New Starter Exercises: HTML/CSS/JS

1. Goals

The exercises below are intended to ease new developers into the Focus team with some basic / fundamental exercises in constructing some of the standard things we use in the CMP pages.

It also gives us a chance to see your coding in context and compare with the way we've done things - we might even learn some new tricks from you.

We will review your code with you and discuss your work, also relating it to similar features in the CMP

You should use your Git skills (New Starter Exercises: Git) to create a repository for each task and a commit for each step in the tasks so we can look through your work.

2. Server Data exercise

2.1 Tasks

1. Create static HTML to display the first 10 rows of data from the attached JSON file.

servers_table.json

 The HTML can be hardcoded with data.

The 8 column headings are:
Name, State, Account, Data Center, Cores, CPU, Memory and Storage.

2. Style the HTML to look like the image below, using pure CSS. Pay attention to the graphic representing the "State".

Font size is 12px;

For bonus points, the fallback font is sans-serif, but we'd like to use "Open Sans".

Name	State	Account	Data Center	Cores	CPU	Memory	Storage
adder	○	Enterprise Cloud for EU Sysdev	Shanghai	N/A	N/A	N/A	N/A
albatross	○	Enterprise Cloud for EU Sysdev	Slough	N/A	N/A	N/A	N/A
alho	○	Enterprise Cloud for EU Sysdev	Slough	N/A	N/A	N/A	N/A
anaconda	○	Enterprise Cloud for EU Sysdev	Shanghai	N/A	N/A	N/A	N/A
anglab-ap-nboss1	○	Enterprise Cloud for EU Sysdev	EU Central 1 (Frankfurt)	2	N/A	4GB	54GB
anglab-core-app1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-app2	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-bdb1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-db1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-mail1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-portal1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-core-proxy1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-eu-nboss1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	54GB
anglab-eu-sync1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-jp-app1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-jp-app2	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-jp-bdb1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-jp-cp1	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB
anglab-jp-cp2	○	Enterprise Cloud for EU Sysdev	Hemel Hempstead	2	N/A	4GB	14GB

3. Can you use JavaScript to read the JSON file and create the HTML with all the rows from the JSON.
 (Hint: client side templating)

4. Can you make the HTML responsive - it should fill the width of the page. As you shrink the page it should truncate text in the columns To look like: "Trunca..."

2.2 Questions

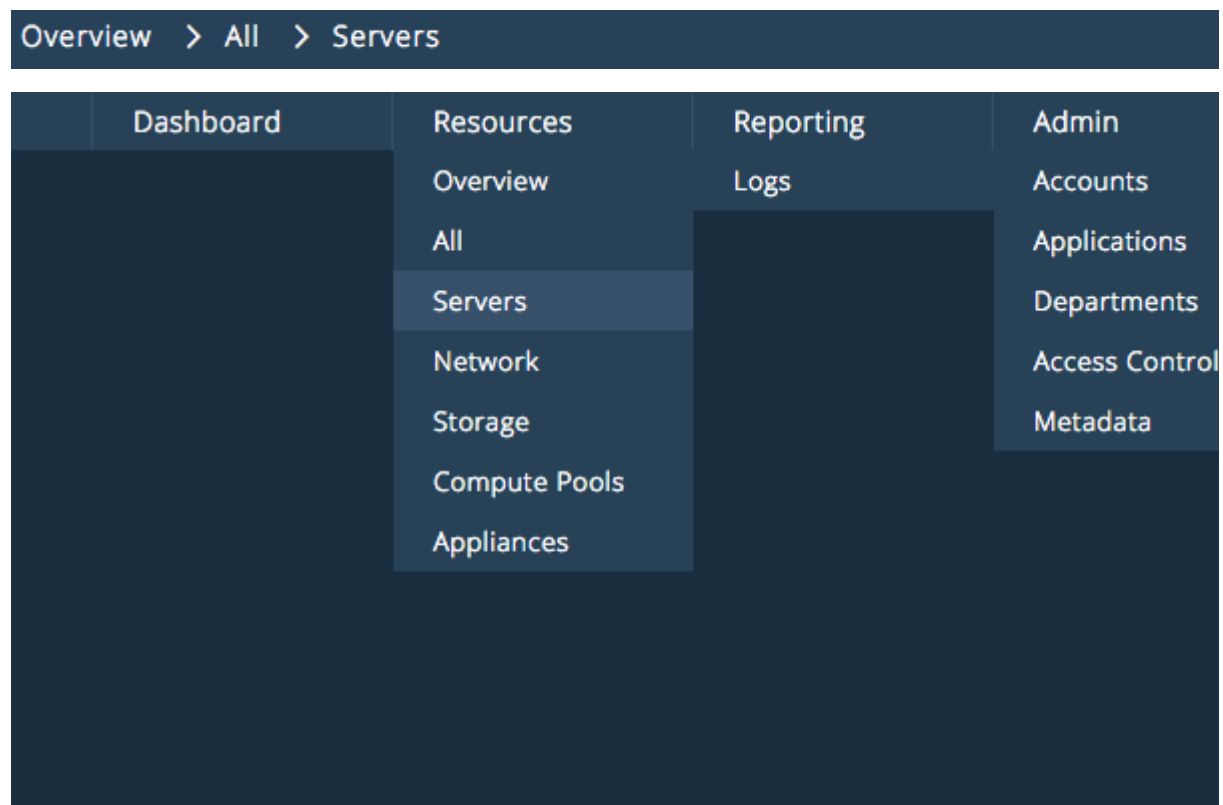How might you make this scrollable, keeping the header fixed?

How might you make an entire row clickable?

If you were to use SASS to build this, what might you do differently with your style-sheets?

3. Navbar Exercise

3.1 Tasks

1. Make a static HTML mockup of the a navigation bar from the images below. It should have drop-down menu's. Initially, the menu-entries and breadcrumbs won't be links.

2. Style the navbar with CSS so that drop-downs work on rollover. Pay attention to the menu "dividers", the rollover colour and the breadcrumbs on the left. The navbar will stretch to fit the width of the screen with the breadcrumbs anchored left and the menu anchored right. The menu should always fit on the screen, with the breadcrumbs ideally fitting - e.g. minimum width with possible truncation - for discussion.

Font size is 14px

3. Using the attached JSON file, can you dynamically generate the menu with links in the appropriate place?

menus.json

3.2 Questions

How might we update the breadcrumbs dynamically?

Can you try to write some jQuery/JavaScript to prevent the links navigating to another page, but allow them to update the breadcrumbs with the appropriate heirarchy?

Requirements:

- "Overview" will always be shown, e.g. "Overview > Dashboard", etc. for "top-level" menu's

- For sub-menu's it will show "Overview > Resources > Servers", etc.

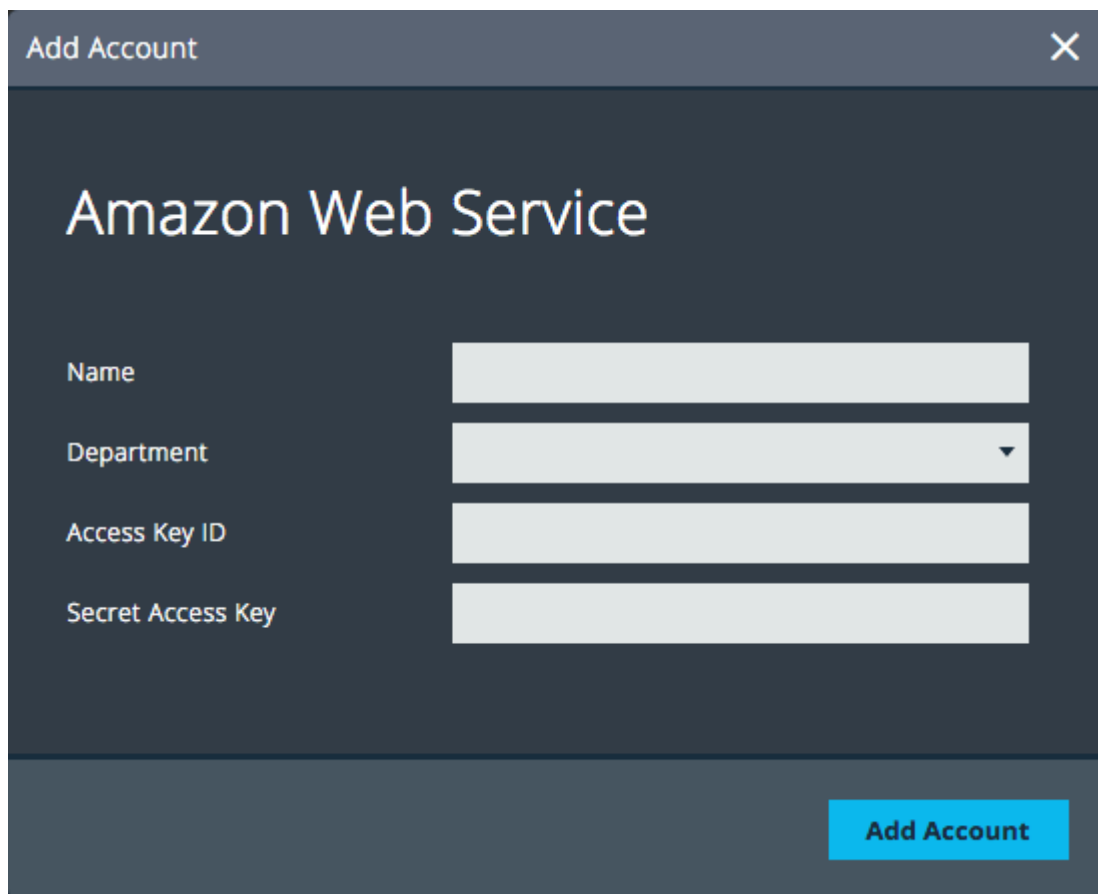- When on the Resources->Overview page the breadcrumbs will only show "Overview"

4. Form Exercise

Before starting the Form task make sure you have read the CSS Coding Standards & Style Guide: https://confluence.ntt.eu/pages/viewpage.action?pageId=395644567
Supporting information can be found on the New Starter Orientation page: https://confluence.ntt.eu/display/CMP/New+Starter+Orientation#NewStarterOrientation-CSS

4.1 Tasks

1. Make a static HTML mockup of the form from the images below. Ignore styling for now.

2. Style the form, using SASS, with the following considerations:

- This is a "popup panel" - we'd like to reuse the general layout of "header", "body", "footer". How might you organise your styles for specific vs abstract?

- For other cloud providers, we may have more, or less, inputs

- How might you ensure the select box follows the designs?

3. All fields are 'required'. Can you use simple HTML5 + CSS to indicate that a field is valid / invalid?

4.2 Questions

Discuss with your reviewer:

- How we might make generating forms a bit more "programmatic"?

- Do we need any JavaScript for this form if we are just submitting it?