

Assignment 1

Mobile Web Application

Overview

In this assignment you will make a mobile optimized website that will also display well in a standard web browser. To achieve this you will use a responsive design. The idea behind a responsive design is that the page will change layout based on the device it is being viewed on. There is no particular set of requirements imposed on how you go about achieving this, but several strong suggestions are given below.

Requirements

Elements

Heading

The page should have a large heading that has the title of the page. This should be larger than any other text on the page and should always be the top element with no other elements in-line with it.

A Set of Buttons

There should be a set of at least 3 buttons. You can choose to have them horizontally aligned or vertically aligned (or it can change from horizontal to vertical depending on screen width if you want). What is important is that the three buttons are always aligned. It should never be the case that there are two buttons on one line and one button on the next. They also must look like buttons and when clicked should direct me to google.com so I know they work.

An Unordered List

There should be an unordered list of at least 3 items. Each item should appear on it's own line.

A Short Story

You don't need to actually tell a story, but if you want to its fine. There should be a title which is separated from the text of the story and the text should be at least a few sentences.

Layout

Wide Layout

For screen widths $\geq 768\text{px}$ the items should be laid out as follows:

A Sample Homework 1 Page

Bugs

99 little bugs in the code, 99 little bugs

Take one down, patch it around

117 little bugs in the code

- Apples
- Bananas
- Grapes
- Strawberries
- Tyrannosaurus Rexes
- Limes
- Lemons
- Oranges

Press Only In Emergency

Do Not Press Ever

!

Narrow Layout

For screen widths < 768px

A Sample Homework 1 Page

Bugs

99 little bugs in the code, 99 little
bugs

Take one down, patch it around

117 little bugs in the code

- Apples
- Bananas
- Grapes
- Strawberries
- Tyrannosaurus Rexes
- Limes
- Lemons
- Oranges

Press Only In Emergency

Do Not Press Ever

!

How to Go About Doing This?

You have several options. I suggest using jQuery mobile. <http://jquerymobile.com/> Alternativley you could acheive the same results with Bootstrap. <http://getbootstrap.com> Finally you could make your own solution from scratch. I am fine with any of these options.

You will need to spend some time reading the appropriate documentation to understand how to implement the responsive grid system.

Proving it Works and is Correct

You will validate your page at validator.w3.org. It should automatically detect the page as HTML 5 and display no warnings or errors. You will also submit a live version of you page and include screenshots as detailed below. It should display correctly on a emulator set to a Nexus 4. I will be using the Ripple Chrome browser extension for testing

(<https://chrome.google.com/webstore/detail/ripple-emulator-beta/geelfhphabnejjhdalkjhgpohgpdnuc>)

Deliverables

You will make a single PDF that has

- A screenshot of your page both in wide format on the desktop and narrow format on the Nexus 4 in the Ripple browser extension.
- A screenshot of your page passing validation at validator.w3.org

You will turn in a single zip that contains all the files needed for you website. I should be able to unzip this and see the site locally.

You will include a link in the Blackboard text submission box (not a file upload) to the live, functioning website.