



# Interface Design and Development

## Credit Task 5.3: Creating Router

### Overview

In this task, you will create a router that will display unit information using a view template in your web application.

**Purpose:** Learn how to use component and create router.

**Task:** Create a web app that allows users to click of a unit to show more information.

**Time:** This task should be completed before the start of week 7, but may be completed later (see following note).

**Resources:**

- Lecture notes #3, #4 and #5

**Note:** If you are not currently up to date you should skip this task and return to it once you are up to date with the Pass Tasks. Do not allow Credit Tasks to delay you in keeping up with the unit's Pass Tasks.

### Submission Details

You must submit the following files:

- Unit information source code (\*.html).
- Unit information component and router source code (\*.js).
- Screenshot of the web app.

Please submit the html and js files as one zip file and submit the screenshot as a separate file.

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

- The routing web application is HTML5 compliant.
- Demonstrates understanding in using the VueJS framework.
- Demonstrates use of VueJS component and router.

## Instructions

Implement the unit information web app that display detailed unit information. In this web application, you will need to implement a route to show the detailed information of a selected unit.

1. Start by creating a new HTML file in an editor.
2. Implement the basic outline of an VueJS web app with the appropriate scripts.

**Note:** It is a good practice to write the component in a separate file.

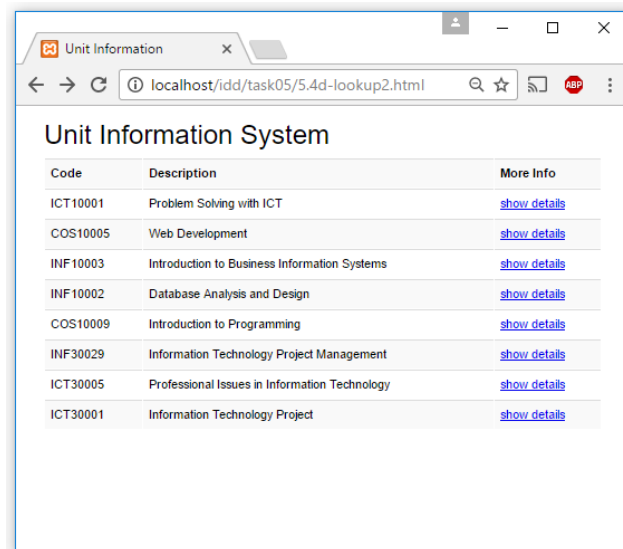
```
<script src="js/applookup2.js"></script>
```

3. Create the web application HTML file with the following:
  - 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 |

Table 1: Unit Information

- Display the table that list the unit information from Task 3.2. Search and filter is optional for this task.

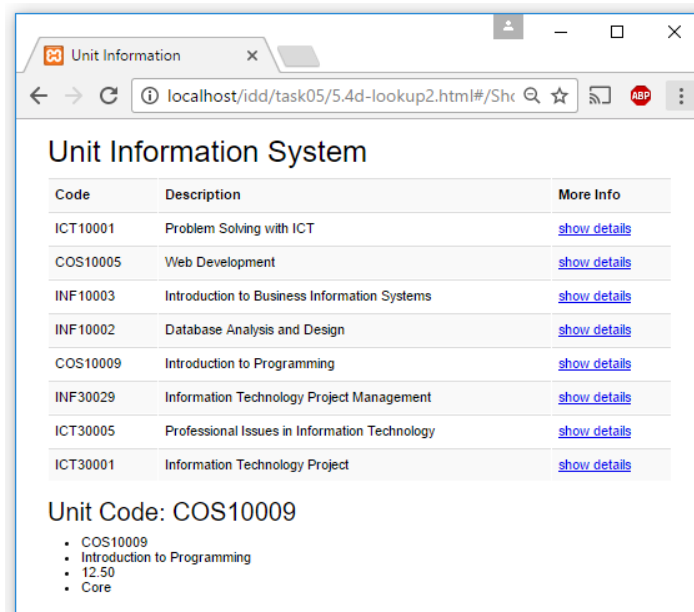


**Note:** Mark up the code using Bootstrap is optional for this task.

4. Create the unit detail view templates that will list the unit information. We will limit the information to unit code, description, credit point and type.

**Note:** The unit code is used as key to retrieve detailed information from the database. For this task, we will retrieve the unit information from the model with the unit code as filter.

5. Create the component file applookup2.js with the template (next page).
6. Your web app should now be complete. Make sure you test it on the browser to make sure that it works as you expect.



**Web App: applookup2.js**

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```
//Defining the list of units in an array
var units = [ ... ];

// creating a component for the units to pass in the router
const Unit = {
  data() { return { units } },
  //define the template for the route results
  template: ... ,
  computed: {
    //filter function (returns the selected unit object )
    filteredUnits: function() {
      ...
    }
  }
}

// Creating the VueRouter
const router = VueRouter.createRouter({
  history: VueRouter.createWebHashHistory(),
  routes: [{
    path: '/unit/:id',
    component: Unit
  } //defining path and the component
]
})

// create new app instance
const app = Vue.createApp({})

// creating component for the lookup table
app.component('app-lookup2', {
  data: function() {
    return {
      units
    }
  },
  //defining template for the app
  template: ...
})

// use router, mount to app
app.use(router)
app.mount('#app')
```