UXD HTML/CSS Developer Exercise

Below is a series of questions and exercises to be completed and submitted prior to your interview. Please be prepared to discuss your answers and implementations in detail during the interview.
Source code should be checked in to a publicly readable GitHub repository.

Open Ended Questions

Please answer at least 4 of these questions

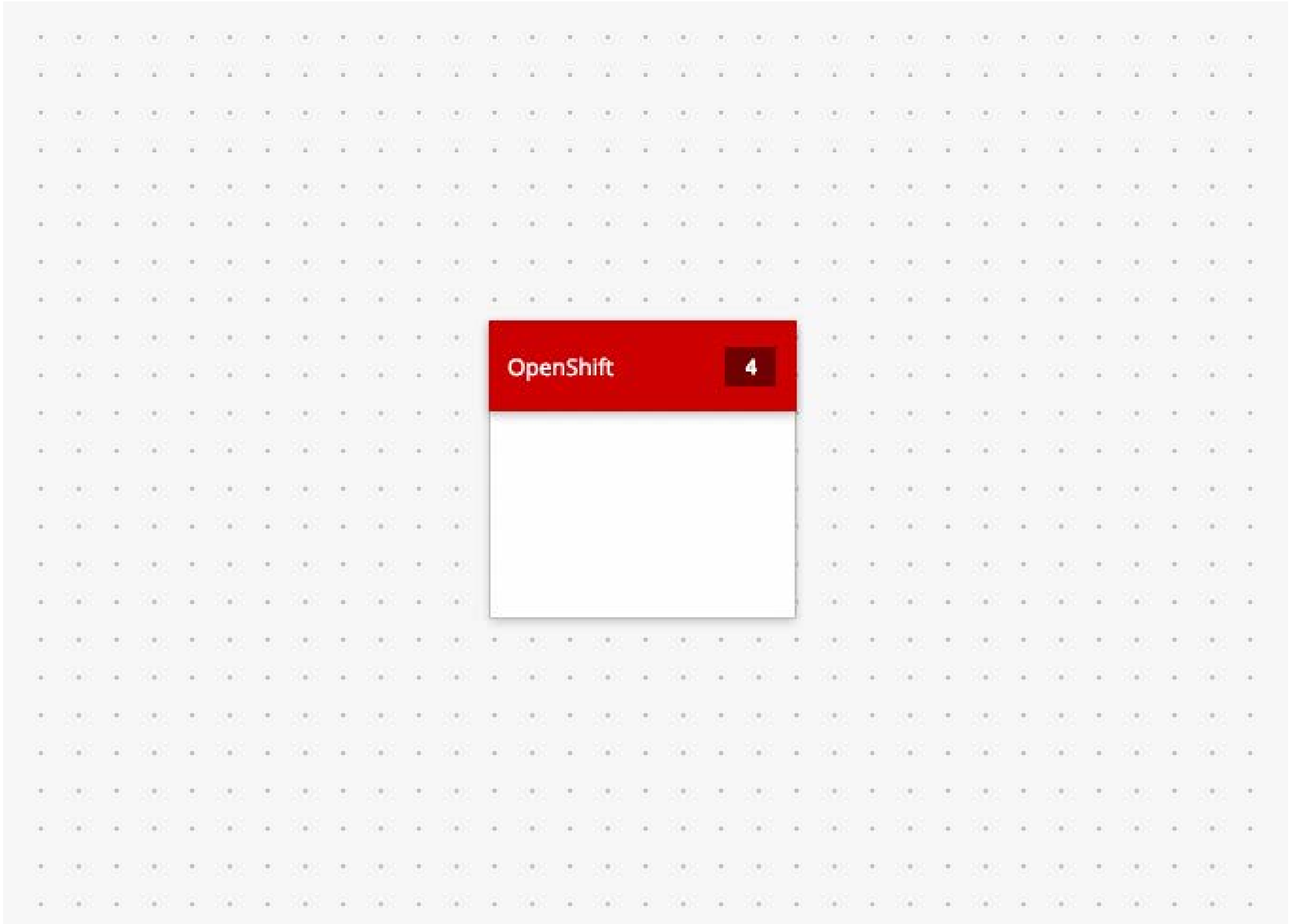
- What are some best practices for ensuring proper accessibility support?
- How do you test to ensure your development work matches the design you are provided?
- What are some best practices for ensuring cross-browser compatibility?
- Have you used any design systems, if so which ones?
- What are some pros and cons to working with a design system?
- What are some features you'd like to see added to the CSS/HTML specs?
- In your career to-date what are you most proud of?

Practical Exercises

Implement the following designs and deliver it in a Github repo.
Ensure the pages work in the latest versions of Chrome and Firefox.

Exercise 1 - Bootstrap

Implement the following design and deliver it in a Github repo.



https://www.dropbox.com/s/904r3jtvltkn56i/html-css-test.png?dl=0

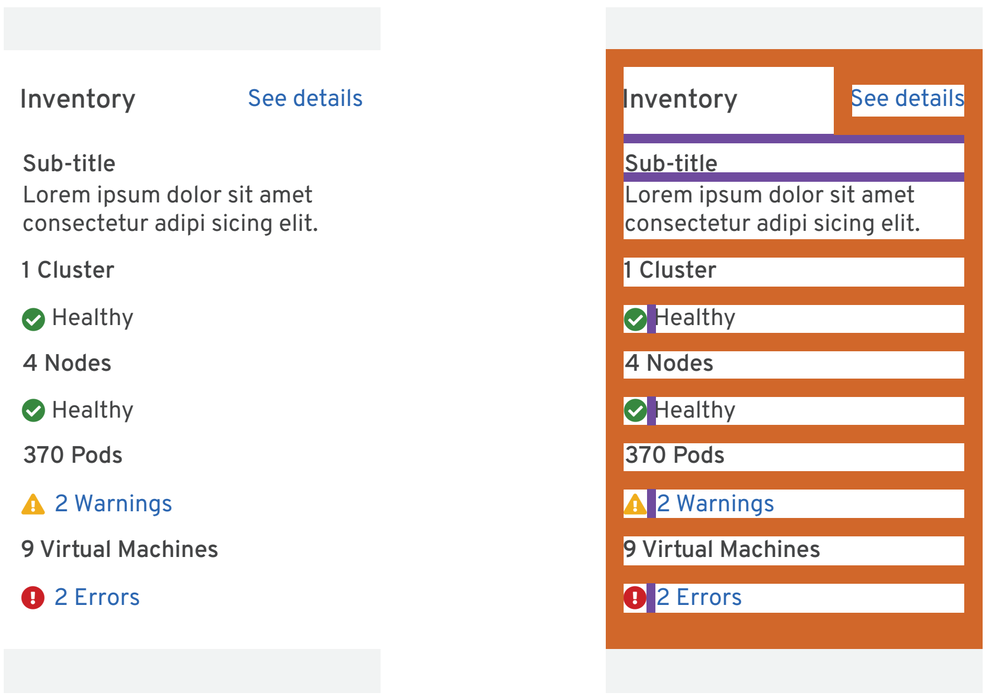
- Recreate the layout above using Bootstrap 3.
- Use Bootstrap components and elements for the OpenShift box.
- Use bootstrap variables to style the example.
- The box should be 2 columns wide on medium and large viewports and 12 columns on extra small viewports.
    - It should also have an offset of 4 columns on medium and large viewports.
- Hide the box on small devices.
- Offset the box 200px from the top of the viewport.
- Don't use any images.
- Reproducing the the background is part of the exercise.
- PSD is here: https://www.dropbox.com/s/keyihe524zqm7m9/HTML-CSS-Test.psd?dl=0

Red Hat

Exercise 2 - Vanilla CSS

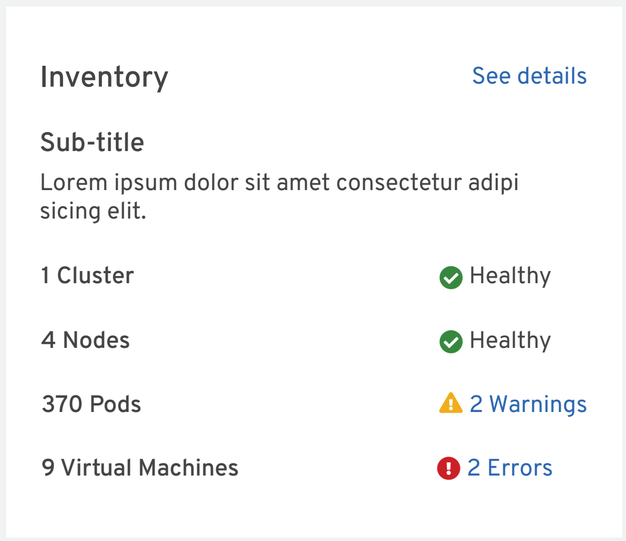
Implement the following design and deliver it in a Github repo.

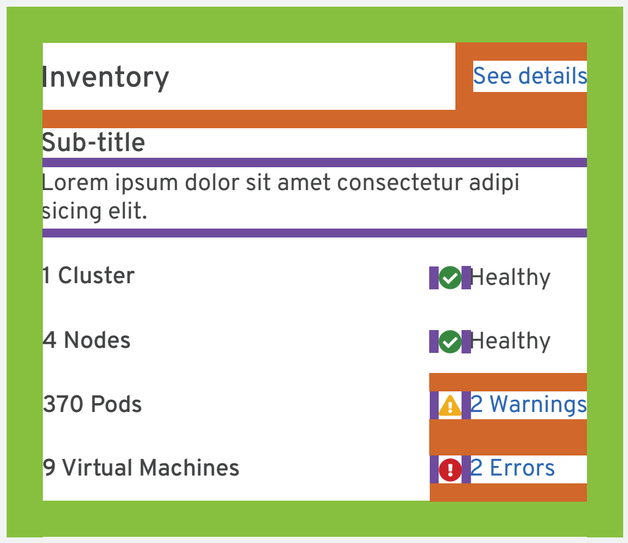
Mobile View



Spacing values

Desktop View





Requirements

Should meet AA WCAG accessbility compliance
Must be responsive and modular
Use vanilla css (no pre-processor)
Make use of modern CSS techniques

Colors

Text color: #444
Link color: #0066cc
Hover color: #004080
Successs color: #3f8743
Warning color: #eeac34
Error color: #c7232d
background: #f1f0f0

Fonts

Font-family: overpass (regular, semi-bold)
h1: 20px (desktop) 18px (mobile) semi-bold
h2: 18px (desktop) 16px (mobile) semi-bold
body: 16px (regular)

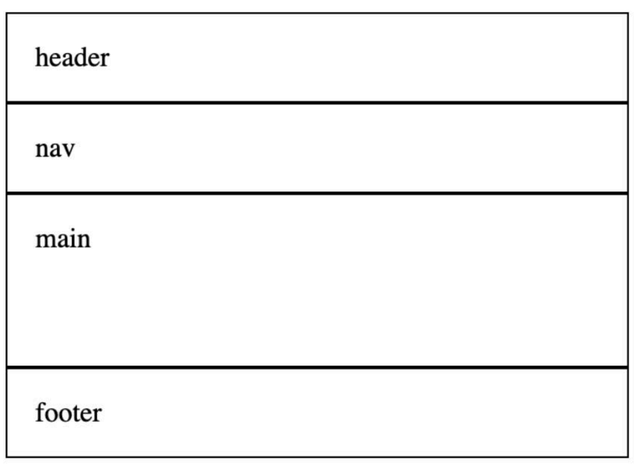
Icons

fontawesome 5
size: 16px

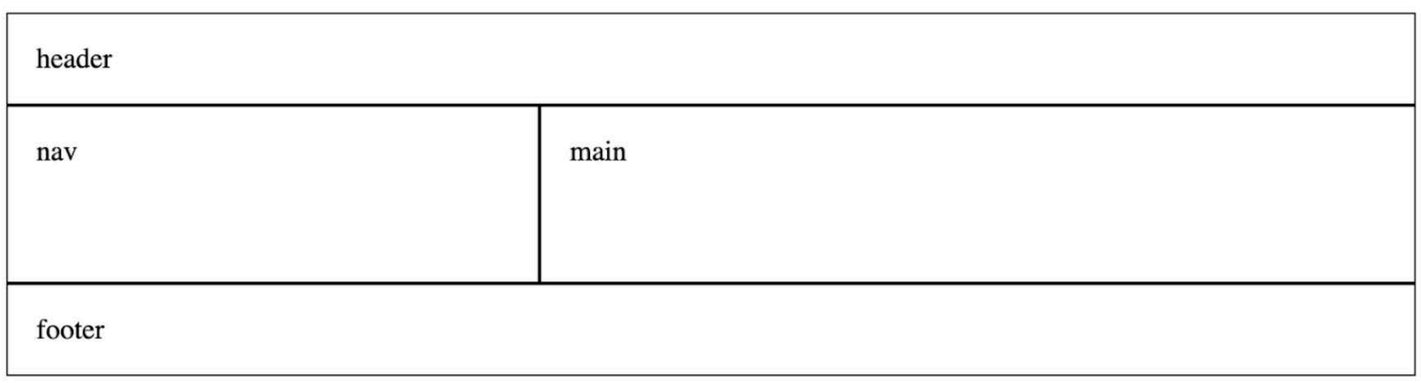
Exercise 3 – layout

Implement the following design and deliver it in a Github repo.

Mobile (<= 640px)



Desktop (> 640px)



HTML/CSS address: https://www.dropbox.com/s/l5laea8oe0pzkif/exercise-3.html?dl=0

- Using the provided HTML/CSS, recreate the layout in the designs above 4 different ways using only CSS.
  - Use a different CSS technique for each approach (I.e., grid, flexbox, etc).
  - Do not modify the markup.
- For the mobile layout, the sections should stack on top of one another.
  - The <main> element should be 100px tall.
  - This layout should target viewports that are less than or equal to 640px wide.
- For the desktop layout, create 3 fluid rows that span the width of the page.
  - The <nav> and <main> elements should be 100px tall.
  - The <nav> element should be 300px wide.
  - The <main> element should fill the available space left over beside the <nav>.
  - This layout should target viewports that are greater than 640px wide.
- Deliver the final work as 1 HTML file (a copy of the HTML/CSS provided) with 4 different external stylesheets (1 for each technique), and use the <link> tag in your HTML file to include the stylesheet for your preferred technique for creating this type of layout.