**Building a Simple React To-Do List Application**

In this project, we will create a simple To-Do List application using React. This guide will walk you through the setup steps, provide code snippets, and show screenshots of the application in action.

**Prerequisites**

Before you begin, ensure you have the following installed:

* Node.js and npm (Node Package Manager)
* A code editor (e.g., Visual Studio Code)

**Step-by-Step Guide**

**Step 1: Set Up the React Application**

1. **Create a new React application**:

npx create-react-app todo-list

1. **Move into the project directory**:

cd todo-list

1. **Start the React development server**:

npm start

This will start the development server and open your new React app in the browser at http://localhost:3000.

**Step 2: Create the To-Do List Components**

1. **Create the necessary components**: Create a components directory inside src and add the following files:
   * TodoInput.js
   * TodoList.js
2. **TodoInput Component**: This component will handle the input form for adding new to-dos.
3. import React,{useState} from "react";
4. function TodoInput(props) {
5. const [inputText,setInputText] = useState('');
6. const handleEnterPress = (e)=>{
7. if(e.keyCode===13){
8. props.addList(inputText)
9. setInputText("")
10. }
11. }
12. return (
13. <div className="input-container">
14. <input
15. type="text"
16. className="input-box-todo"
17. placeholder="Enter your todo"
18. value={inputText}
19. onChange={e=>{
20. setInputText(e.target.value)
21. }}
22. onKeyDown={handleEnterPress}
23. />
24. <button className="add-btn"
25. onClick={()=>{
26. props.addList(inputText)
27. setInputText("")
28. }}>+</button>
29. </div>
30. );
31. }
32. export default TodoInput;

**TodoList Component**: This component will display each to-do item with a button to mark it as complete.

import React from 'react'

function Todolist(props) {

  return (

    <li className="list-item">

        {props.item}

        <span className='icons'>

        <i className="fa-solid fa-trash-can icon-delete"

        onClick={e=>{

            props.deleteItem(props.index)

        }}></i>

        </span>

    </li>

  )

}

export default Todolist

### Step 3: Integrate Components in the Main Application

1. **Modify App.js**: Update the App.js file to use the TodoList component.
2. import React, { useState } from 'react'
3. import "./App.css"
4. import TodoInput from './components/TodoInput';
5. import Todolist from './components/TodoList';
6. function App() {
7. const [listTodo,setListTodo]=useState([]);
8. let addList = (inputText)=>{
9. if(inputText!=='')
10. setListTodo([...listTodo,inputText]);
11. }
12. const deleteListItem = (key)=>{
13. let newListTodo = [...listTodo];
14. newListTodo.splice(key,1)
15. setListTodo([...newListTodo])
16. }
17. return (
18. <div className="main-container">
19. <div className="center-container">
20. <TodoInput addList={addList}/>
21. <h1 className="app-heading">TODO</h1>
22. <hr/>
23. {listTodo.map((listItem,i)=>{
24. return (
25. <Todolist key={i} index={i} item={listItem} deleteItem={deleteListItem}/>
26. )
27. })}
28. </div>
29. </div>
30. )
31. }
32. export default App

**Style the application**: Update App.css for basic styling.

\*{

  margin: 0;

  padding: 0;

}

body{

  background-color: #333;

}

.main-container{

  display: flex;

  justify-content: center;

  align-items: center;

  height: 100vh;

}

.center-container{

  height: 500px;

  width: 350px;

}

.app-heading{

  padding: 4px;

  color: white;

  /\* text-align: center; \*/

  font-family:Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;

  text-transform: uppercase;

}

.input-container{

  display: flex;

  justify-content: center;

  margin-bottom: 10px;

}

.input-box-todo{

  margin-left: 10px;

  width: 70%;

  height: 40px;

  border-radius: 14px;

  border:1px solid black;

  padding-left: 10px;

  box-shadow: 0px 10px 20px rgba(0,0,0,0.3);

  outline: none;

  font-family: Cambria, Cochin, Georgia, Times, 'Times New Roman', serif;

  font-size: large;

}

.add-btn{

  width:40px;

  height:40px;

  border-radius: 50%;

  border:none;

  background-color:#316fc1;

  color: white;

  font-weight: bolder;

  font-size: larger;

  margin-left: 10px;

  cursor: pointer;

  box-shadow: 0px 5px 10px rgba(11, 10, 10, 0.3);

  transition: 0.3s;

}

.add-btn:active{

  box-shadow: none;

}

.list-container{

  display: flex;

  align-items: center;

  margin-top: 5px;

}

.list-item{

  list-style-type: none;

  /\* background-color: #596e8b; \*/

  border:2px solid rgb(161, 158, 158);

  color:white;

  padding:3px;

  padding-left: 5px;

  border-radius: 5px;

  width: 100%;

  height: 30px;

  display: flex;

  align-items: center;

  position: relative;

  margin-top: 10px;

}

.icons{

  position: absolute;

  right: 10px;

}

.icons i{

  margin: 4px;

  font-size: large;

  cursor: pointer;

  transition: 0.1s;

}

.icons i:hover{

  transform: scale(1.2);

}

.icon-delete:hover{

  color: red;

}

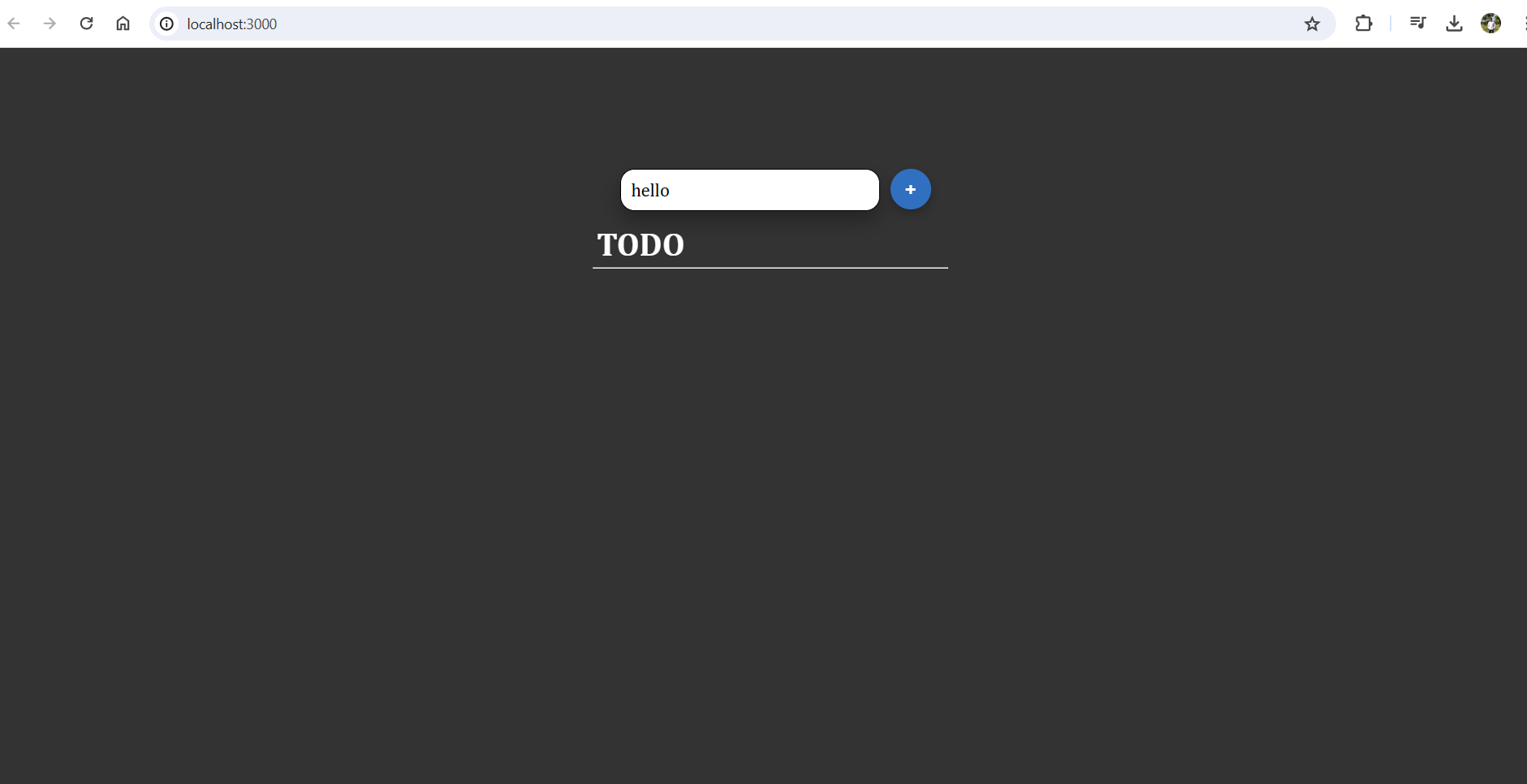
### Step 4: Run and Test the Application

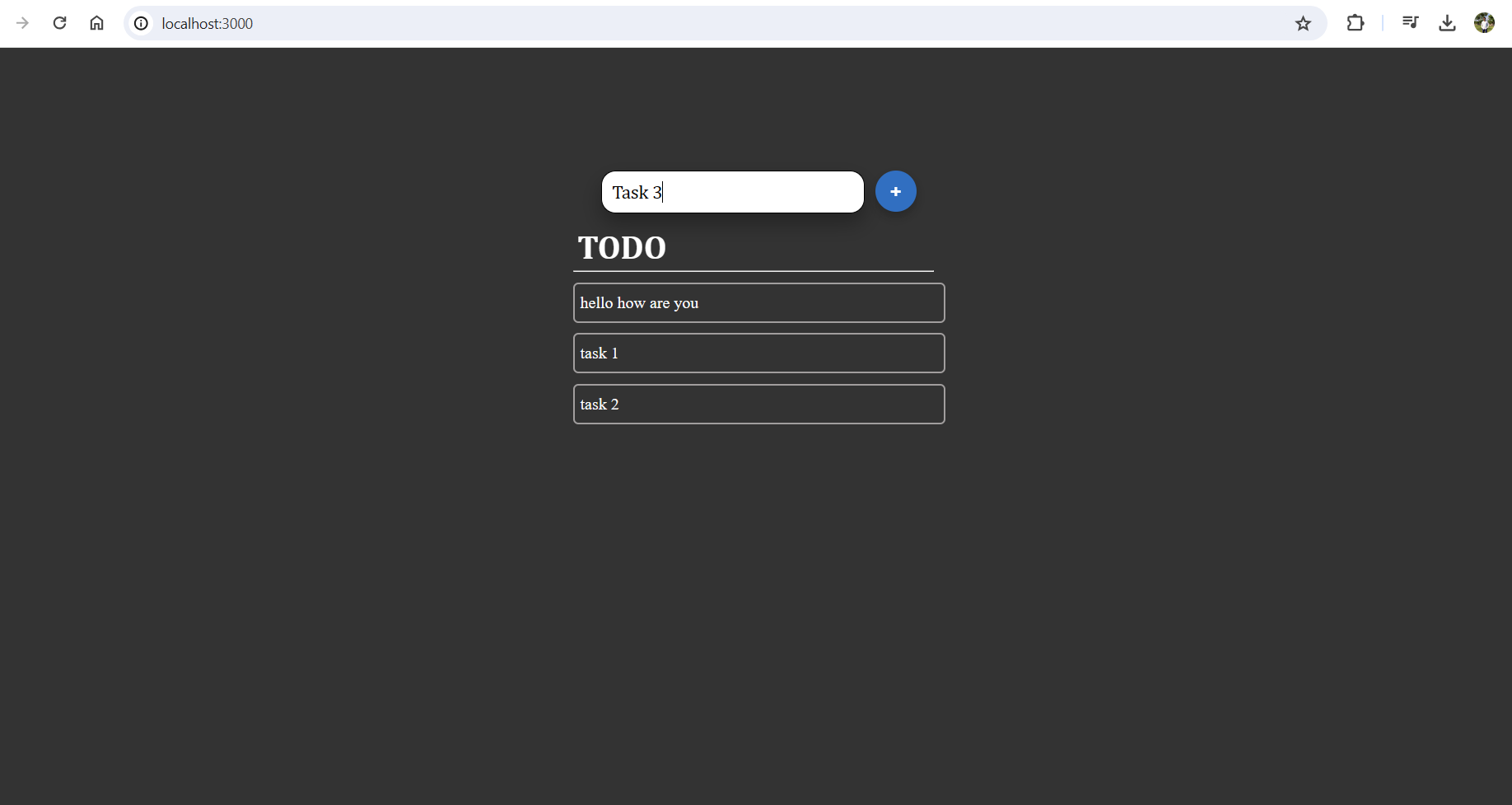
1. **Start the development server**:

npm start

1. **Interact with the application**: Open your browser and go to http://localhost:3000 to see your React To-Do List in action.

**Screenshots**

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