



University of the Armed Forces ESPE

Information Technology Engineering

Web Fundamentals

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## **Responsive Web Design**

Responsive Design or adaptive design is a technique currently used to create the same website adapted to the different platforms that technology offers us: computers, tablets, Smartphones, iPads, Kindles and, in short, all existing screen resolutions.

Knowing this, it is this context that drives the birth of Responsive Design, a term that is not new but increasingly important in every way. This technique implies that the design and development of the site must respond to the user's behavior and environment in all aspects, from screen size to platform and orientation.

### **How Responsive Web Design works**

Images can be automatically adjusted and there is a solution to prevent corruption. Responsive design consists of a series of CSS style sheets and uses the "mediaquery" attribute to transform a normal website into a cross-platform website that can adapt to all existing sizes, provide a more pleasant user experience, Meet the needs of the general public .

This technique detects the screen width of the browser in question and automatically adapts all elements, whether images, different font sizes or the menus themselves.

There is a single HTML code that is sent to all devices. To do this, it is important to choose the size of the elements taking into account the size of the view and to use a responsive theme.

### **Why your website should be Responsive**

The advantages of using Responsive Design are many and reading what they are, you will surely be convinced to convert your website into a multiplatform site:

#### **1# Better user experience**

This has an impact on the opinion that users have of your website and the use they will make of it. It will improve both your brand image and the time spent on the web and increase

the bounce rate between pages of your website.

## 2# No more duplicate content

If you used a mobile version for users accessing your website to see the content adapted to the device, it was detrimental to your SEO, as it created duplicate content and, therefore, Google penalized your website. A Responsive design avoids this problem because it is the same content that is organized differently depending on the device on which it is viewed.

## 3# Reduced development costs

The development and maintenance costs of the website are reduced. By using the same template for all platforms, the investment in maintenance and development is reduced, since a single change affects all versions.

### **Responsive web design tools**

Responsive Design is becoming widespread by leaps and bounds and that has produced several developers create frameworks (preconfigured applications) so you do not have to create adaptive pages from scratch, make our lives easier and make the whole process of creation is much easier for developers.

Among the most widespread are:

**Bootstrap** is a framework created by the Twitter development team and open source, widely used by freelance developers.

**Foundation** Framework is another very popular framework which they define as "the most advanced framework in the world".

**HTML5 Boilerplate**, the framework used by most well-known brands such as Google, Microsoft, Nike or Barack Obama's team of developers.

### **Simple Grid (Free & Open-Source CSS Framework)**

Basic Grid may create web projects with a basic layout and architecture and a consumer-friendly front-end. Simple Grid seems to be very effective in creating a cleaner look throughout your website project.

It is helpful for developers seeking an essential CSS grid for any web development. Simple Grid offers excellent results for 1140px designs and is readily adaptable to different layout widths.

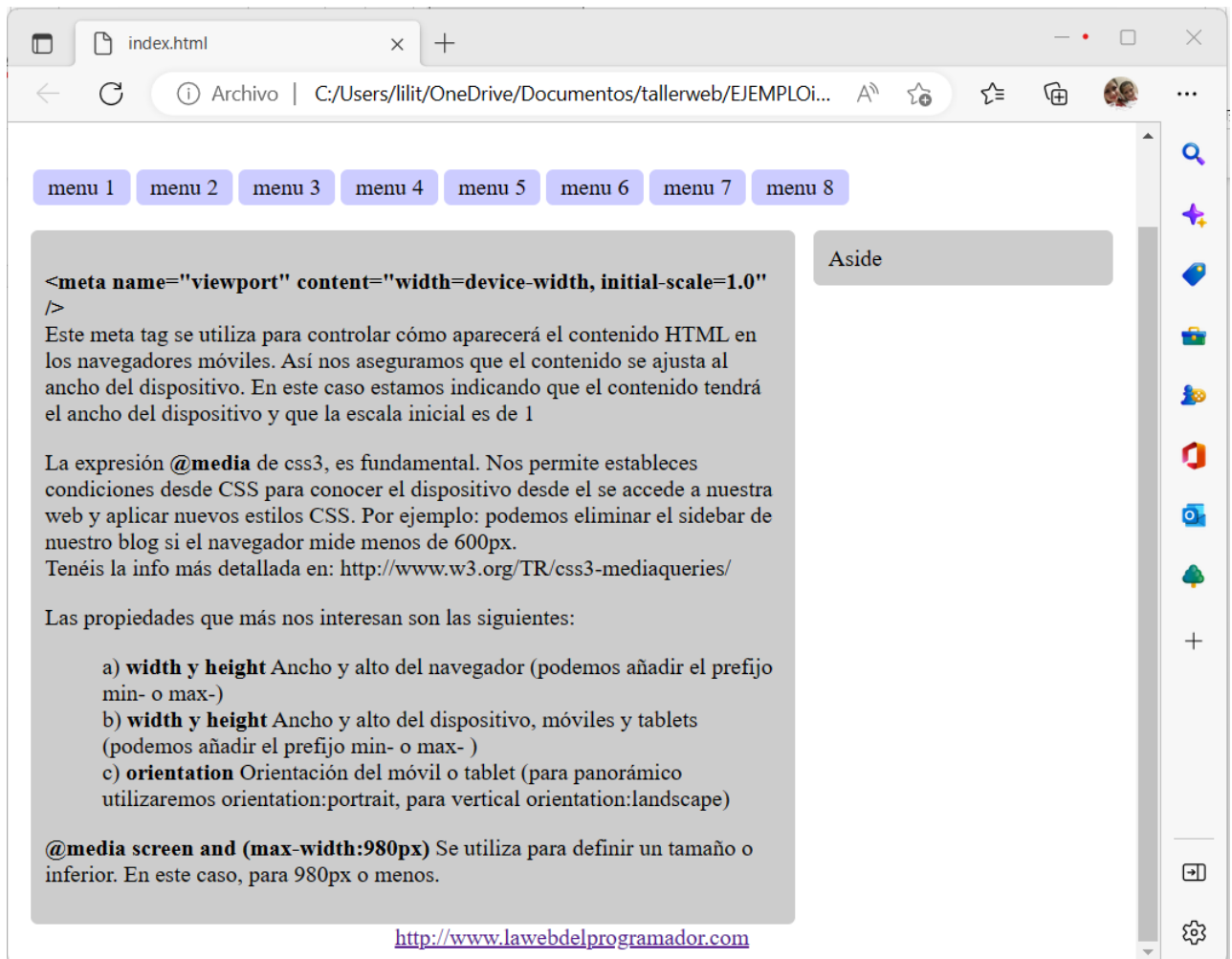
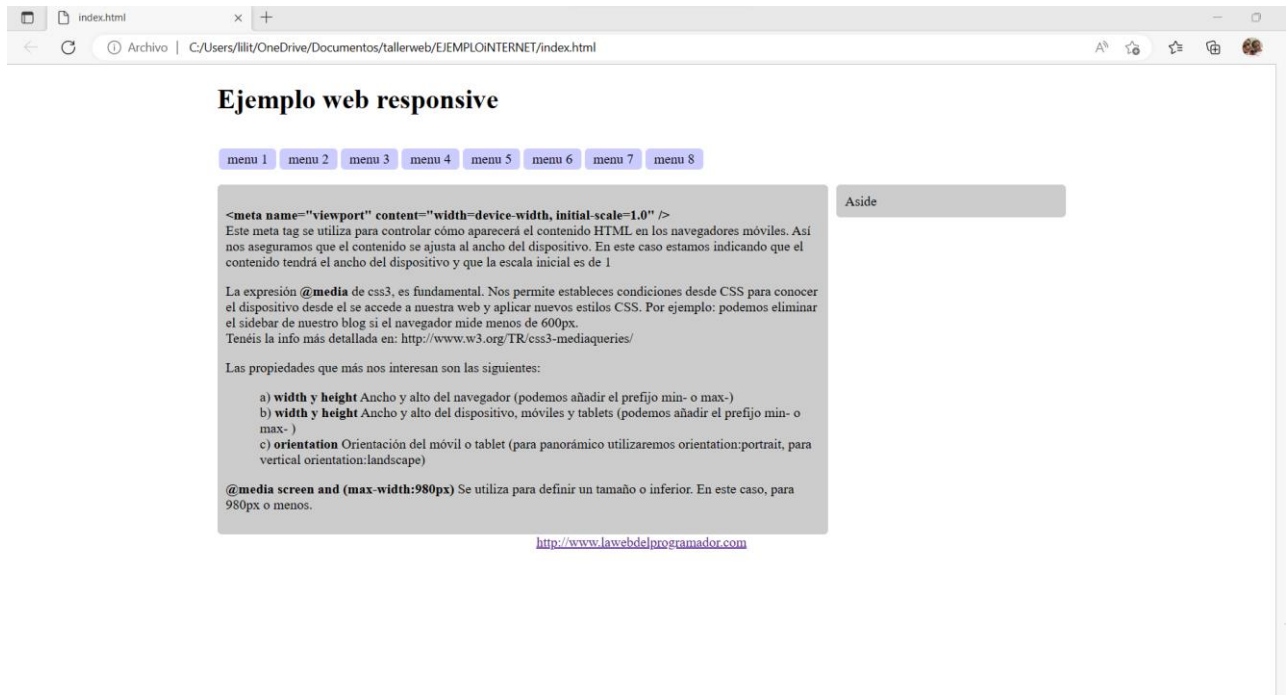
It provides flexible columns for making your website device-independent. With this approach, you may considerably cut the number of code characters, resulting in a file width of 6KB.

### **Cascade (Free & Open-Source CSS Framework)**

Cascade may generate both semantic as well as non-semantic grid patterns. Because it takes a general approach, the development procedure has been simplified. It has navigation components, table designs, foundation templates, and other capabilities.

Not just will you create a device-agnostic website Interface, but you may also create cross-browser layouts.

### **Example**





Example made by me

Caja Flexible

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# Caja Flexible

InicioEsquinas RedondeadasSiguietes

## Crear una caja Flexible

Intermedio

Inicio

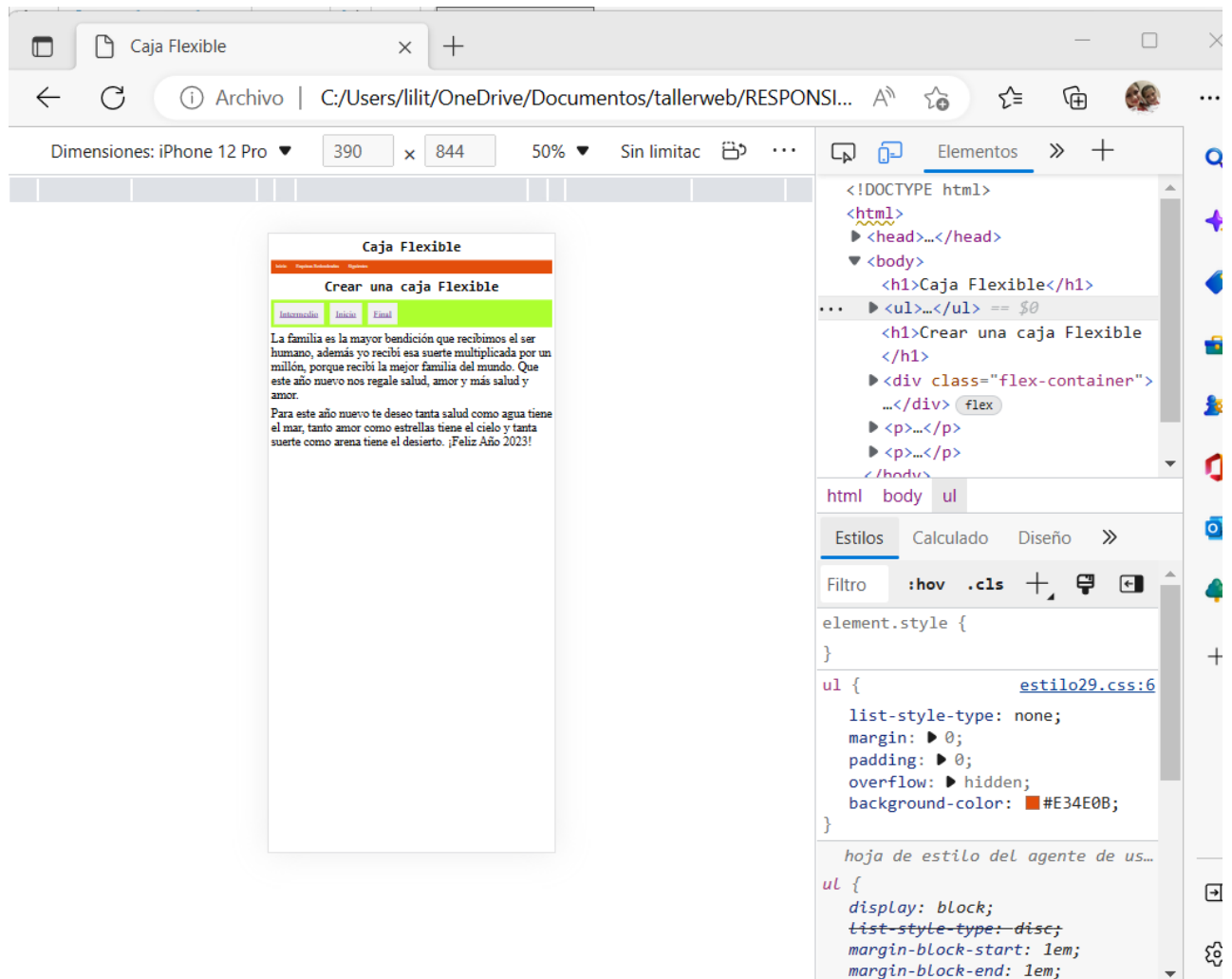
Final

La familia es la mayor bendición que recibimos el ser humano, además yo recibí esa suerte multiplicada por un millón, porque recibí la mejor familia del mundo. Que este año nuevo nos regale salud, amor y más salud y amor.

Para este año nuevo te deseo tanta salud como agua tiene el mar, tanto amor como estrellas tiene el cielo y tanta suerte como arena tiene el desierto. ¡Feliz Año 2023!

🔍🌟🔑🛒👤🎮📺🌳+

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## Bibliography

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