**Vue JS code**

**main.js**

import { createApp } from 'vue'

import App from './App.vue'

createApp(App).mount('#app')

**App.vue**

<script setup>

// import HelloWorld from './components/HelloWorld.vue'

// import TheWelcome from './components/TheWelcome.vue'

import MC1 from './components/MyComponent1.vue'

import MC2 from './components/MyComponent2.vue'

</script>

<template>

<div class="container mt-3 border">

<h1 class="text-center text-primary"> Hello Welcome to my Vue JS </h1>

<h3 class="text-center text-warning"> Welcome all VUE participants</h3>

</div>

<div class="container mt-3 border">

<MC1></MC1>

</div>

<div class="container mt-3 border">

<MC2 ComValue1="Common Values Pass Here" ComValue2='CG-VAK, Coimbatore'></MC2>

</div>

</template>

**index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<link rel="icon" href="/favicon.ico" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Vite App</title>

<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css">

<script src="https://cdn.jsdelivr.net/npm/jquery@3.6.0/dist/jquery.slim.min.js"></script>

</head>

<body>

<div id="app"></div>

<script type="module" src="/src/main.js"></script>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.min.js"></script>

<script src="https://cdn.jsdelivr.net/npm/jquery@3.6.0/dist/jquery.slim.min.js"></script>

</body>

</html>

**First.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<script src="https://unpkg.com/vue@3"></script>

<title>My first vue Document</title>

</head>

<body>

<h1> Single HTML file in VUE</h1>

<div id="app">

<h1> {{title}} </h1><br>

<b> <u> <h4> {{subtitle}} </h4></u></b>

</div>

<script>

// Simple Vue script --- Way 1

// const { createApp } = Vue

// createApp({

// data() {

// return {

// message: 'Hello Vue!'

// }

// }

// }).mount('#app')

//Simple Vue script --- way 2

// const app=Vue.createApp({

// template : "<h2> I'm In VUE Application Template </h2> <u> <h4> I'll create Vue web application</h4> </u>"

// })

// app.mount('#app')

//Simple Vue script --- way 3

const app=Vue.createApp({

data(){

return {

title : 'Welcome to my VUE Application',

subtitle : "You're most welcome"

}

}

})

app.mount('#app')

</script>

</body>

</html>

**MyComponent1.vue --- component folder**

<template>

<h2> My first VUE Component</h2>

<hr />

{{title}}

Count value is : <strong> {{count}} </strong>

<hr />

<div class="text-secondary text-center">

<h5>My name is <u><b> {{firstName}} &nbsp &nbsp {{lastName}} </b> </u> </h5>

</div>

<div class="text-worning text-center">

<h5> {{a}} \* {{b}} = {{multiply() }}</h5>

</div>

</template>

<script>

export default {

data() {

return { count: 100,

a: 10,

b: 20,

title : 'JS file with HTML file in VUE example',

firstName : 'Arulseeli',

lastName : 'Churchill'

}

},

methods:

{

multiply()

{

var c= this.a \* this.b

console.log(this.a + ' \* ' + this.b + ' = ' + c )

return c

} } } </script>

**MyComponent2.vue**

<template>

<div>

<h3> My name is {{firstname}} &nbsp &nbsp {{lastname}} </h3>

<h4> My age is {{age}} </h4>

<h4> {{result}} </h4>

<h5 class="text-danger"> {{ComValue1}} </h5>

<h5> {{ComValue2}} </h5>

<slot> </slot>

<!-- <button @click="toggleShow"> Open Container </button> -->

</div>

</template>

<script>

export default

{ props: ['ComValue1', 'ComValue2'],

data(){

return{

firstname : 'Arulseeli',

lastname : 'Churchill',

age : 20,

result : 'true'

// showContainer : false

}

}

}

</script>

**App.vue**

<template>

<!-- <div>

<ListData></ListData>

</div> -->

<div>

<ExpressionsVue></ExpressionsVue>

<!-- <MouseEventsVue></MouseEventsVue> -->

<!-- <ImageShowVue></ImageShowVue> -->

<!-- <Binding1></Binding1> -->

<!-- <KeyEventsVue> </KeyEventsVue> -->

</div>

<div>

<!-- <CompFunctionVue> </CompFunctionVue> -->

<!-- <CompFilter> </CompFilter> -->

<!-- <CompGetSet> </CompGetSet> -->

<!-- <CompMapGetter> </CompMapGetter> -->

</div>

</template>

<script setup>

import ListData from './components/list/ListData.vue'

import ExpressionsVue from './components/Basics/Expressions.vue'

import MouseEventsVue from './components/basics/MouseEvents.vue'

import ImageShowVue from './components/basics/ImageShow.vue'

import Binding1 from './components/basics/Binding1.vue'

import KeyEventsVue from './components/basics/KeyEvents.vue'

import CompFunctionVue from './components/Computed/CompFunction.vue'

import CompFilterVue from './components/Computed/CompFilter.vue'

import CompFilter from './components/Computed/CompFilter.vue'

import CompGetSet from './components/Computed/CompSetGet.vue'

import KeyEvents from './components/basics/KeyEvents.vue'

// import CompMapGetterVue from './components/Computed/CompMapGetter.vue'

// import CompMapGetter from './components/Computed/CompMapGetter.vue'

</script>

**Expressions.vue --- in component folder**

<template>

<div class="container-fluid mt-5">

<h1 class="text-center text-success "> Expressions </h1>

</div>

<div class="container mt-3 pt-3 text-center text-success border">

<h3> The selected Product : {{product}} </h3>

<h4> Required Quantity : {{quantity}} </h4>

<button type="button" @click="changeProduct"> Change </button>

<br /><br />

<button v-on:click = "quantity++" > + </button> <b>Quantity </b>

<button v-on:click = "decrease" > - </button>

<!-- <h2> <div @click="changeName"> Change the name</div> </h2>

<button @click="dialog">Press me</button> -->

</div>

<!-- <div class="container align-right">

<button @click="toggleProduct">

<span v-if = "showProduct>"> HIDE PRODUCT </span>

<span v-else> SHOW PRODUCT </span>

</button>

</div> -->

</template>

<script>

export default{

data(){

return({

product : 'Head Set',

quantity : 0 ,

status : true

})

},

methods : {

decrease()

{

if (this.quantity<=0)

this.quantity=0;

else

this.quantity--;

},

changeProduct(){

this.status=!this.status

if (this.status)

this.product='Head Set'

else

this.product='Pen Drive'

//this.product = (this.status) ? 'Head set' : 'Pen Drive';

}

}

}

</script>

**List Data.vue**

<template>

<div class="container mt-3 pt-3">

<u><h2 class="text-center text-primary bg-secondary mt-3">

Product Details </h2></u>

</div>

<div class="container mt-3 pt-3 text-left text-worning">

<div class="text-center" v-if="showProduct">

<strong>

<p> {{product[0].pname}} - {{product[0].ptype}} - {{product[0].quantity}} - {{product[0].price}} </p>

<p> {{product[1].pname}} - {{product[1].ptype}} - {{product[1].quantity}} - {{product[1].price}} </p>

<p> {{product[2].pname}} - {{product[2].ptype}} - {{product[2].quantity}} - {{product[2].price}} </p>

</strong>

</div>

</div>

<div class="container align-right text-center">

<button @click="toggleProduct">

<span v-if = "showProduct"> HIDE PRODUCT </span>

<span v-else> SHOW PRODUCT </span>

</button>

</div>

<div class="container">

<h3 class="text-primary text-center"> Product Details </h3>

<ul class="list-group">

<li class="card card-body mb-2 border-primary" v-for="pdt in product">

<div class="row">

<!-- <div class="col-md-4" @click="toggleProduct">

<img :src="pdt.image" :alt="pdt.pname" width="150" height="150" />

</div> -->

<div class="col-md-10" >

<p> <h5> Product Name : {{pdt.pname}} </h5> </p>

<p> <h6> Product Type : {{pdt.ptype}} </h6> </p>

<p> <h6> Quantity : {{pdt.quantity}} </h6> </p>

<p> <h6> Price : {{pdt.price}} </h6> </p>

</div>

<!-- <button name="change" @click="toggleProduct">

<span v-if="showProduct"> Hide Product </span>

<span v-else> Show Product </span>

</button> -->

</div>

</li>

</ul>

</div>

</template>

<script>

export default {

data() {

return {

showProduct : true,

product : [

{

pname : 'Shirt',

ptype : 'Formal Men\'s wear',

quantity : 10,

price : 1670 ,

image : './src/assets/images/Shirt.jpg'

},

{

pname : 'Jeans',

ptype : 'Casual Men\'s wear',

quantity : 35,

price : 910,

image : './src/assets/images/Jean.jpg'

},

{ pname : 'T-Shirt',

ptype : 'Casual Men\'s wear',

quantity : 80,

price : 670,

image : './src/assets/images/T-Shirt.jpg'

}

]

}

},

methods :

{

toggleProduct()

{

this.showProduct = !this.showProduct

}

} } </script>

**KeyEvents.vue**

<template>

<div>

Enter the message : <input type="text" v-model="name" @keyup.enter="showAlert(name)" />

<Br></Br>

Enter the Title : <input type='text' placeholder='Type something' @keypress='handleKeyPressed' @keydown='handleKeyDown' @keyup='handleKeyUp' />

<Br></Br>

</div>

</template>

<script>

export default {

data() {

return {

name: ""

};

},

methods: {

showAlert(message){

var temp='Welcome to ' + message

alert(temp);

console.log(temp)

},

handleKeyPressed(){

console.log('Key is Pressed')

},

handleKeyDown(){

console.log('Key is Down')

},

handleKeyUp(){

console.log('Key is Up')

}, } } </script>

**MouseEvents.vue**

<style>

.box{

padding : 100px 0;

width : 400px;

text-align : center;

background: #ddd;

margin: 20px;

display: inline-block;

}

</style>

<template>

Mouse Events

<div class="row">

<!-- <div class="box" v-on:mouseover="handleEvent"></div> --> <!-- Giving the mouseover event simply -->

<!-- <div class="box" v-on:mouseover="handleEvent">Mouseover(enter)</div> --> <!-- Giving the mouseover event with label -->

<!-- <div class="box" v-on:mouseover="handleEvent(10)"></div> --> <!-- Giving the mouseover event with 10 as argument -->

<!--<div class="box" v-on:mouseover="handleEvent($event)"></div> --> <!--Passing events-->

<div class="box" v-on:mouseover="handleEvent($event,10)">Mouse Over</div> <!--Passing events with data-->

<div class="box" v-on:mouseleave="handleEvent">Mouse Leave</div>

<div class="box" @dblclick="handleEvent($event)">Double Click</div>

<div class="box" @mousemove="handleMouseMove">Position - {{x}} , {{y}} </div>

</div>

</template>

<script>

export default{

data(){

return {

x : 0,

y : 0

}

},

methods:

{ //handleEvent(e,data)

handleEvent(e, data)

{

console.log(e,e.type)

if (data)

{

console.log(data)

}

},

handleMouseMove(e)

{

this.x = e.offsetX;

this.y = e.offsetY;

}

},

showAlert: (message) => {

alert(message);

}

}

</script>

**ImageShow.vue**

<template>

<div>

<h3> 1. a href -- Link substitution</h3>

<a href="{{url1}}"> CG-VAK , Coimbatore </a> <br> <br>

<!-- URL Won't be coming --- Use v-bind-->

<h3> 2. Attribute binding in a href --- v-bind </h3>

<a v-bind:href="url1"> CG-VAK, CBE </a>

<!-- Attribute binding --> <br>

<h3> 3. Attribute binding -- Other way (Short cut)</h3>

<a :href="url2"> Indian Tourism -- Getting Other way </a>

<!-- Attribute binding : Other way --> <br>

<h3> 4. Display image using attribute binding in img tag

</h3><img :src = "product[0].image" :alt="product[0].image" />

<img src="{{product[0].image}}" :alt="product[0].image" />

</div>

</template>

<script>

export default{

data(){

return({

url1 : 'https://craft.co/cg-vak-software-exports',

url2 : 'https://www.bing.com/search?q=indian+tourist+places',

product :[

{

pname : 'LOPTOP',

ptype : 'Lenova',

price : '56700',

image : './src/assets/images/Laptop01.jpg'

},

{

pname : 'LOPTOP',

ptype : 'DELL',

price : '75300',

image : './src/assets/images/Laptop02.jpg'

},

{

pname : 'LOPTOP',

ptype : 'HCL',

price : '62500',

image : './src/assets/images/Laptop03.jpg'

},

]

})

} } </script>

**Binding1.vue ----- Explains Various binding**

<template>

<div class="container">

<div v-bind:style="{ color: activeColor, fontSize: fontSize + 'px' }">

Hello Welcome to Vue JS Training <!-- inline style binding-->

</div>

<div v-bind:style="styleObject">

Hello! Welcome to all the participants !!! <!-- Object based style binding-->

</div>

<div class= "static"

v-bind:class="{ active: isActive, 'text-danger': hasError }">

Welcome all !!! <!-- Inline class binding-->

</div>

<div v-bind:class="[activeClass, errorClass]"> Class binding as an array</div>

<div v-bind:class="[isActive ? activeClass : '', errorClass]"> Conditional based binding </div>

<div v-bind:class="classObject"> Object based class binding </div>

<h3 class="text-primary text-center"> Product Details </h3>

<ul class="list-group">

<li v-for="pdt in product" v-bind:class="{fav:pdt.isFav}" @click="toggleFav(pdt)" >

<div class="row">

<div class="col-md-4">

<img :src="pdt.image" :alt="pdt.pname" width="150" height="150" />

</div>

<div class="col-md-8" >

<p> <h4> Product Name : {{pdt.pname}} </h4> </p>

<p> <h6> Product Type : {{pdt.ptype}} </h6> </p>

<p> <h6> Price : {{pdt.price}} </h6> </p>

</div>

</div>

<hr />

</li>

</ul>

</div>

</template>

<!-- class="card card-body mb-2 border-primary" -->

<script>

export default{

data(){

return({

activeColor : 'red',

fontSize : 30,

styleObject: {

color: 'green',

fontSize: '25px'

},

isActive: true,

hasError: true,

classObject: {

active: true,

'text-primary': true

},

activeClass: 'active',

errorClass: 'text-warning',

product :[

{

pname : 'LOPTOP',

ptype : 'Electronics',

price : 76700,

image : './src/assets/images/Laptop01.jpg',

isFav : true

},

{

pname : 'Shirt',

ptype : 'Dress',

price : '750',

image : './src/assets/images/Shirt.jpg',

isFav : false

},

{

pname : 'Skirt',

ptype : 'Dress',

price : '2000',

image : './src/assets/images/Skirt.jpg',

isFav : true

}

]

})

},

methods: {

toggleFav(pdt)

{

pdt.isFav = !pdt.isFav

}

}

// filteredProduct()

// {

// return this.product.filter(

// (product) => product.isFav

// )

// }

} </script>

<style>

body {

background: #eee;

max-width: 960px;

margin: 20px auto;

}

p, h3, ul {

margin: 0;

padding: 0;

}

li{

list-style-type: none ;

background: #fff;

margin: 20px auto;

padding: 10px 20px;

border-radius: 10px;

display: flex;

align-items: center;

justify-content: space-between;

}

li.fav {

background: #ff9ad2;

color: white;

}

</style>