React + Vite Snippets

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<table>
<tr><th colspan="2">Snippets</th></tr>
<tr><th>Concept</th><th>Code Snippet/Prompt</th></tr>
<tr><td><b>Create a Vite app</b></td><td>

```
$ npm create-vite-app@latest
```

</td></tr>
<tr><td><b>Preview Vite app locally</b></td><td>

```
$ npm run dev
```

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<tr><td><b>Install React Router</b></td><td>

```
$ npm install react-router-dom
```

</td></tr>
<tr><td><b>Starter code (SPA)</b></td><td>

```
// SRC/MAIN.JSX ===================
import React from 'react'
import ReactDOM from 'react-dom/client'
import App from './App'
import './index.css'

ReactDOM.createRoot(document.getElementById('root')).render(
  <React.StrictMode>
    <App />
  </React.StrictMode>
)

// SRC/APP.JSX ===================
function App() {
  return <h1>Hello World!</h1>;
}

export default App;

// INDEX.HTML ===================
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <link rel="icon" type="image/svg+xml" href="/vite.svg" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>Vite + React</title>
  </head>
  <body>
    <div id="root"></div>
    <script type="module" src="/src/main.jsx"></script>
  </body>
</html>
```

</td></tr>
<tr><td><b>Starter code (React Router)</b></td><td>

```
import React from 'react'
import ReactDOM from 'react-dom/client'
import { RouterProvider, createBrowserRouter } from "react-router-dom"
```

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```
import App from './App'
import './index.css'

const router = createBrowserRouter([
  { path: "/", element: <App />},
])

ReactDOM.createRoot(document.getElementById('root')).render(
  <React.StrictMode>
    <RouterProvider router={router}/>
  </React.StrictMode>
)
```

RootLayout + Outlet (children routes)

```
// MAIN.JSX
const router = createBrowserRouter([
  {
    path: "/",
    element: <RootLayout />,
    children: [
      { path: "/", element: <App /> },
      { path: "/create-post", element: <NewPost /> },
    ],
  },
]);

// ROUTES/ROOTLAYOUT.JSX
import { Outlet } from "react-router-dom";
import MainHeader from "../components/MainHeader";

function RootLayout() {
  return (
    <>
      <MainHeader />
      <Outlet />
    </>
  );
}

export default RootLayout;
```

Export a component

```
export default Post;
```

Import a component

```
import Post from "./components/Post"
```

Defining our own component

```
const names = ["Johan", "Tenma"];

function Post() {
  const chosenName = Math.random() > 0.5 ? names[0] : names[1];
  return (
    <div>
      <p>{chosenName}</p>
    </div>
  );
}
```

```
export default Post;
```

Using components

```
import Post from "./components/Post";

function App() {
  return <Post />;
}

export default App;
```

Event Listener (example: onKeyDown)

```
import { useState } from "react";
import classes from './NewPost.module.css';

function NewPost() {
  const [ enteredBody, setEnteredBody] = useState("");
  // stateData[0] is current value
  // stateData[1] is state updating function (re-executes component
function)

  function changeBodyHandler(event) {
    setEnteredBody(event.target.value)
  }

  return (
    <form className={classes.form}>
      <p>
        <label htmlFor="body">Text</label>
        <textarea id="body" required rows={3}
onKeyDown={changeBodyHandler}/>
      </p>
      <p>{enteredBody}</p>
      <p>
        <label htmlFor="name">Your name</label>
        <input type="text" id="name" required />
      </p>
    </form>
  );
}

export default NewPost;
```

Making HTTP requests to an API route (fetch)

```
fetch("http://localhost:8080/posts", {
      method: "POST",
      body: JSON.stringify(postData),
      headers: {
        "Content-Type": "application/json"
      }
```

<Link>

Does what the anchor tag <a> does, without sending any HTTP request.

Example:

```
<Link to="/create-post" className={classes.button}>
  <MdPostAdd size={18} />
  New Post
</Link>
```