

The use of template syntax is displayed in question 1, the first example is using text interpolation, which is implemented in my code through the `{{ }}` brackets, the text used inside the `<div>` which is ID'd as the app is used to interpolate the text of "text" and therefore the content in text will be replaced by `{{ }}`. Furthermore, raw HTML is used with the `v-html` directive which is used to render the HTML content, in my code the raw HTML contains different strings with HTML tags which get rendered as HTML. The attributes binding using `v-bind:` is used with the directive which binds the id to the HTML element. Lastly, the JavaScript expressions using `{{ }}` where JavaScript expressions are placed within the code. For example `{{ text: "Hello Wlecome }}"` is an example of the JavaScript expressions inside the braces.

The method I have used is to define a custom function that occurs when the event happens, firstly the methods are defined as change text and are responsible for changing the value of text, the use of the `v-click` directive binds click with change text, and therefore when the div is clicked the change text method is activated, overall I used methods to respond to the action (clicking the div) when the event happens the method is then therefore executed.

The reactivity functions used is executed by importing the 'ref' function, and the creation of a reactive variable called 'count' which is initially set at 0, the 'increment' function modifies 'count'. The count variable is displayed within a button and clicking it starts the increment function updating count.

The class and style bindings being used within the code are operated through class binding, for example, the `v-bind: class` directive is implemented binding the class name stored in the `className` variable to a div element. For styling the `v-bind: style` directive is used to set the font size and background colour of `<div>` based on size and isimportant.

List Rendering is demonstrated with the `v-for` directive, it runs through an array called foods and displays every item in the list which is an unordered list, furthermore, a range of numbers is being generated using `v-for=" number" in range (1,13)` and is also displayed in a list.

Event handling is displayed in this code using the `v-on: input` directive. An 'impound' variable is also implemented whenever the user of the website types. The event handling updates the count, and a new count is therefore displayed below.

Form input bindings are used within the code binding input fields, checkboxes, radio buttons and select dropdowns as well as areas to data properties.

Watchers are used within the code to monitor specific data properties for changes and trigger custom actions when the colour changes, allowing the user to respond to data changes.

The router is created using a library for adding routing to the application, setting up the routes for different pages(Home and About) creating a single-page application, the `<-link>` elements create navigation links and the `<-view>` displays the appropriate information based on the current route. This enables navigation between different views within the SPA.