Interface Design and Development

Pass Task 3.2: Lookup Web App

Overview

Using loop directive in VueJS, it is possible to create programs that dynamically generates HTML elements using an array of data objects. In this task, you will create a small web application that will list down a list of units in a table and allow the user to filter by unit code and unit description.

Purpose:	Learn to use loop and filter directives to respond to user actions. Learn how to incorporate styling.
Task:	Create a web app that list units and support a search filter.
Time:	This task should be completed in your tutorial and submitted for feedback before the start of week 5.
Resources:	

- Lecture notes #2 and #3
- VueJS https://vuejs.org/
- Bootstrap http://getbootstrap.com/

Submission Details

You must submit the following files:

- Look-up source code (lookup1.html).
- Screenshot of the web app. **Please submit the screenshots as separate files (not inside a zip).**

Make sure that your task has the following in your submission:

- The Look-up web application is HTML5 compliant.
- Demonstrates understanding in using the VueJS framework.
- Demonstrates use of VueJS expression and conditional directives.
- Demonstrates understanding of incorporating the Bootstrap framework.

SWIN BUR NE

SWINBURNE UNIVERSITY OF TECHNOLOGY

Instructions

Loops allow one to programmatically generate a list or table based on a given data, instead of having to hard code each data item. This requires the data set to be downloaded to the client, which may add to the loading time of the web application.

While the list or table can also be programmatically generated in the server and send to the client as HTML, adding search and filter client-side user interactivity will be difficult to implement.

1. Open Brackets (or other editor) and save the blank file as lookup1.html in your lab03 directory.

2. Start the web application code with the template for VueJS found in lecture 03.

3. Implement a web application with the following logic:

   - Initialise the array of objects with the following unit information

Unit codes	Units	Credit points	Type
ICT10001	Problem Solving with ICT	12.5	Core
COS10005	Web Development	12.5	Core
INF10003	Introduction to Business Information Systems	12.5	Core
INF10002	Database Analysis and Design	12.5	Core
COS10009	Introduction to Programming	12.5	Core
INF30029	Information Technology Project Management	12.5	Core
ICT30005	Professional Issues in Information Technology	12.5	Core
ICT30001	Information Technology Project	12.5	Core
COS20001	User-Centred Design	12.5	Software Development
TNE10005	Network Administration	12.5	Software Development
COS20016	Operating System Configuration	12.5	Software Development
SWE20001	Development Project 1 - Tools and Practices	12.5	Software Development
COS20007	Object Oriented Programming	12.5	Software Development
COS30015	IT Security	12.5	Software Development
COS30043	Interface Design and Development	12.5	Software Development
COS30017	Software Development for Mobile Devices	12.5	Software Development
INF20012	Enterprise Systems	12.5	Systems Analysis
ACC10007	Financial Information for Decision Making	12.5	Systems Analysis
INF20003	Requirements Analysis and Modelling	12.5	Systems Analysis
ACC20014	Management Decision Making	12.5	Systems Analysis
INF30005	Business Process Management	12.5	Systems Analysis
INF30003	Business Information Systems Analysis	12.5	Systems Analysis
INF30020	Information Systems Risk and Security	12.5	Systems Analysis
INF30001	Systems Acquisition & Implementation Management	12.5	Systems Analysis

Table 1: Unit Information

Note: You may download the unit information in JSON format from Canvas.

   - It accepts 2 text input filters, namely: unit code and unit description.

   - It has a radio input filter to select unit type, namely: core, software development, systems analysis and all.

   - Display the unit information in a table (1) ordered by unit description, (2) have unit code, unit description and type as filter, and filter must not be case sensitive, (3) and credit point displayed with 2 decimal places.

```
Web App: lookup1.html
_____

Uses: VueJS 3.x
------------------------------
--- Model:
- obj.code (stores the unit code)
- obj.desc (stores the unit description)
- obj.type (specifies the unit type)
------------------------------
--- Steps:
1: Initialise the array of objects
2: Assign obj.code and/or obj.desc using v-model with
     the prompt: 'Search filter:'
3: Create a radio input obj.type with the options
     'core', 'software development', 'systems analysis'
     or 'all' units
4: Use v-for to display the table
```

Tip: For styling the table, use the table class from the Bootstrap framework.

```
<div class="table-responsive"
 <table class="table table-striped table-hover">
    :
 </table>
</div>
```
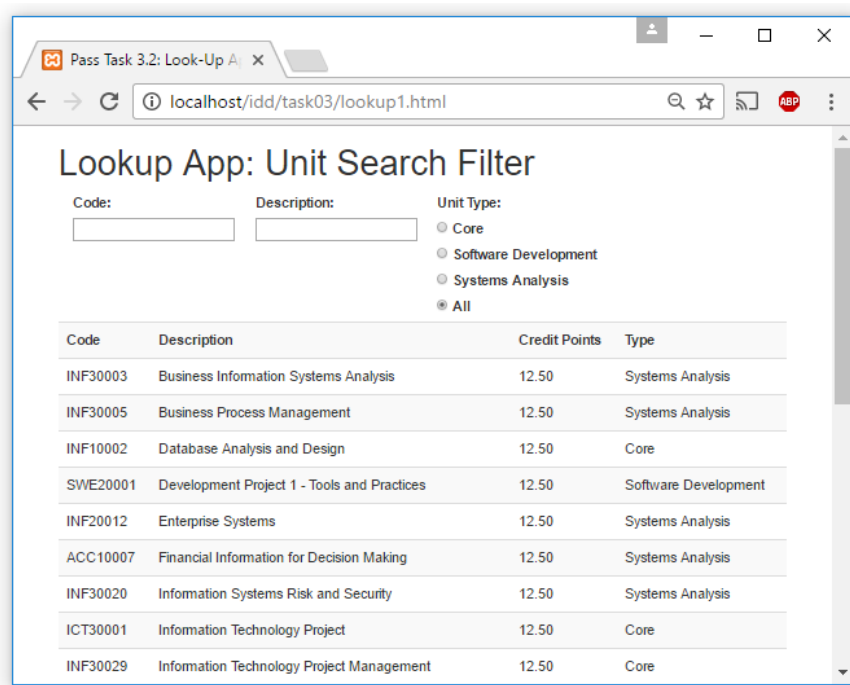

Figure 1: Screenshot of the web app with Bootstrap mark up (row and col-xx-##)

Now that the task is complete you can submit it for assessment, which will help prepare it for your portfolio.