Responsive Interfaces

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

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, we will have a quick insight into how we can develop responsive websites for our service.

There are two approaches to designing responsive websites *mobile-first* & *web-first*. We have already discussed these approaches. In the mobile-first approach, we can design the website for the small screen & then let it adapt for the bigger desktop screen or 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 & unique screen sizes. Smart TVs, Kindle, Android-powered devices, IoT devices, Blackberry, Windows handheld phones, Apple products like iPhone, iPad and the list doesn't end here.

We can now even check our Facebook notifications & emails on our super tiny smartwatch screens. Well, if you ask me unless I am James Bond, I will always prefer to check my messages on my phone. I know that was a bit out of context. Anyway, so, it's not possible for developers to create & 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, it should 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.
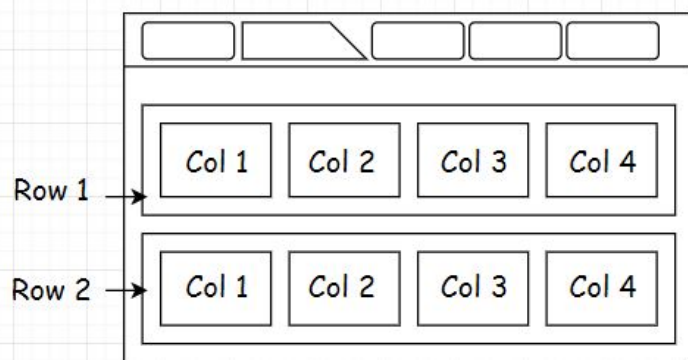
Designing Responsive Websites

I Am Not A Designer, How Do I Develop A Responsive Website?

If you are not a designer, cannot hire a designer, you are more of a backend developer & want to design a professional-looking responsive website all by yourself. Pick BootstrapJS. Period.
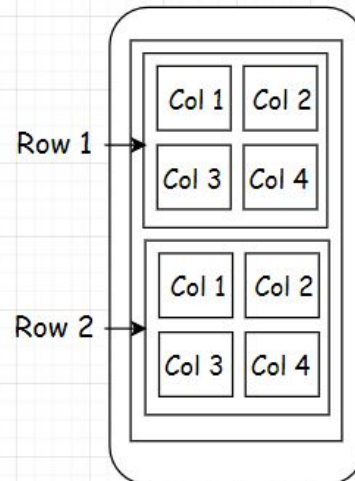
BootstrapJS is a production-grade open-source *CSS* framework for designing responsive user interfaces. It contains CSS, common JavaScript features, animations, typography, form elements, buttons & much more that the websites commonly have. So, we don't have to write anything from the ground up, everything 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 & 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; 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 & easy to understand. Just wisely use the grid-based approach using rows and columns to build the web page.

Responsive website rendered on a desktop browser - the entire page is built in a grid fashion containing rows and columns

Responsive website rendered on a mobile browser - columns re-arrange themselves based on the screen size

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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 Bootstrap framework here.

Another popular framework for writing responsive websites is jQuery Mobile. The project is developed and maintained by the jQuery project team. I am a bit biased towards using Bootstrap as 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 like *Skeleton, HTML5 Boilerplate, Less Framework* etc. you can do your research.

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