



```
Tasks.js
import { Component } from "react";
import {
  addTask,
  getTasks,
  updateTask,
  deleteTask,
} from "./services/taskServices";
class Tasks extends Component {
  state = { tasks: [], currentTask: "" };
  async componentDidMount() {
     try {
       const { data } = await getTasks();
        this.setState({ tasks: data });
     } catch (error) {
       console.log(error);
  }
  handleChange = ({ currentTarget: input }) => {
     this.setState({ currentTask: input.value });
  };
  handleSubmit = async (e) => {
     e.preventDefault();
     const originalTasks = this.state.tasks;
     try {
        const { data } = await addTask({ task: this.state.currentTask });
        const tasks = originalTasks;
        tasks.push(data);
        this.setState({ tasks, currentTask: "" });
     } catch (error) {
       console.log(error);
     }
  };
  handleUpdate = async (currentTask) => {
     const originalTasks = this.state.tasks;
     try {
        const tasks = [...originalTasks];
        const index = tasks.findIndex((task) => task._id === currentTask);
        tasks[index] = { ...tasks[index] };
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tasks[index].completed = !tasks[index].completed;
       this.setState({ tasks });
        await updateTask(currentTask, {
          completed: tasks[index].completed,
       });
     } catch (error) {
       this.setState({ tasks: originalTasks });
       console.log(error);
     }
  };
  handleDelete = async (currentTask) => {
     const originalTasks = this.state.tasks;
     try {
       const tasks = originalTasks.filter(
          (task) => task._id !== currentTask
       );
       this.setState({ tasks });
       await deleteTask(currentTask);
     } catch (error) {
       this.setState({ tasks: originalTasks });
       console.log(error);
     }
  };
}
export default Tasks;
```

## TaskServices.js

```
import axios from "axios";
const apiUrl = "http://localhost:8080/api/tasks";
export function getTasks() {
   return axios.get(apiUrl);
}

export function addTask(task) {
   return axios.post(apiUrl, task);
}

export function updateTask(id, task) {
   return axios.put(apiUrl + "/" + id, task);
}

export function deleteTask(id) {
   return axios.delete(apiUrl + "/" + id);
}
```

```
tasks.js
```

```
const Task = require("../models/task");
const express = require("express");
const router = express.Router();
router.post("/", async (req, res) => {
  try {
     const task = await new Task(req.body).save();
     res.send(task);
  } catch (error) {
     res.send(error);
  }
});
router.get("/", async (req, res) => {
  try {
     const tasks = await Task.find();
     res.send(tasks);
  } catch (error) {
     res.send(error);
  }
});
router.put("/:id", async (req, res) => {
  try {
     const task = await Task.findOneAndUpdate(
       { _id: req.params.id },
       req.body
     );
     res.send(task);
  } catch (error) {
     res.send(error);
  }
});
router.delete("/:id", async (req, res) => {
  try {
     const task = await Task.findByldAndDelete(req.params.id);
     res.send(task);
  } catch (error) {
     res.send(error);
  } });
module.exports = router;
```

## task.js

```
const mongoose = require("mongoose");
const Schema = mongoose.Schema;
const taskSchema = new Schema({
  task: {
     type: String,
     required: true,
  },
  completed: {
     type: Boolean,
     default: false,
  },
});
module.exports = mongoose.model("task", taskSchema);
db.js
const mongoose = require("mongoose");
module.exports = async () => {
  try {
     const connectionParams = {
       useNewUrlParser: true,
       useCreateIndex: true,
       useUnifiedTopology: true,
     };
     await mongoose.connect(
       "mongodb://localhost/todo-app",
       connectionParams
     );
     console.log("Connected to database.");
  } catch (error) {
     console.log("Could not connect to database.", error);
  }
};
```