KB금융그룹 | 국민의 평생 금융파트너

2025년 상반기 K-디지털 트레이닝

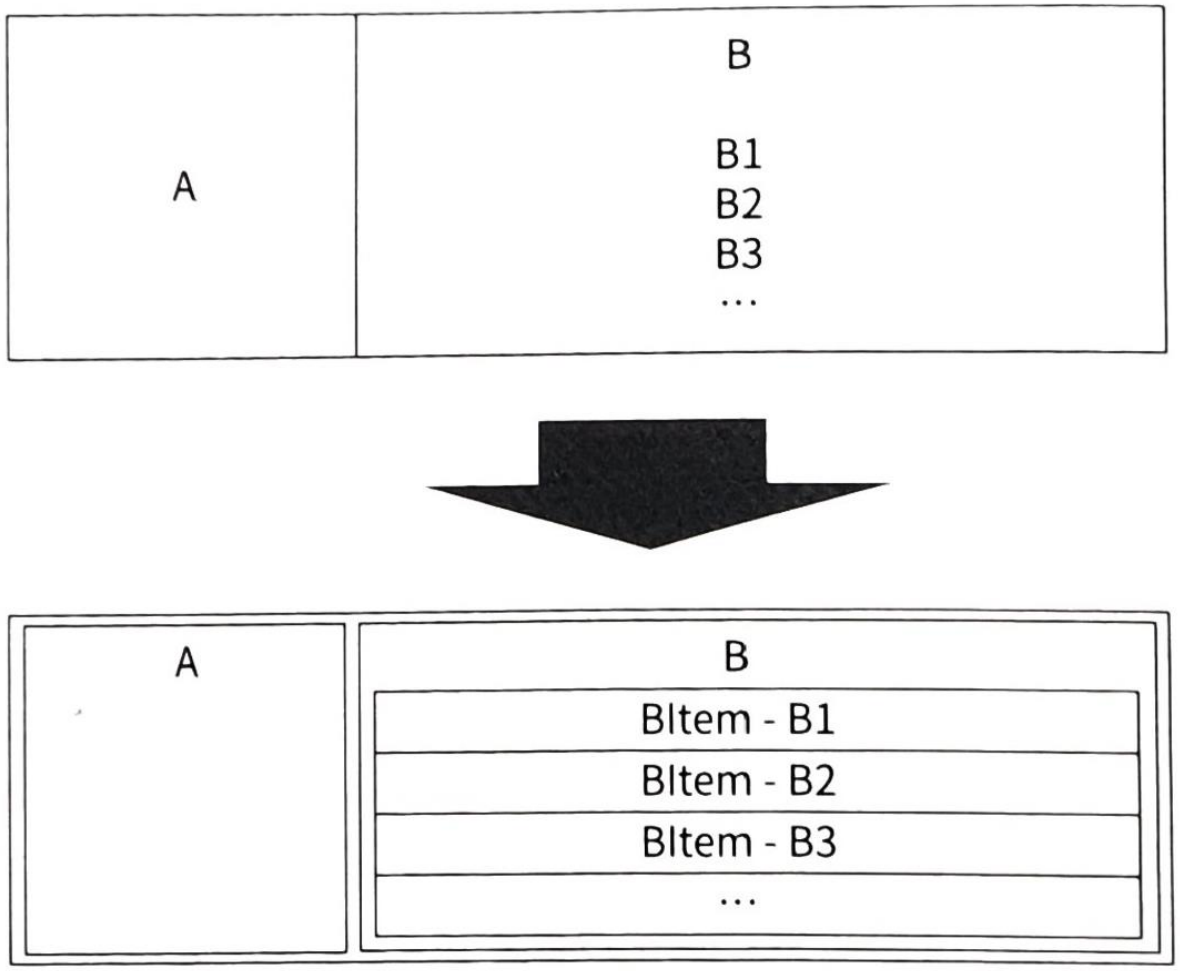
TodoList 예제 리팩토링

[KB] IT's Your Life

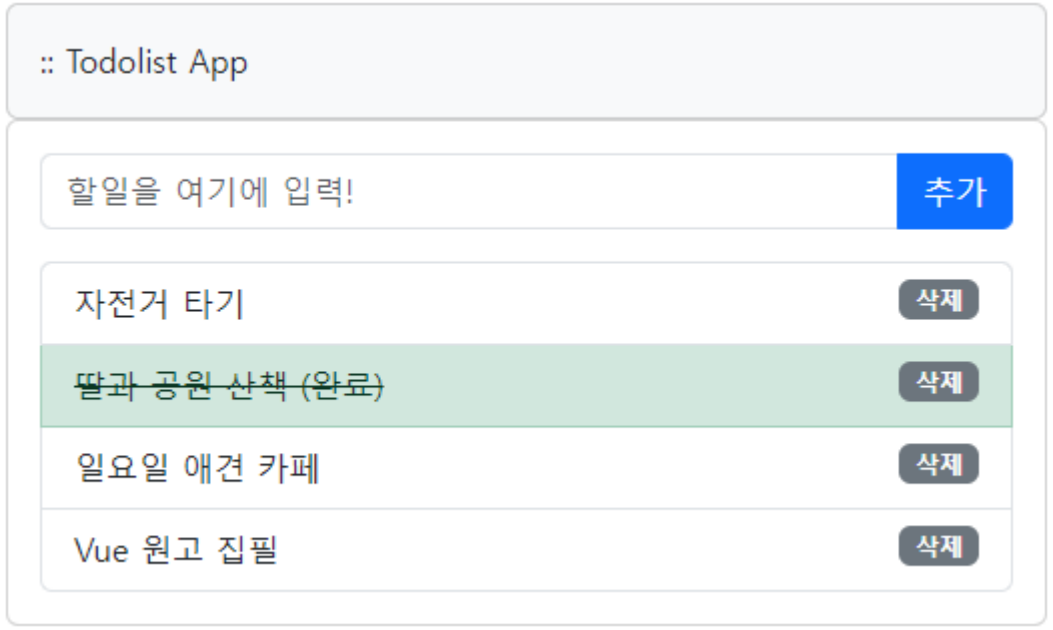
KB 국민은행

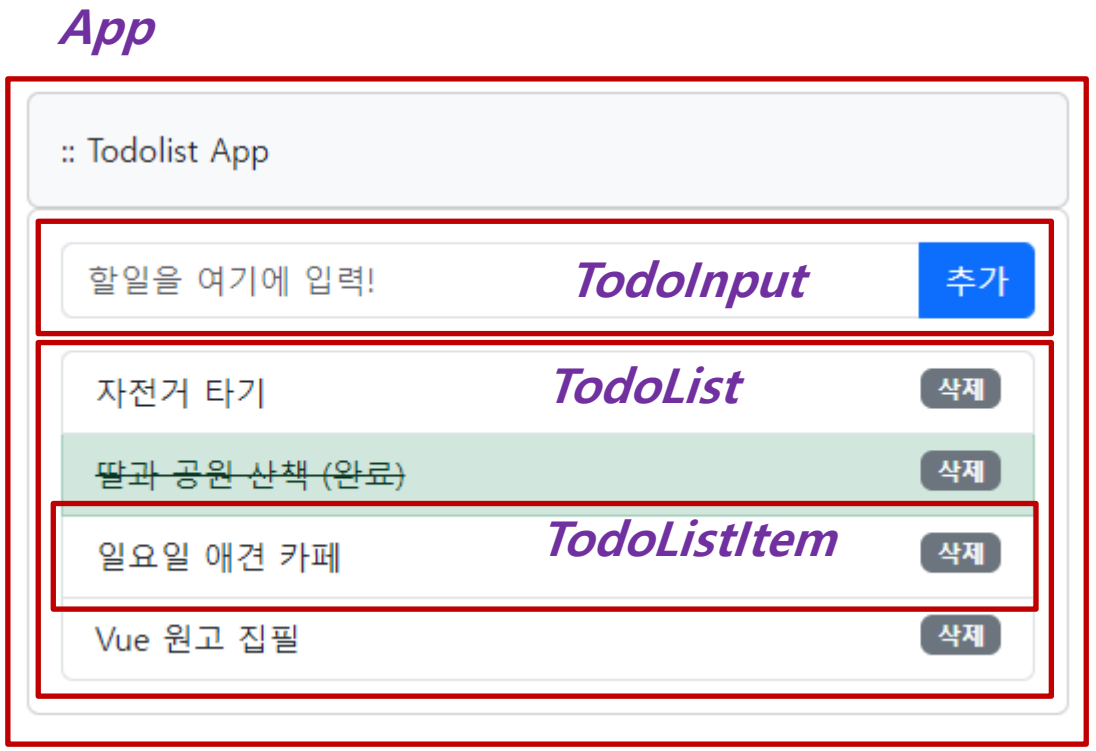
컴포넌트 분할 기준

- 한 번에 변경되는 데이터를 렌더링하는 UI 단위로 컴포넌트를 분할
  → 변경된 데이터만 다시 렌더링



TodoList 앱 화면의 컴포넌트 분할





데이터 관리

- 화면 단위의 데이터와 메서드 기능을 상위 컴포넌트에 집중

[관리해야 할 데이터]

```
{
   todoList : [
      { id: 1, todo:"자전거 타기", completed: false },
      { id: 2, todo:"딸과 공원 산책", completed: true },
      { id: 3, todo:"일요일 애견 카페", completed: false },
      { id: 4, todo:"Vue 원고 집필", completed: false },
   ]
}
```

메서드

[메서드 목록]

- addTodo(todo)
- deleteTodo(id)
- toggleCompleted(id)

[수신 이벤트 목록]

- add-todo : 전달 인자-todo
- delete-todo : 전달 인자-id
- toggle-completed : 전달 인자-id

1 컴포넌트 분할과 정의

컴포넌트

[컴포넌트 목록]

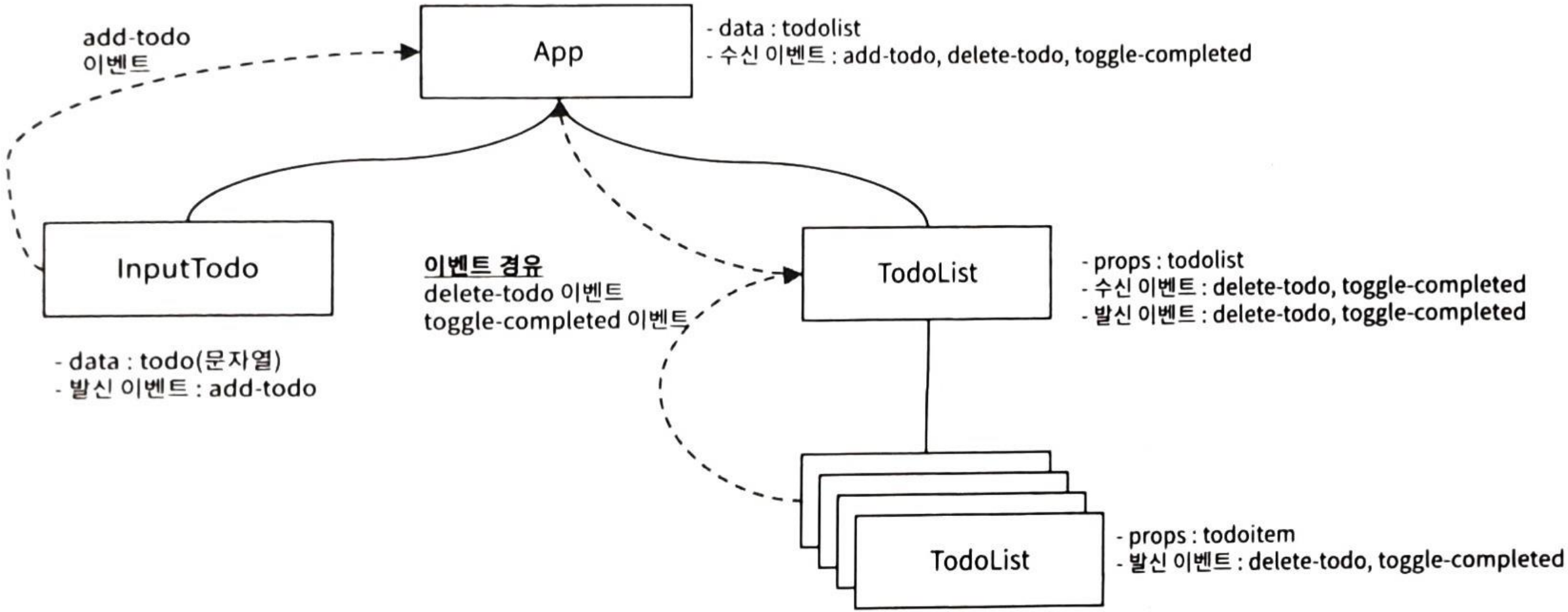
* App 컴포넌트
  - data : todoList 배열
  - methods : addTodo, deleteTodo, toggleCompleted 메서드
  - 수신 이벤트 : add-todo, delete-todo, toggle-completed

* InputTodo 컴포넌트
  - data : todo 문자열 값
  - 발신 이벤트 : add-todo

* TodoList 컴포넌트
  - props : todoList 배열(todoList)
  - 발신이벤트 : delete-todo(경유), toggle-completed(경유)
  - 수신이벤트 : delete-todo(경유), toggle-completed(경유)

* TodoListItem 컴포넌트
  - props : todoItem(todoList 배열의 값 하나)
  - 발신 이벤트 : delete-todo, toggle-completed

TodoList 앱 컴포넌트 계층 구조

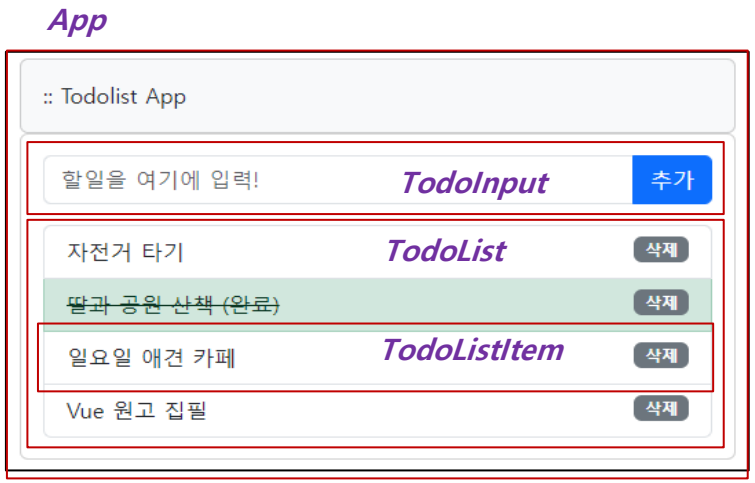


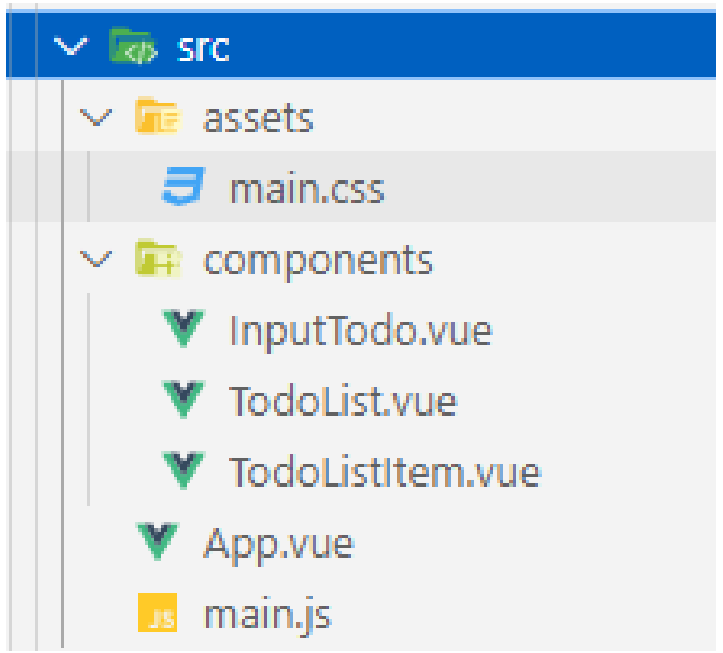
프로젝트 만들기

npm init vue todolist-app
--> 모두 No 선택
cd todolist-app
npm install
npm install bootstrap@5

컴포넌트 파일 생성

- src/assets/main.css
- src/components/InputTodo.vue
- src/components/TodoList.vue
- src/components/TodoLsitItem.vue





src/main.js

```
import 'bootstrap/dist/css/bootstrap.css'
import './assets/main.css'

import { createApp } from 'vue'
import App from './App.vue'

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

src/assets/main.css 기본 스타일 정의

```
body {
  margin: 0;
  padding: 0;
  font-family: sans-serif;
}
.title {
  text-align: center;
  font-weight: bold;
  font-size: 20pt;
}
.todo-done {
  text-decoration: line-through;
}
.container {
  padding: 10px 10px 10px 10px;
}
.panel-borderless {
  border: 0;
  box-shadow: none;
}
.pointer {
  cursor: pointer;
}
```

src/components/InputTodo.vue

```
<template>

</template>

<script>
    export default {
        name : "InputTodo",
    }
</script>
```

src/components/TodoListItem.vue

```
<template>

</template>

<script>
    export default {
        name : "TodoListItem",
    }
</script>
```

src/components/TodoList.vue

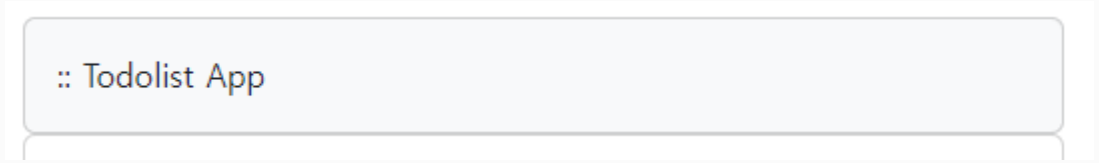
```
<template>

</template>

<script>
    export default {
        name : "TodoListI",
    }
</script>
```

src/App.vue

```
<template>
  <div id="app" class="container">
    <div class="card card-body bg-light">
      <div classe="title">:: Todolist App</div>
    </div>
    <div class="card card-default card-borderless">
      <div class="card-body">
        <InputTodo />
        <TodoList />
      </div>
    </div>
  </div>
</template>
```



src/App.vue

```
<script>
  import TodoList from './components/TodoList.vue'
  import InputTodo from './components/InputTodo.vue'

  let ts = new Date().getTime()

  export default {
    name: "App",
    components : { InputTodo, TodoList },
    data() {
      return {
        todoList : [
          { id: ts, todo:"자전거 타기", completed: false },
          { id: ts+1, todo:"딸과 공원 산책", completed: true },
          { id: ts+2, todo:"일요일 애견 카페", completed: false },
          { id: ts+3, todo:"Vue 원고 집필", completed: false },
        ]
      }
    },
```

src/App.vue

```
    methods: {
      addTodo(todo) {
        if (todo.length >= 2) {
          this.todoList.push({ id: new Date().getTime(), todo: todo, completed: false });
        }
      },
      deleteTodo(id) {
        let index = this.todoList.findIndex((item) => id === item.id);
        this.todoList.splice(index, 1);
      },
      toggleCompleted(id) {
        let index = this.todoList.findIndex((item) => id === item.id);
        this.todoList[index].completed = !this.todoList[index].completed;
      }
    }
  }
</script>
```

src/App.vue

```
<template>
  <div id="app" class="container">
    <div class="card card-body bg-light">
      <div classe="title">:: Todolist App</div>
    </div>
    <div class="card card-default card-borderless">
      <div class="card-body">
        <InputTodo @add-todo="addTodo" />
        <TodoList :todoList="todoList" @delete-todo="deleteTodo" @toggle-completed="toggleCompleted" />
      </div>
    </div>
  </div>
</template>
```

InputTodo.vue 컴포넌트

- 엔터를 치거나 추가 버튼을 눌렀을 때 새 할 일 등록되게 함

src/components/InputTodo.vue

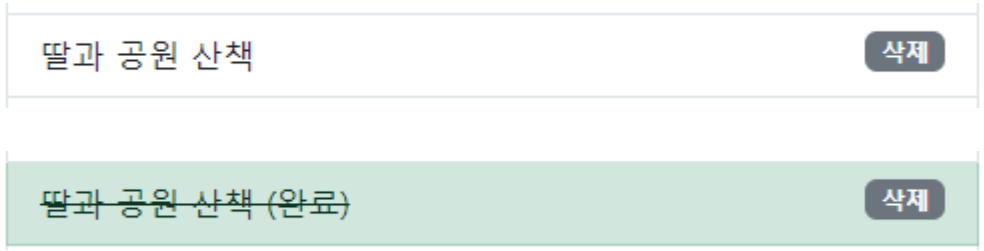
```
<template>
    <div class="row mb-3">
        <div class="col">
            <div class="input-group">
                <input type="text" class="form-control"
                    placeholder="할일을 여기에 입력!"
                    v-model.trim="todo"
                    @keyup.enter="addTodoHandler" />
                <span class="btn btn-primary input-group-addon"
                    @click="addTodoHandler">추가</span>
            </div>
        </div>
    </div>
</template>
```

src/components/InputTodo.vue

```
<script>
    export default {
        name : "InputTodo",
        data() {
            return { todo : "" }
        },
        emits : ["add-todo"],
        methods : {
            addTodoHandler() {
                if (this.todo.length >= 3) {
                    this.$emit('add-todo', this.todo);
                    this.todo = "";
                }
            }
        },
    }
</script>
```

TodoListItem.vue 컴포넌트

- 제목을 클릭했을 때 완료 여부 toggle



src/components/TodoListItem.vue

```
<script>
export default {
  name: 'TodoListItem',
  props: {
    todoItem: { type: Object, required: true },
  },
  emits: ['delete-todo', 'toggle-completed'],
};
</script>
```

src/components/TodoListItem.vue

```
<template>
  <li
    class="list-group-item"
    :class="{ 'list-group-item-success': todoItem.completed }"
    @click="$emit('toggle-completed', todoItem.id)"
  >
    <span class="pointer" :class="{ 'todo-done': todoItem.completed }">
      {{ todoItem.todo }} {{ todoItem.completed ? '(완료)' : '' }}
    </span>
    <span
      class="float-end badge bg-secondary pointer"
      @click.stop="$emit('delete-todo', todoItem.id)"
      >삭제</span
    >
  </li>
</template>
```

TodoList.vue 컴포넌트

src/components/TodoList.vue

```
<script>
import TodoListItem from './TodoListItem.vue';

export default {
  name: 'TodoList',
  components: { TodoListItem },
  props: {
    todoList: { type: Array, required: true },
  },
  emits: ['delete-todo', 'toggle-completed'],
};
</script>
```

src/components/TodoList.vue

```
<template>
  <div class="row">
    <div class="col">
      <ul class="list-group">
        <TodoListItem
          v-for="todoItem in todoList"
          :key="todoItem.id"
          :todoItem="todoItem"
          @delete-todo="$emit('delete-todo', $event)"
          @toggle-completed="$emit('toggle-completed', $event)"
        />
      </ul>
    </div>
  </div>
</template>
```