

## TODO REST API

### Description

A crud rest API for a to-do application.

### Prerequisites

- Express
- CORS
- Mongoose

### Installation

```
Npm install -save express mongoose cors
```

### Endpoints

GET /tasks

GET /tasks/:id

POST /tasks

DELETE /tasks/:id

PUT /tasks

#### createTaskHandler Function

```
createTaskHandler (req, res, next)
```

##### Description

Handle a request for POST /tasks , create a task in the database and send the inserted task On res object.

##### Parameters

Req: request object  
Res: response object  
Next: next function

##### What the function returns

The function returns nothing.

### **getTasksHandler Function**

```
getTasksHandler (req, res, next)
```

#### **Description**

Handle a request for GET /tasks, return list of tasks inserted to the database on res object.

#### **Parameters**

Req – request object

Res – response object

Next – next function

#### **What the function returns**

The function returns nothing.

### **getTaskByIdHandler Function**

```
getTaskByIdHandler (req, res, next)
```

#### **Description**

Handle a request for GET /tasks/:id, return a task with specified id on res object .

#### **Parameters**

Req – request object

Res – response object

Next – next function

#### **What the function returns**

The function returns nothing.

### **deleteTaskHandler Function**

```
deleteTaskHandler (req, res, next)
```

#### **Description**

Handle a request for DELETE /tasks/:id, return a status code on res object on success or raise an error.

#### **Parameters**

Req – request object  
Res – response object  
Next – next function

#### **What the function returns**

The function returns nothing.

### **updateTaskHandler Function**

```
updateTaskHandler (req, res, next)
```

#### **Description**

Handle a request for PUT /tasks, return a status code on res object on success or raise an error.

#### **Parameters**

Req – request object  
Res – response object  
Next – next function

#### **What the function returns**

The function returns nothing.

## **TODO CLIENT**

### **Description**

An application that is used manage to-dos. A user can perform create, delete, update and read operations.

### **Prerequisites**

- React
- Redux

- Redux-Saga
- React-Router-Dom
- Material-UI

## Installation

```
Npx create-react-app client  
Npm install -save redux redux-saga react-router-dom  
@material/core @material/icons
```

### request Function

```
any request(method,payload,endpoint)
```

#### Description

A generic function that is used to send all requests based on the type of method.

#### Parameters

method : GET | PUT | DELETE | POST

payload: Data to be send as a body of the request.

endpoint: To which end point the request is send to.

#### What the function returns

The function can return a response data or can raise an error..

### createTask Function

```
Object createTask(title,description)
```

#### Description

An action creator function that returns an object with type `CREATE_TASK_ASYNC`  
And payload of an object with properties of title and description.

#### Parameters

Title: title of the task

Description: description of the task

#### What the function returns

The function returns object with payload and type

### **updateTask Function**

Object `updateTask(task)`

#### **Description**

An action creator function that returns an object with type `UPDATE_TASK_ASYNC`  
And payload of task.

#### **Parameters**

Task: a task object

#### **What the function returns**

The function returns object with payload and type

### **deleteTask Function**

Object `deleteTask(taskId)`

#### **Description**

An action creator function that returns an object with type `DELETE_TASK_ASYNC`  
And payload of taskId.

#### **Parameters**

taskId: id of the task to be deleted.

#### **What the function returns**

The function returns object with payload and type

### **loadTask Function**

Object `loadTask()`

#### **Description**

An action creator function that returns an object with type `LOAD_TASK_ASYNC`.

#### **Parameters**

Takes nothing

#### **What the function returns**

The function returns object with type.

### **watchFetchTask Function**

\***watchFetchTask** ( )

#### **Description**

A watcher saga function that listen to calls on LOAD\_TASK\_ASYNC and invoke fetchTaskAsync function.

#### **Parameters**

Takes nothing

#### **What the function returns**

Return nothing

### **watchDeleteTask Function**

\***watchDeleteTask** ( )

#### **Description**

A watcher saga function that listen to calls on DELETE\_TASK\_ASYNC and invoke deleteTaskAsync function.

#### **Parameters**

Takes nothing

#### **What the function returns**

Return nothing

### **watchCreateTask Function**

\***watchCreateTask** ( )

#### **Description**

A watcher saga function that listen to calls on CREATE\_TASK\_ASYNC and invoke createTaskAsync function.

#### **Parameters**

Takes nothing

#### **What the function returns**

Return nothing

### **watchEditTask Function**

\* **watchCreateTask** ( )

#### **Description**

A watcher saga function that listen to calls on UPDATE\_TASK\_ASYNC and invoke updateTaskAsync function.

#### **Parameters**

Takes nothing

#### **What the function returns**

Return nothing

### **fetchTaskAsync Function**

\* **fetchTaskAsync** ( )

#### **Description**

A worker saga function sends a get request to fetch list of task then dispatch an event.

#### **Parameters**

Takes nothing

#### **What the function returns**

Return nothing

### **deleteTaskAsync Function**

\* **deleteTaskAsync** (action)

#### **Description**

A worker saga function sends a delete request to delete of task then dispatch an event.

#### **Parameters**

Action: object with type and payload

#### **What the function returns**

Return nothing

### **createTaskAsync Function**

\* **createTaskAsync** (`action`)

#### **Description**

A worker saga function sends a post request to create a task.

#### **Parameters**

Action: object with type and payload

#### **What the function returns**

Return nothing

### **updateTaskAsync Function**

\* **updateTaskAsync** (`action`)

#### **Description**

A worker saga function sends a put request to update a task.

#### **Parameters**

Action: object with type and payload

#### **What the function returns**

Return nothing



