# CRUD Operation Project

A simple CRUD (Create, Read, Update, Delete) application using Node.js, Express, MongoDB, and React. This project provides a form to enter user details (name, email, mobile) and save them in a MongoDB database.

## Project Setup

1. 1. Backend Setup

Initialize Project: Run `npm init` in the project directory to create a `package.json` file.

* Install Dependencies:

```bash  
npm install express mongoose cors nodemon  
```

* express: Web framework.
* mongoose: MongoDB object modeling.
* cors: Middleware for Cross-Origin Resource Sharing.
* nodemon: Development tool to auto-restart the server on changes.

1. 2. Database Setup

Connect to MongoDB on port 27017 with a database named `crudoperation`.

Ensure MongoDB is running locally.

1. 3. Server Configuration

Create an `index.js` file in the `server` folder.

Set up Express middleware with `express.json()` and `cors()`.

Define a Mongoose schema for `userModel` with fields: `name`, `email`, and `mobile`.

* Implement CRUD routes:
* GET /: Retrieve all entries.
* POST /create: Add a new entry.
* PUT /update: Update an entry by \_id.
* DELETE /delete/:id: Delete an entry by \_id.

1. 4. Frontend Setup

Create a React application with `create-react-app`.

Set up a form to submit `name`, `email`, and `mobile` data.

Display and update the list of entries from the MongoDB database.

## Running the Project

1. 1. Start the Backend Server

```bash  
nodemon server/index.js  
```

1. 2. Start the React Frontend

```bash  
npm start  
```

Access the application locally at `http://localhost:8080`.

## Features

* Connects to MongoDB database.
* Form submission for user data.
* Ability to create, read, update, and delete user entries.

## Requirements

* Node.js
* MongoDB
* npm (Node Package Manager)