syncing.

Once you're satisfied with what you've done with the code, we're going to "commit" the changes, this means to upload the new code to the cloud, Github in this case.

- Click on the source control button, and you'll see the edited file under the "Changes" drop down menu.
- Next, click on the little "+" icon to "Stage changes."
- The file should now be under the "Staged Changes" section as seen below.



- Now, click on the big "Commit" button at the top.





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- Wait, what is that? AN ERROR? Don't panic, you just need to input the Git credentials with two simple commands.
- Click on the "Open Git Log" button in the error dialog window.
- It should open a long log you won't probably read, don't worry, me neither.

```
git config --global user.email "you@example.com"
git config --global user.name "Your Name"

to set your account's default identity,
omit --global to set the identity only in this repository.

fatal: no email was given and auto-detection is disabled
2023-10-12 15:15:43.815 [info] > git config --get-all user.name [6ms]
2023-10-12 15:15:43.921 [info] > git for-each-ref --format=%(refname)%00%((upstream:short)%00%(objectname)%00%(upstream:track)%00%(upstream:remotename)%00%
PS C:\Users\kar\Desktop\code\orb-hub> git config --global user.email orbarchitecture@gmail.com
PS C:\Users\kar\Desktop\code\orb-hub> git config --global user.name orbarch
```

- Scroll down, until you see the text input line, usually is the last line after the entire log.

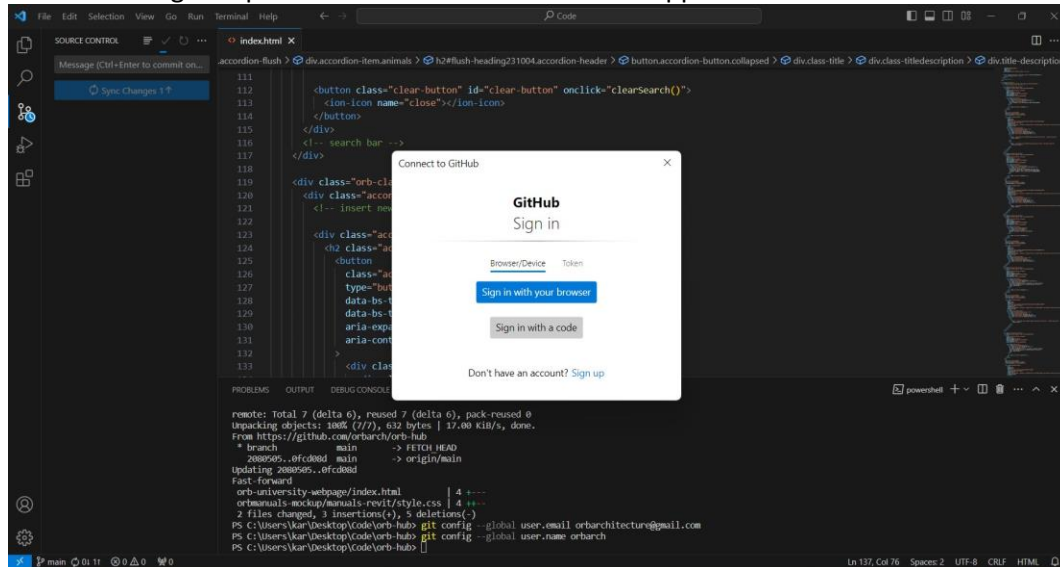
```
remote: Total 7 (delta 6), reused 7 (delta 6), pack-reused 0
Unpacking objects: 100% (7/7), 632 bytes | 17.00 KiB/s, done.
from https://github.com/orbarch/orb-hub
* branch main -> FETCH_HEAD
2023-10-12 15:15:43.921 [info] > git for-each-ref --format=%(refname)%00%((upstream:short)%00%(objectname)%00%(upstream:track)%00%(upstream:remotename)%00%
PS C:\Users\kar\Desktop\code\orb-hub> git config --global user.email orbarchitecture@gmail.com
PS C:\Users\kar\Desktop\code\orb-hub> git config --global user.name orbarch
```

- Type this manually (DON'T COPY AND PASTE):
git config --global user.email orbarchitecture@gmail.com + enter
git config --global user.name orbarch + enter

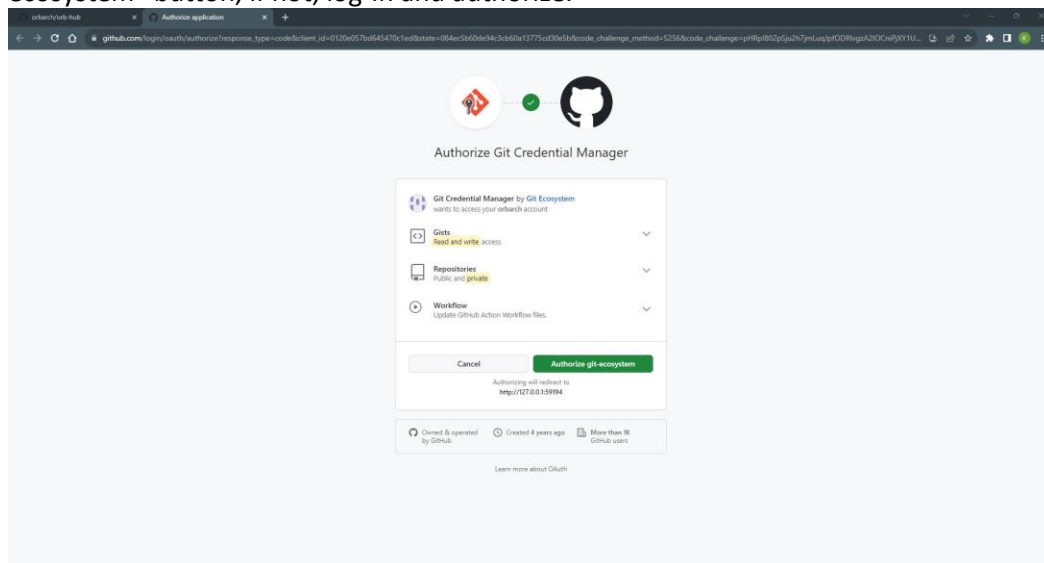


UPDATING ORB UNIVERSITY

- Now, the “Commit” button should’ve changed to “Sync Changes”, click on it and a pop-up window asking to input the Github credentials should appear.



- Click on the “Sign in with your browser” button, it should open a web browser window.
- Since we logged to Github earlier on, we only need to click on the green “Authorize git-ecosystem” button; if not, log-in and authorize.



- Now with all that, the code should’ve synced to Github.

It may take a few minutes for the changes to be reflected in the ORB-Hub public website (<https://orbarch.github.io/orb-hub/>), since Github needs to “build” it all over again.

And that’s it, for now...