

Lab Guide for HTML

The following tutorial has most of the topics for this guide: <https://www.w3schools.com/html/default.asp>

You can use the tutorial as a reference guide but can also read it before starting if you prefer a better grasp of the fundamentals before putting them into practice.

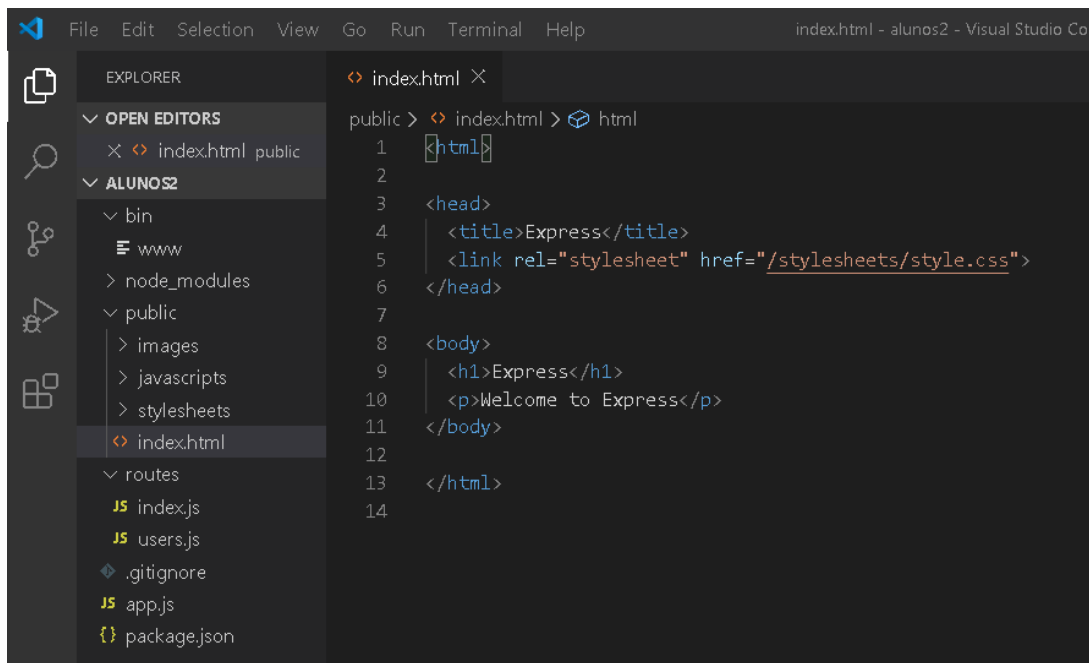
The objective of this guide is to create a set of HTML pages with some of the main concepts of HTML:

- HTML document structure: https://www.w3schools.com/html/html_basic.asp
- HTML Layout elements: https://www.w3schools.com/html/html_layout.asp
- Basic elements:
 - https://www.w3schools.com/html/html_headings.asp
 - https://www.w3schools.com/html/html_paragraphs.asp
 - https://www.w3schools.com/html/html_formatting.asp
- Links: https://www.w3schools.com/html/html_links.asp
- Images: https://www.w3schools.com/html/html_images.asp
- File paths: https://www.w3schools.com/html/html_filepaths.asp
- Lists: https://www.w3schools.com/html/html_lists.asp
- Tables: https://www.w3schools.com/html/html_tables.asp

NOTE: The topics were presented in the order they will be approached in the guide which is not always the same used in the w3shools tutorial.

Open the project “alunos” that was created in the installation tutorial (see the installation tutorial if you have not created node.js/express.js projects yet) or create a new project (ex: “learningPlatform”) following the same steps.

We will start by editing the “index.html” file in the “public” folder.



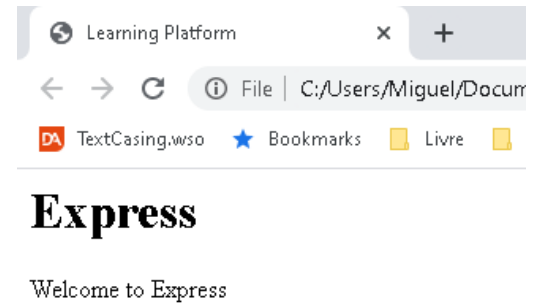
```
1 <html>
2
3 <head>
4   <title>Express</title>
5   <link rel="stylesheet" href="/stylesheets/style.css">
6 </head>
7
8 <body>
9   <h1>Express</h1>
10  <p>Welcome to Express</p>
11 </body>
12
13 </html>
14
```

Remembering: The “index.html” in the base folder is the page that will be shown if we access our website by its name (ex: localhost:3000).

1. Change the title of the html page to "Learning Platform"

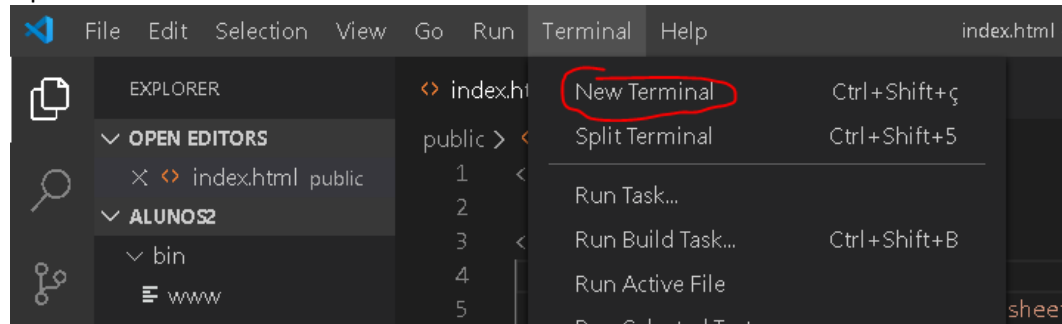
You can now see that name on the tab of your browser

You see your web page by opening the HTML file in your browser (double clicking the file should also open it) or by running the project.



Remembering: How to run a node.js / express.js project

Open a terminal:



If you don't have the node_modules folder you will need to run install, run "node install" on terminal

Start your program by running "node start" on the terminal

On your browser open a page with URL : localhost:3000

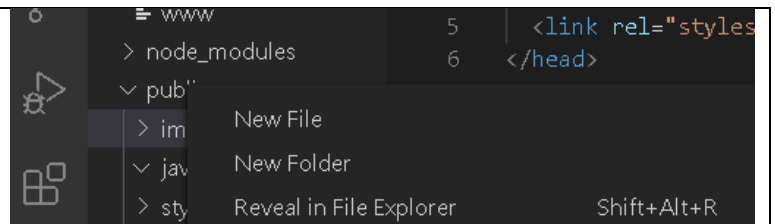
2. Delete the elements inside the body and define the layout elements of the page (empty elements for now):
 - a. A header where we will put an image (student.png) and some text
 - b. A navigation bar with links to other pages of our web site
 - c. Another element with a set of links of sites related to ours (other websites)
 - d. The main description of our pages
 - e. A footer with contact information

You should use for the above the following elements (not by order): footer, header, main, aside, nav

3. Our header should have the supplied student.png image and a section with a title and a subtitle:
 - a. Title: Learning Platform
 - b. Subtitle: This platform will help you manage your classes
4. Create two new web pages and call them "units.html" and "grading.html".

Creating a new file:

Right click on the public folder and choose "new file".



We will write some HTML in here later but for now we do not need to.

5. Make two links on the navigation bar to these two new files with the following text:
 - a. See available units and students
 - b. Grade a student

Tip: Links from one HTML page to another only need the relative path from one file to another, in this case they are on the same folder, so you only need to write the filename for the href.

6. Create two links for the following two related sites:
 - a. DGES (url: <https://www.dges.gov.pt/>)
 - b. IADE (url: <https://www.iade.europeia.pt/>)
7. The main part of the page holds the description. This part has two sections each one with a header that presents the contents.
 - a. First section will be presented with the title “Our objective” and has the following text (in the box):

This platform will allow an easy management of **units** and **students** saving you **time** and **money**.

Some of our functionalities:

- See the available subjects
- Grade a student

Words in **green** should be given more emphasis and the words in **pink** are considered more important,

- b. Second section will be presented with the title “Description” and six paragraphs of text. You can generate the paragraphs of text using this site: <https://pt.lipsum.com/>

8. The footer should have the following text:

Contact us by email (admin@ensino.pt) or telephone ([2112312312](tel:2112312312))

Where the email should be a link that open the email client and the telephone number should be a link that calls the phone client.

9. Add a new link to the navigation bar. The link is called “Contacts” and should scroll the page down to the contacts.

We will now complete the “units.html” web page

10. Create a header with the same structure as before but with the following changes
 - a. The student.png image should link back to the main page (index.html)
 - b. The main title is still “Learning Platform”
 - c. The subtitle is now “Unit List”
11. In the main area create a table with the unit information of your second year of your course.
 - a. 4 columns: name, ects, year (2 for all), semester (1 or 2)

The “grading.html” will be completed in another guide but until then you can use it to try the HTML concepts you learned.

You can see an example of the resulting pages in the next page

NOTE: The information shown is different and you should use the one presented on the text.



Learning Platform

This platform will help you manage your classes

[See available units](#) [Grade a student](#) [Contacts](#)
[DGES](#) [IPS](#)

Our objective

This platform will allow an easy management of *units* and *students* saving you **time** and **money**.

Some of our functionalities:

- See the available units and students
- Grade a student

Description

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Contact us by email (admin@ensino.nt) or telephone (2112312312)

Example of the result page for index.html (broken in 2 columns to fit this page).



Learning Platform

Subject List

Name	ECTS	Year	Semester
Bases de Dados e Análise de Informação	6	2	1
Biologia Celular e Molecular	6	2	1
Desenvolvimento de Produtos Médicos	6	2	1
Eletrónica Analógica	6	2	1
Estatística para a Saúde	6	2	1
Biomateriais	6	2	2
Dispositivos Médicos I	6	2	2
Eletrónica para Aquisição e Processamento de Sinais Médicos	6	2	2
Equipamentos de Saúde	6	2	2
Telemedicina	6	2	2
Name	ECTS	Year	Semester

Example of the result page for units.html (also broken in 2 columns to fit this page).