

## WEB PROGRAMMING AND APPLICATIONS

(503073)

### Lab 2

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#### Objective:

This week, you will enhance your understanding of CSS by styling a set of provided HTML files. The given HTML files contain only structural markup and lack any styling. **Your task** is to create and apply CSS rules to improve the visual appearance of these pages, aligning them with the provided illustrative examples.

#### Key Requirements:

- **CSS Styling:** Write CSS code to style the pages according to the reference images.
- **Non-Intrusive HTML Editing:** You are not permitted to modify the HTML code directly, except for updating class attribute values as necessary.
- **Separate Stylesheet:** Place your CSS code in a standalone file (e.g., style.css) and link it to the HTML files using the <link> tag in the <head> section.

Before beginning the exercises, ensure you have reviewed the tutorial videos corresponding to this lab for guidance on best practices and techniques.

#### Exercise 1: Customizing a Button

Create a .black-button class to style a button as shown in the images. The button should have a black background, white text, and slightly rounded corners. On hover, its background color should transition smoothly to gray (#808080) over 0.5 seconds and revert when the mouse leaves. Use the :hover pseudo-class and the transition property to implement the effect.



*Default state of the button*

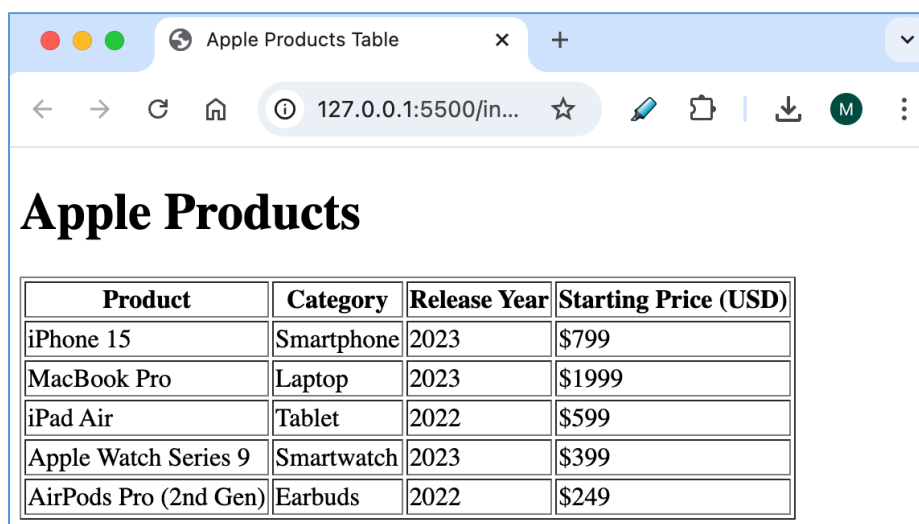


*Button state on hover*

## Exercise 2: Styling a Table

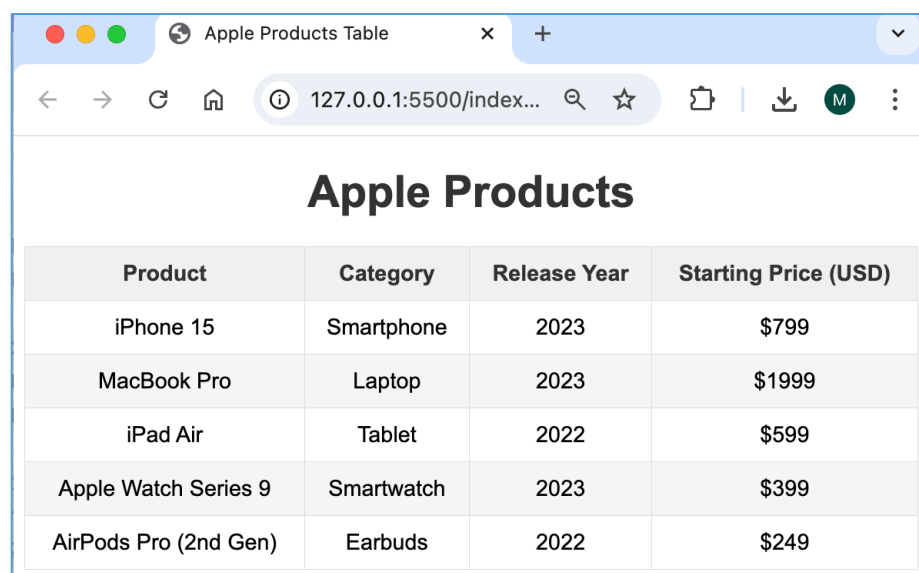
You are provided with an HTML file containing a bare table that lists Apple products. Your task is to write CSS to style and decorate the table.

The table should span the full width of the container, with borders collapsed for a clean layout. Apply padding and center-align the text in each cell, and make sure the header row has a distinct background color with bold text. Use alternating row colors to improve readability and apply a hover effect that highlights rows when the mouse is over them.



Product	Category	Release Year	Starting Price (USD)
iPhone 15	Smartphone	2023	\$799
MacBook Pro	Laptop	2023	\$1999
iPad Air	Tablet	2022	\$599
Apple Watch Series 9	Smartwatch	2023	\$399
AirPods Pro (2nd Gen)	Earbuds	2022	\$249

Table before styling



Product	Category	Release Year	Starting Price (USD)
iPhone 15	Smartphone	2023	\$799
MacBook Pro	Laptop	2023	\$1999
iPad Air	Tablet	2022	\$599
Apple Watch Series 9	Smartwatch	2023	\$399
AirPods Pro (2nd Gen)	Earbuds	2022	\$249

Table after applying CSS styling

Exercise 3: Registration Form

Your Name

Full Name

Email address

Email

Email address is not valid

Birthday

mm / dd / yyyy

Birthtime

-- : --

Gender

☐ Male ☐ Female

Country

Select a country

Please select a country

TOEIC

Register

Reset

Figure 1. HTML Form without CSS

Your Name

Full Name

Email address

Email

Email address is not valid

Birthday

mm / dd / yyyy

Birthtime

-- : --

Gender

☐ Male ☐ Female

Country

Select a country

Please select a country

TOEIC

Register

Reset

Figure 2. HTML Form with CSS

Exercise 4: Responsive Website

Responsie Website

- Vietnam
- Singapore
- Thailand
- Indonesia

Tutorials

To make the layout responsive, using **media query** feature. This feature allows us to set css on different conditions such as: viewport size, rotation direction of screen, type of device running ...

What is Lorem Ipsum?

Lorem Ipsum is simply dummy text of the printing and typesetting industry.

Where does it come from?

Contrary to popular belief, Lorem Ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old.

Why do we use it?

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout..

Lorem Ipsum chỉ đơn giản là một đoạn văn bản giả, được dùng vào việc trình bày và dàn trang phục vụ cho in ấn.

Figure 1. Plain HTML page

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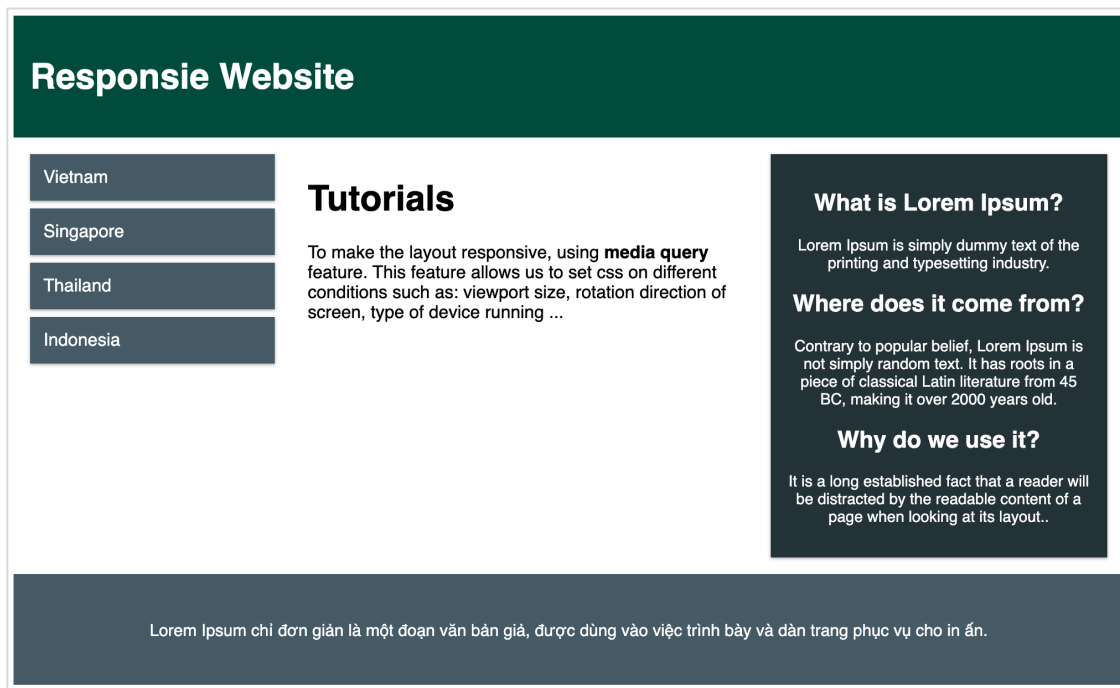


Figure 2. HTML page with CSS applied when running on **PC**



Figure 3. HTML page with CSS applied when running on **tablet devices**

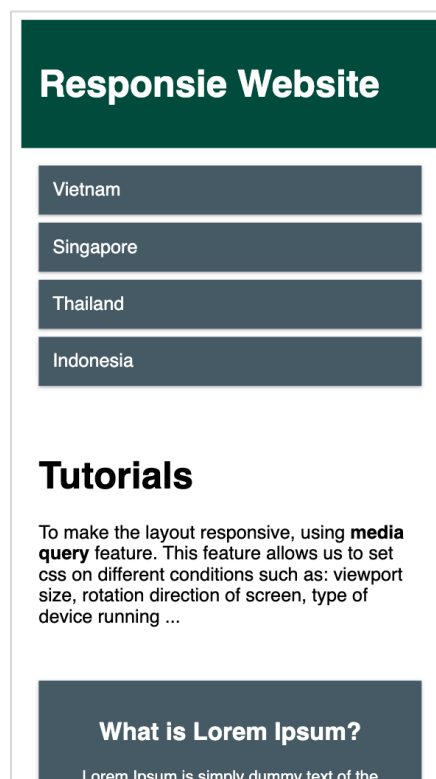


Figure 4. HTML with CSS applied when running on **mobile devices**

## Exercise 5: Chat Conversation

Hello  
I would like for the div to only expand to as wide as my table becomes.  
Hello  
when there are no width specified. I heard they think of adding what you w  
Hello  
lement that has what CSS calls shrink-to-fit width and the spec does not pr  
Hello  
Hello  
Hello  
Hello  
Hello  
Hello  
the effect is called "shrinkwrapping", and as answered there's a couple of v  
Hello  
You want a block element that has what CSS calls shrink-to-fit width and t  
"has to" get a width out of thin air. Those situations are:  
Hello  
Hello

Figure 1. HTML only

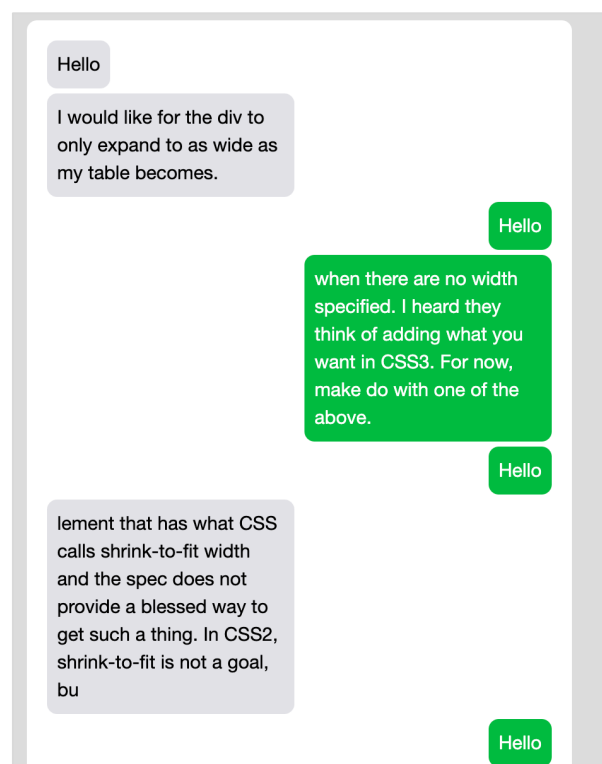



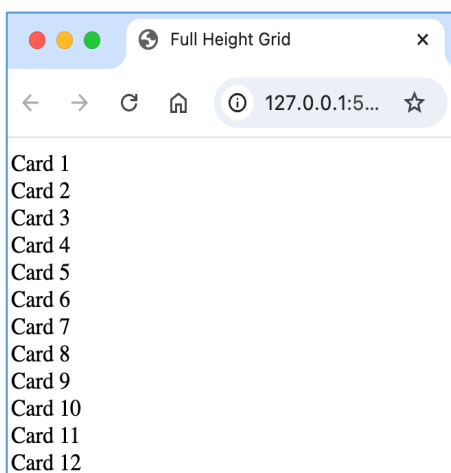
Figure 2. HTML with CSS applied

## Exercise 6: Simple ListView (using flexbox)

	<b>John Doe</b> Software Engineer	♡	⋮
	<b>John Doe</b> Software Engineer	♡	⋮
	<b>John Doe</b> Software Engineer	♡	⋮
	<b>John Doe</b> Software Engineer	♡	⋮
	<b>John Doe</b> Software Engineer	♡	⋮
	<b>John Doe</b> Software Engineer	♡	⋮

## Exercise 7: Full-Height Grid Layout

In this exercise, you are tasked with creating a full-width, full-height container that uses CSS Grid to display a grid with 3 rows and 4 columns. Each grid cell should contain centered text. The container should take up the entire viewport, and each cell should have a background color with centered text. Add appropriate spacing between the cells using grid gaps.



*Before using CSS Grid*



*After using CSS Grid*

Exercise 8: Student Schedule Table

student schedule

Day/Period	I	II	lunch	III	IV
Monday	Math	Physics			
Tuesday	LAB				
Wednesday	History	Music		SEMINAR	
Thursday	Physical Education	Swimming		Chemistry	Biology
Friday	LAB			Geography	Informatics
Saturday	Math	Physics		LAB	
Sunday					Homework

Figure 1. Plain HTML Table

STUDENT SCHEDULE

DAY/PERIOD	I	II	LUNCH	III	IV
Monday	Math	Physics			
Tuesday	LAB				
Wednesday	History	Music		SEMINAR	
Thursday	Physical Education	Swimming		Chemistry	Biology
Friday	LAB			Geography	Informatics
Saturday	Math	Physics		LAB	
Sunday					Homework

Figure 2.. HTML Table with CSS applied