**Vuejs**

**Installation**

- npm i -g @vue/cli

- vue create vue-crash-2022

**Create component**

App.vue

<template>

    <div class="container">

       <HeaderComponent title = "Task Tracker" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

export default {

  name: 'App',

  components: {

       HeaderComponent,

  },

}

</script>

Components/Header.vue

<template>

     <header>

        <h1>{{title}}</h1>

        <ButtonComponent text = "Add Task" color="green"/>

     </header>

</template>

<script>

import ButtonComponent from './Button.vue'

export default{

    name: 'HeaderComponent',

    props:{

        title: {

            type: String,

            default: "Title of page"

        }

    },

    components:{

        ButtonComponent

    }

}

</script>

<style>

   header{

       display: flex;

       justify-content: space-between;

       align-items: center;

       margin-bottom: 20px;

   }

</style>

Component/Button.vue

<template>

     <button @click="onDelete()" :style="{background:color}" class="btn">{{text}}</button>

</template>

<script>

export default {

    name: 'ButtonComponent',

    props:{

        text: String,

        color: String

    },

    methods:{

        onDelete(){

            console.log("clcik")

        }

    }

}

</script>

**Work with basic data**

<template>

    <div class="container">

       <HeaderComponent title = "Task Tracker" />

       <TasksComponent :tasks = "tasks" /> // :tasks = v-bind

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

export default {

  name: 'App',

  components: {

       HeaderComponent,

       TasksComponent

  },

  data(){

      return {

        tasks:[]

      }

  },

  //default create

  created(){

      this.tasks = [

          {

            id: 1,

            text: 'Doctors Appointment',

            day: 'March 1st at 2:30pm',

            reminder: false,

          },

           {

            id: 2,

            text: 'Meeting at School',

            day: 'September 1st at 3:30pm',

            reminder: true,

          },

           {

            id: 3,

            text: 'Food Shopping',

            day: 'November 1st at 2:30pm',

            reminder: false,

          }

      ]

  }

}

</script>

Components/tasks.vue

<template>

<template>

       <div :key="task.id" v-for="task in tasks">

             <!-- 3- using component -->

            <TaskItem :task="task" />

       </div>

</template>

<script>

//1- import component

import TaskItem from './Task'

export default {

    name: 'TasksComponent',

    props:{

        tasks: Array

    },

    //2- register component

    components:{

        TaskItem

    }

}

</script>

// 1- import component

// 2- register component

// 3- use component

Components/task.vue

<template>

   <div :class="[task.reminder? 'reminder':'task', 'task']">

       <h3>{{task.text}}

        <i class="fas fa-times"></i>

       </h3>

       <p>{{task.day}}</p>

   </div>

</template>

<script>

export default {

    name:'TaskItem',

    props:{

        task:Object

    }

}

</script>

**WORK WITH DELETE CLICK**

Components/task.vue

<template>

   <div :class="[task.reminder? 'reminder':'task', 'task']">

       <h3>{{task.text}}

        <i @click="onDelete(task.id)" class="fas fa-times"></i>

       </h3>

       <p>{{task.day}}</p>

   </div>

</template>

<script>

export default {

    name:'TaskItem',

    props:{

        task:Object

    },

    methods:{

      onDelete(id){

          this.$emit('delete-task', id)

      }

    }

}

</script>

Components/tasks.vue

<template>

       <div :key="task.id" v-for="task in tasks">

             <!-- 3- using component -->

         <TaskItem @delete-task="$emit('delete-task', task.id)" :task="task" />

       </div>

</template>

<script>

//1- import component

import TaskItem from './Task'

export default {

    name: 'TasksComponent',

    props:{

        tasks: Array

    },

    //2- register component

    components:{

        TaskItem

    },

    emits:['delete-task'],

}

</script>

App.vue

<template>

    <div class="container">

       <HeaderComponent title = "Task Tracker" />

       <TasksComponent @delete-task="deleteTask" :tasks = "tasks" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

export default {

  name: 'App',

  components: {

       HeaderComponent,

       TasksComponent

  },

  data(){

      return {

        tasks:[]

      }

  },

  //default create

  created(){

      this.tasks = [

          {

            id: 1,

            text: 'Doctors Appointment',

            day: 'March 1st at 2:30pm',

            reminder: false,

          },

           {

            id: 2,

            text: 'Meeting at School',

            day: 'September 1st at 3:30pm',

            reminder: true,

          },

           {

            id: 3,

            text: 'Food Shopping',

            day: 'November 1st at 2:30pm',

            reminder: false,

          }

      ]

  },

  methods:{

    deleteTask(id){

          if(confirm('Are you sure?')){

            this.tasks = this.tasks.filter((task)=> task.id !== id)

          }

    }

  }

}

</script>

**WORK WITH DOUBLE CLICK**

Components/task.vue

<template>

   <div @dblclick="$emit('toggle-reminder', task.id)" :class="[task.reminder? 'reminder':'task', 'task']">

       <h3>{{task.text}}

        <i @click="$emit('delete-task',task.id)" class="fas fa-times"></i>

       </h3>

       <p>{{task.day}}</p>

   </div>

</template>

<script>

export default {

    name:'TaskItem',

    props:{

        task:Object

    }

}

</script>

Components/tasks.vue

<template>

       <div :key="task.id" v-for="task in tasks">

             <!-- 3- using component -->

            <TaskItem @toggle-reminder="$emit('toggle-reminder', task.id)" @delete-task="$emit('delete-task', task.id)" :task="task" />

       </div>

</template>

<script>

//1- import component

import TaskItem from './Task'

export default {

    name: 'TasksComponent',

    props:{

        tasks: Array

    },

    //2- register component

    components:{

        TaskItem

    },

    emits:['delete-task', 'toggle-reminder'],

}

</script>

App.vue

<template>

    <div class="container">

       <HeaderComponent title = "Task Tracker" />

       <TasksComponent @toggle-reminder="toggleReminder" @delete-task="deleteTask" :tasks = "tasks" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

export default {

  name: 'App',

  components: {

       HeaderComponent,

       TasksComponent

  },

  data(){

      return {

        tasks:[]

      }

  },

  //default create

  created(){

      this.tasks = [

          {

            id: 1,

            text: 'Doctors Appointment',

            day: 'March 1st at 2:30pm',

            reminder: false,

          },

           {

            id: 2,

            text: 'Meeting at School',

            day: 'September 1st at 3:30pm',

            reminder: true,

          },

           {

            id: 3,

            text: 'Food Shopping',

            day: 'November 1st at 2:30pm',

            reminder: false,

          }

      ]

  },

  methods:{

    deleteTask(id){

          if(confirm('Are you sure?')){

            this.tasks = this.tasks.filter((task)=> task.id !== id)

          }

    },

    toggleReminder(id){

        this.tasks = this.tasks.map((task)=>task.id === id ?{...task, reminder:!task.reminder}:task)

    }

  }

}

</script>

**Add Task**

Components/AddTask.vue

<template>

   <form @submit="onSubmit" class="add-form">

    <div class="form-control">

      <label>Task</label>

      <input type="text" v-model="text" name="text" placeholder="Add Task" />

    </div>

    <div class="form-control">

      <label>Day & Time</label>

      <input

        type="text"

        v-model="day"

        name="day"

        placeholder="Add Day & Time"

      />

    </div>

    <div class="form-control form-control-check">

      <label>Set Reminder</label>

      <input type="checkbox" v-model="reminder" name="reminder" />

    </div>

    <input type="submit" value="Save Task" class="btn btn-block" />

  </form>

</template>

<script>

    export default{

        name:"AddTask",

        data(){

            return {

                text: '',

                day: '',

                reminder: false

            }

        },

        methods:{

            onSubmit(e){

                e.preventDefault()

                if(!this.text){

                    alert('Please add a task')

                    return

                }

                const newTask = {

                    id: Math.floor(Math.random() \* 1000000),

                    text: this.text,

                    day: this.day,

                    reminder: this.reminder

                }

                console.log(newTask)

                this.$emit('add-task', newTask)

                this.text = ''

                this.day = ''

                this.reminder = false

            }

        }

    }

</script>

App.vue

<template>

    <div class="container">

       <HeaderComponent title = "Task Tracker" />

       <AddTask @add-task = "addTask" />

       <TasksComponent @toggle-reminder="toggleReminder" @delete-task="deleteTask" :tasks = "tasks" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

import AddTask from './components/AddTask.vue'

export default {

  name: 'App',

  components: {

    HeaderComponent,

    TasksComponent,

    AddTask

},

  data(){

      return {

        tasks:[]

      }

  },

  //default create

  created(){

      this.tasks = [

          {

            id: 1,

            text: 'Doctors Appointment',

            day: 'March 1st at 2:30pm',

            reminder: false,

          },

           {

            id: 2,

            text: 'Meeting at School',

            day: 'September 1st at 3:30pm',

            reminder: true,

          },

           {

            id: 3,

            text: 'Food Shopping',

            day: 'November 1st at 2:30pm',

            reminder: false,

          }

      ]

  },

  methods:{

    addTask(task){

       this.tasks = [...this.tasks, task]

    },

    deleteTask(id){

          if(confirm('Are you sure?')){

            this.tasks = this.tasks.filter((task)=> task.id !== id)

          }

    },

    toggleReminder(id){

        this.tasks = this.tasks.map((task)=>task.id === id ?{...task, reminder:!task.reminder}:task)

    }

  }

}

</script>

**Toggle open close task form**

Components/Button.vue

<template>

     <button @click="onClick()" :style="{background:color}" class="btn">{{text}}</button>

</template>

<script>

export default {

    name: 'ButtonComponent',

    props:{

        text: String,

        color: String

    },

    methods:{

        onClick(){

            this.$emit('btn-click')

        }

    }

}

</script>

Components/header.vue

<template>

     <header>

        <h1>{{title}}</h1>

        <ButtonComponent @btn-click="$emit('toggle-add-task')" :text = "showAddTask ?'Close':'Add Task'" :color="showAddTask?'red':'green'"/>

     </header>

</template>

<script>

import ButtonComponent from './Button.vue'

export default{

    name: 'HeaderComponent',

    props:{

        title: {

            type: String,

            default: "Title of page"

        },

        showAddTask:Boolean

    },

    components:{

        ButtonComponent

    }

}

</script>

App.vue

<template>

    <div class="container">

       <HeaderComponent @toggle-add-task="toggleAddTask"

       title = "Task Tracker" :showAddTask="showAddTask" />

       <div v-show="showAddTask">

          <AddTask @add-task = "addTask" />

       </div>

       <TasksComponent @toggle-reminder="toggleReminder" @delete-task="deleteTask" :tasks = "tasks" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

import AddTask from './components/AddTask.vue'

export default {

  name: 'App',

  components: {

    HeaderComponent,

    TasksComponent,

    AddTask

},

  data(){

      return {

        tasks:[],

        showAddTask: false

      }

  },

  //default create

  created(){

      this.tasks = [

          {

            id: 1,

            text: 'Doctors Appointment',

            day: 'March 1st at 2:30pm',

            reminder: false,

          },

           {

            id: 2,

            text: 'Meeting at School',

            day: 'September 1st at 3:30pm',

            reminder: true,

          },

           {

            id: 3,

            text: 'Food Shopping',

            day: 'November 1st at 2:30pm',

            reminder: false,

          }

      ]

  },

  methods:{

    toggleAddTask(){

      this.showAddTask = !this.showAddTask

    },

    addTask(task){

       this.tasks = [...this.tasks, task]

    },

    deleteTask(id){

          if(confirm('Are you sure?')){

            this.tasks = this.tasks.filter((task)=> task.id !== id)

          }

    },

    toggleReminder(id){

        this.tasks = this.tasks.map((task)=>task.id === id ?{...task, reminder:!task.reminder}:task)

    }

  }

}

</script>

**FAKE SERVER**

npm i json-server

package.json

 "scripts": {

    "serve": "vue-cli-service serve",

    "build": "vue-cli-service build",

    "lint": "vue-cli-service lint",

    "backend": "json-server --watch db.json --port 5000"

  },

Create db.json

{

  "tasks": [

    {

      "id": 1,

      "text": "Doctors Appointment",

      "day": "March 1st at 2:30pm",

      "reminder": true

    },

    {

      "id": 2,

      "text": "Meeting at School",

      "day": "June 1st at 2:30pm",

      "reminder": true

    },

    {

      "id": 2,

      "text": "Food Shopping",

      "day": "September 1st at 2:30pm",

      "reminder": true

    },

    {

      "id": 85019,

      "text": "werewr",

      "day": "werwer",

      "reminder": false

    }

  ]

}

npm run backend

App.vue

<template>

    <div class="container">

       <HeaderComponent @toggle-add-task="toggleAddTask"

       title = "Task Tracker" :showAddTask="showAddTask" />

       <div v-show="showAddTask">

          <AddTask @add-task = "addTask" />

       </div>

       <TasksComponent @toggle-reminder="toggleReminder" @delete-task="deleteTask" :tasks = "tasks" />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import TasksComponent from './components/Tasks'

import AddTask from './components/AddTask.vue'

export default {

  name: 'App',

  components: {

    HeaderComponent,

    TasksComponent,

    AddTask

},

  data(){

      return {

        tasks:[],

        showAddTask: false

      }

  },

  //default create

  async created(){

      this.tasks = await this.fetchTasks()

  },

  methods:{

    toggleAddTask(){

      this.showAddTask = !this.showAddTask

    },

    async addTask(task){

       const res = await fetch('api/tasks', {

               method: 'POST',

               headers:{

                   'Content-type': 'application/json',

               },

               body: JSON.stringify(task)

       })

       const data = await res.json()

       this.tasks = [...this.tasks, data]

    },

    async deleteTask(id){

          if(confirm('Are you sure?')){

            const res = await fetch(`api/tasks/${id}`, {

                method: 'DELETE'

            })

            res.status === 200 ? this.tasks = this.tasks.filter((task)=> task.id !== id) : alert('Error delete task')

          }

    },

    async toggleReminder(id){

        const taskToToggle = await this.fetchTask(id)

        const updTask = {

              ...taskToToggle, reminder: !taskToToggle.reminder

        }

        const res = await fetch(`api/tasks/${id}`, {

            method: 'PUT',

            headers:{

              'Content-type': 'application/json'

            },

            body: JSON.stringify(updTask)

        })

        const data = await res.json()

        this.tasks = this.tasks.map((task)=>task.id === id ?{...task, reminder:data.reminder}:task)

    },

    async fetchTasks(){

      const res = await fetch('api/tasks');

      const data = await res.json();

      return data

    },

    async fetchTask(id){

      const res = await fetch(`api/tasks/${id}`)

      const data = await res.json();

      return data

    },

  }

}

</script>

Components/AddTask.vue

<template>

   <form @submit="onSubmit" class="add-form">

    <div class="form-control">

      <label>Task</label>

      <input type="text" v-model="text" name="text" placeholder="Add Task" />

    </div>

    <div class="form-control">

      <label>Day & Time</label>

      <input

        type="text"

        v-model="day"

        name="day"

        placeholder="Add Day & Time"

      />

    </div>

    <div class="form-control form-control-check">

      <label>Set Reminder</label>

      <input type="checkbox" v-model="reminder" name="reminder" />

    </div>

    <input type="submit" value="Save Task" class="btn btn-block" />

  </form>

</template>

<script>

    export default{

        name:"AddTask",

        data(){

            return {

                text: '',

                day: '',

                reminder: false

            }

        },

        methods:{

            onSubmit(e){

                e.preventDefault()

                if(!this.text){

                    alert('Please add a task')

                    return

                }

                const newTask = {

                    // id: Math.floor(Math.random() \* 1000000),

                    text: this.text,

                    day: this.day,

                    reminder: this.reminder

                }

                console.log(newTask)

                this.$emit('add-task', newTask)

                this.text = ''

                this.day = ''

                this.reminder = false

            }

        }

    }

</script>

**Router**

npm i vue-router@next

src/router/index.js

import {createRouter, createWebHistory} from 'vue-router'

import HomePage from '../views/HomePage'

import AboutPage from '../views/AboutPage'

const routes = [

    {

        path: '/',

        name: 'Home',

        component: HomePage

    },

    {

        path: '/about',

        name: 'About',

        component: AboutPage

    }

]

const router = createRouter({

    history: createWebHistory(process.env.BASE\_URL),

    routes

})

export default router

views/HomePage.vue

<template>

       <div v-show="showAddTask">

          <AddTask @add-task = "addTask" />

       </div>

       <TasksComponent @toggle-reminder="toggleReminder"

       @delete-task="deleteTask" :tasks = "tasks" />

</template>

<script>

    import TasksComponent from '../components/Tasks'

    import AddTask from '../components/AddTask.vue'

    export default{

        name: 'HomePage',

        props:{

            showAddTask:Boolean

        },

        components:{

            TasksComponent,

            AddTask

        },

        data(){

            return {

                tasks:[],

            }

         },

           //default create

            async created(){

                this.tasks = await this.fetchTasks()

            },

         methods:{

            async addTask(task){

                 const res = await fetch('api/tasks', {

                 method: 'POST',

                 headers:{

                'Content-type': 'application/json',

               },

               body: JSON.stringify(task)

                })

                const data = await res.json()

                this.tasks = [...this.tasks, data]

        },

        async deleteTask(id){

            if(confirm('Are you sure?')){

                const res = await fetch(`api/tasks/${id}`, {

                    method: 'DELETE'

                })

                res.status === 200 ? this.tasks = this.tasks.filter((task)=> task.id !== id) : alert('Error delete task')

            }

        },

        async toggleReminder(id){

            const taskToToggle = await this.fetchTask(id)

            const updTask = {

                ...taskToToggle, reminder: !taskToToggle.reminder

            }

            const res = await fetch(`api/tasks/${id}`, {

                method: 'PUT',

                headers:{

                'Content-type': 'application/json'

                },

                body: JSON.stringify(updTask)

            })

            const data = await res.json()

            this.tasks = this.tasks.map((task)=>task.id === id ?{...task, reminder:data.reminder}:task)

        },

        async fetchTasks(){

            const res = await fetch('api/tasks');

            const data = await res.json();

            return data

        },

        async fetchTask(id){

            const res = await fetch(`api/tasks/${id}`)

            const data = await res.json();

            return data

        },

    }

  }

</script>

Views/AboutPage.vue

<template>

     <h3>Version 1.0.0</h3>

     <router-link to="/">Go back</router-link>

</template>

src/main.js

import { createApp } from 'vue'

import App from './App.vue'

import router from './router'

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

src/App.vue

<template>

    <div class="container">

       <HeaderComponent @toggle-add-task="toggleAddTask"

       title = "Task Tracker" :showAddTask="showAddTask" />

      <router-view :showAddTask="showAddTask"></router-view>

      <FooterComponent />

    </div>

</template>

<script>

import HeaderComponent from './components/Header'

import FooterComponent from './components/FooterComponent'

export default {

  name: 'App',

  components: {

    HeaderComponent,

    FooterComponent,

},

  data(){

      return {

        showAddTask: false

      }

  },

  methods:{

    toggleAddTask(){

      this.showAddTask = !this.showAddTask

    },

  }

}

</script>

Components/header.vue

<template>

     <header>

        <h1>{{title}}</h1>

        <ButtonComponent v-show="homePage" @btn-click="$emit('toggle-add-task')" :text = "showAddTask ?'Close':'Add Task'" :color="showAddTask?'red':'green'"/>

     </header>

</template>

<script>

import ButtonComponent from './Button.vue'

export default{

    name: 'HeaderComponent',

    props:{

        title: {

            type: String,

            default: "Title of page"

        },

        showAddTask:Boolean

    },

    components:{

        ButtonComponent

    },

    computed:{

        homePage() {

            if(this.$route.path === '/'){

                return true

            }else{

                return false

            }

        }

    }

}

</script>

Components/FooterComponent.vue

<template>

    <footer>

        <p>Copyright &copy; 2022</p>

        <router-link to="/about">About</router-link>

    </footer>

</template>