





Responsive Interfaces

In this lesson, we will talk about responsive user interfaces.



Designing responsive websites

In the previous lesson, I talked a bit about *mobile-friendly responsive* websites. These websites run in the mobile browser and is one way of having a mobile client for our service. In this lesson, you will have a quick insight into how to develop responsive websites for your service.

There are two approaches to designing responsive websites: *mobile-first* and *web-first*. We have already discussed these approaches. In the mobile-first approach, we can design the website for the small screen and then let it adapt for the bigger desktop screen. If we follow the second approach, we can design the website for the bigger screen and then let it adapt for the smaller screens.

In this day and age, when most of the world is online there are a plethora of smart devices available in the market with different, and unique screen sizes, including Smart TVs, Kindle, Android-powered devices, IoT devices, Blackberry, Windows handheld phones, Apple products like iPhone, and iPad and the list doesn't end here.

We can now even check our Facebook notifications and emails on our super tiny smartwatch screens. Well, if you ask me, I will always prefer to check my messages on my phone, unless I am James Bond. Anyway, it's not possible for developers to create and maintain dedicated user interfaces for every screen size. This makes writing a responsive user

interface an obvious go-to approach for us.



A popular saying with responsive web design is that the content should be like water and take the shape of the vessel it is poured in.

Okay!! Now, let's talk about the popular technologies used by the developers for writing responsive user interfaces.

Designing responsive websites#

I am not a designer, so how do I develop a responsive website?

If you are not a designer and cannot hire a designer or you are more of a backend developer and want to design a professional-looking responsive website all by yourself, pick BootstrapJS (https://getbootstrap.com/). Period.

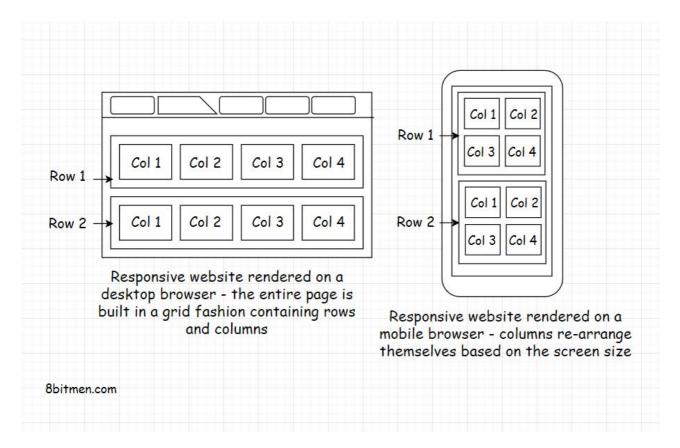
BootstrapJS is a production-grade open-source *CSS* framework for designing responsive user interfaces. It contains CSS, common JavaScript features, animations, typography, form elements, buttons, and many more commonly used website elements. So, we don't have to write anything from the ground up, and everything is pre-loaded. Just plug the elements together and build your website.

Also, since the framework is open source there are a lot of ready-made templates and plugins both free and premium if you need much more than what the core framework offers. Still, if you cannot find the additional features online, you can always write it for yourself as the code is open to all.

I have personally used the Bootstrap framework for most of my websites. It has never let me down. I am not a designer and I am more of a backend developer. The learning curve is not that steep. If you have some idea of front-end development, it should hardly take less than a week to get the



hang of the framework. It's intuitive and easy to understand. Just wisely use the grid-based approach using rows and columns to build the web page.



The framework was originally written at *Twitter* to have consistency across all the user interfaces of the internal tools. Before Bootstrap, the front-end developers at Twitter struggled with the maintenance and consistency across multiple user interfaces. At a later point in time, Twitter released the project as open source. You can check out some of the projects built using the Bootstrap framework here (https://expo.getbootstrap.com/).

Another popular framework for writing responsive websites is jQuery Mobile (https://jquerymobile.com/). The project is developed and maintained by the jQuery project team. I am a bit biased towards using Bootstrap because I really like the default CSS provided by the framework.

Besides these two popular frameworks, if you wish to browse through some other solutions for designing responsive websites there are many miciuumig skeieion, 111111123 Donei piaie, Less Francework, etc. 10a can ao

more research.





I think that's about it regarding designing responsive websites. In the next lesson, let's talk about the types of mobile apps.

