A Mobile World Needs Responsive Course Design

An eBook by Trivantis®

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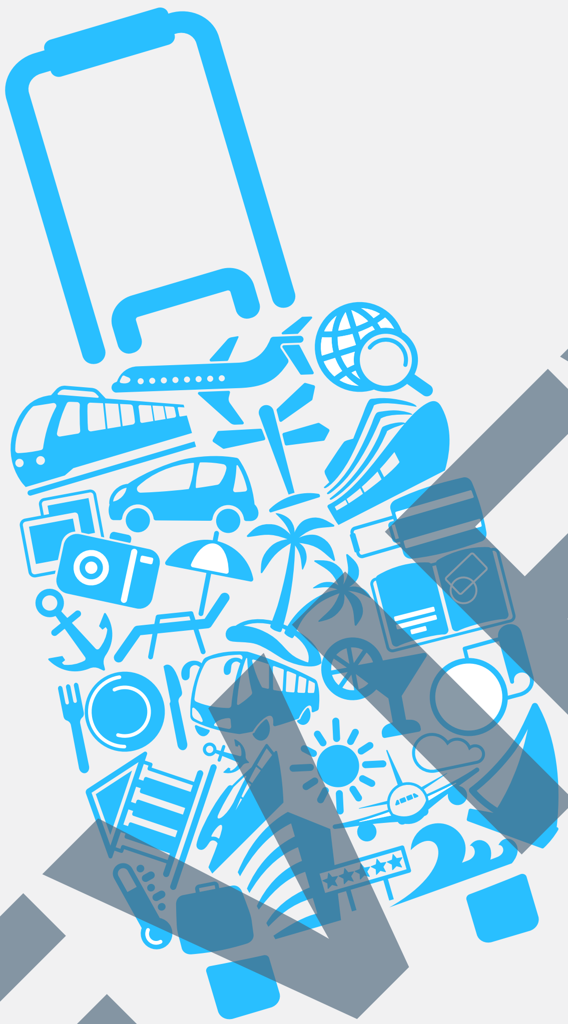
Responsive Design is an approach to creating content that allows for an optimal user experience across a wide variety of devices, including phones, tablets, and desktop devices. The content should be usable across these devices with a minimum of zooming or panning, allowing the user to get the best content experience available on each device.

Web designer Ethan Marcotte is widely credited for coining the phrase "Responsive Web Design" in his 2010 article for *A List Apart*. [(1)] His article defined Responsive Web Design as featuring fluid grids, flexible images, and media queries that identify device types and resolutions.

Today there are many Responsive Design solutions on the market, from JavaScript libraries for programmers, to end user authoring products. Each of these operates on the same core principle described by Ethan Marcotte—the content is laid out on a fluid grid which responds to the width of the device that the content is viewed on. As the view area gets smaller, the grid collapses, and content is repositioned to allow for viewing without the need to scroll the content horizontally or zoom. Most end user focused tools use device width-based "breakpoints" at which a new layout will be used to format the content.

1. Ethan Marcotte. *A List Apart*. "Responsive Web Design". 1 August 2016. http://alistapart.com/article/responsive-web-design



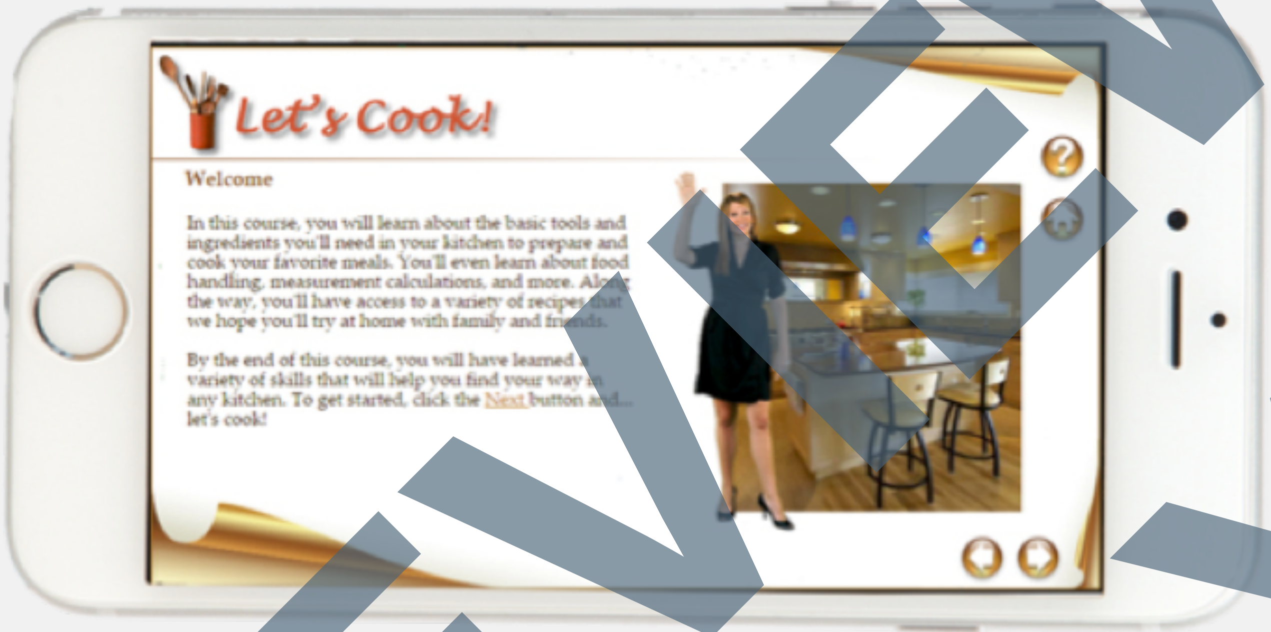
Should we just give up and not create mobile learning content? According to research done by *Towards Maturity*—that's not an option. Take a look at these stats: (1)

- 57% of learners like to be able to access learning on the go
- 42% respond to alerts as soon as they come in
- 37% are accessing work-related resources while they are traveling—only 18% are now learning at their work desks

So if we need to create mobile learning, but using width-based breakpoints isn't the ideal solution, how can we do it?

1. Towards Maturity. "In-Focus: Learning and Performance on the Move April 2016 report."

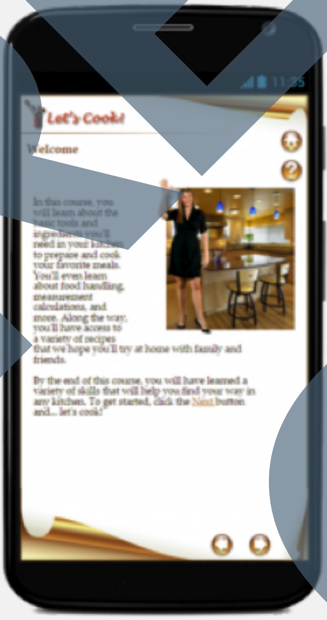
When viewing the same course on a phone, your display area is greatly reduced, so you need to consider the content that is added. For a landscape view, the viewable area is wide but not tall. In this case, removing some of the extra navigation buttons and reducing the image sizes still allows for a good course experience, giving the user all of the information he or she needs.



Welcome

In this course, you will learn about the basic tools and ingredients you'll need in your kitchen to prepare and cook your favorite meals. You'll even learn about food handling, measurement calculations, and more. Along the way, you'll have access to a variety of recipes that we hope you'll try at home with family and friends.

By the end of this course, you will have learned a variety of skills that will help you find your way in any kitchen. To get started, click the Next button and... let's cook!



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A phone in portrait view is generally the most challenging device view to design for. In this case we have elongated the text block, and wrapped it around the images, while also overlapping the two images a bit more. Again, this gives us all of the information, in a format that is easily usable on the phone's viewing area.

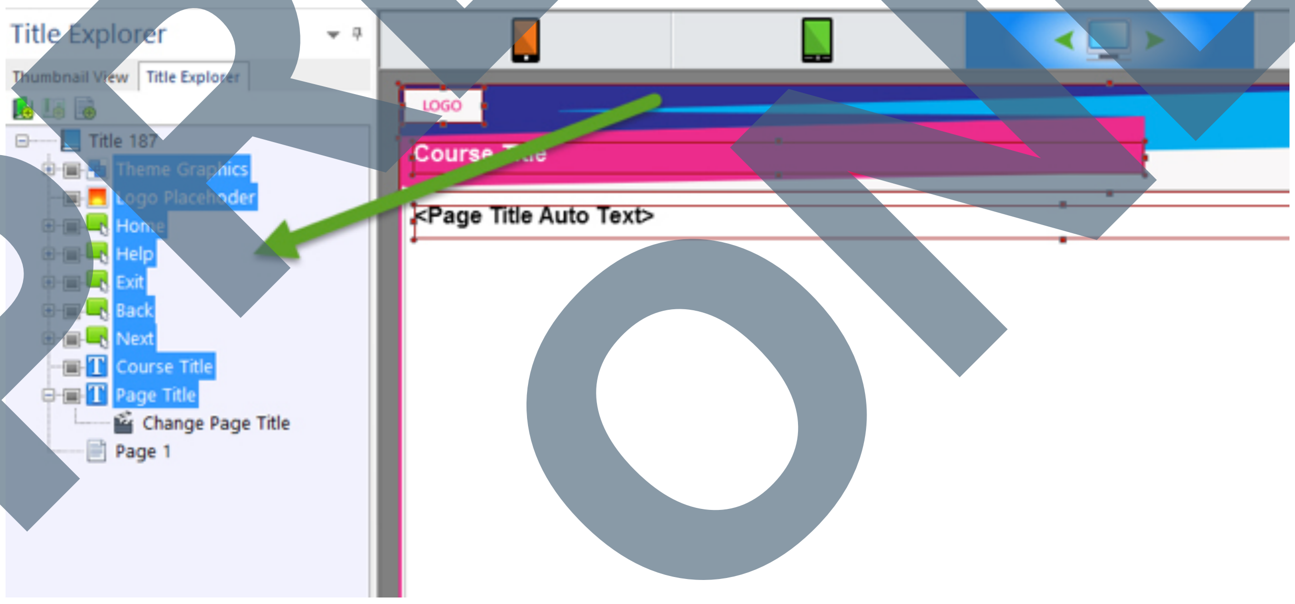
DESKTOP FIRST

You've probably seen articles on Responsive Web Design advocating that you should "design for mobile first." However, for RCD, we use inheritance from the desktop view to populate the mobile views, so you should always design for the desktop first. Content that you place in the desktop view will be automatically responsively positioned and sized for the other views—landscape and portrait on mobile devices. When you work with the mobile views, it will be much easier to remove or reposition content that might not be as important to the information you are trying to convey on that page.

It's important to do as much of your work as you can from the desktop, and let the inheritance do the work for you. That way, any changes or updates you make to the desktop view are carried over to the mobile views without any tweaking necessary.

START AT THE TOP!

When converting a non-responsive title to RCD, or even starting a new RCD title from scratch, it's important to set up all of your title level navigation and background images first on the desktop, and then make sure everything is working on all of the mobile views, before filling in all of your content. That way, you know how much room you will have to work with, and how things will be laid out on each of the pages.



AUDIO/VIDEO WILL NOT AUTO START ON MOBILE

The major browsers on iOS and Android do not support the auto start option for HTML5 media, making it very difficult to have auto started audio and/or video for your content. They require a “touch” of the screen in order to begin playing any audio. Interestingly enough, it is only a browser restriction. If you install the Firefox browser on your Android or iOS device, you will see that audio and video will auto start on each page on a mobile device when run from Firefox. Unfortunately, you will not know what browser your user will have, so you need to keep this restriction in mind when developing responsive courses.

Any “On Click” action (which equates to a touch on mobile), or a controller view, will be able to start media on a mobile device. So, when designing your page with media, look for a way to include a click to start it. That simple interaction can have the added benefit of keeping your users engaged with the content rather than just having it “auto played” to them.

LONGER PAGES, VERTICAL SCROLLING ON MOBILE

Don’t worry about your pages in mobile view having a greater height than the physical screen of the device. Mobile pages have less screen real estate, and it is natural for users to scroll the screen with a gesture to read the content. It is absolutely how a responsively designed page should work in a mobile view. Remember that there are many, many devices out there, and they have many different sizes and aspect ratios, and you are building for all of them.

Much of our content in static page design has been built around exact size pages, fitting to a pre built theme height. In RCD, you can use all of the features of RCD such as “Offset from Bottom” and repeating background images so that you can use a designed background, but still allow the page to flow to its natural height, including all the information you need to, without feeling the need to cram it all into a predefined space.