**React Credit Tracker App**

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This React application allows students to **track how many classes they still need to take** based on their current number of credits. Users input their credit total through a form, and the app displays a dynamically updated table with class estimates. It demonstrates effective use of React's state management, form handling, and conditional rendering.

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**What It Is**

This project is a simple yet practical React application that:

* Accepts input of completed credits via a form.
* Calculates the number of classes still required to graduate.
* Displays the information in a **dynamically updated table**.
* Allows for editing and deleting entries.

It is ideal for showcasing knowledge of:

* React fundamentals (state, props, components)
* Controlled form components
* Real-time table rendering and updates

**Features**

* **Form Input** – Enter number of completed credits.
* **Dynamic Table** – Instantly updates class estimates.
* **Edit & Delete** – Modify or remove existing rows.
* **State Management** – Built using useState and useEffect.
* **Responsive UI** – Clean and user-friendly layout.A diagram of a software application

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**Installation**

Clone the repository:

git clone https://github.com/your-username/form-editing-react-app.git

Navigate to the project directory:

cd form-editing-react-app

Install dependencies:

npm install

Start the app:

npm start

Open in your browser at: [http://localhost:3000](http://localhost:3000/)

**How to Use**

**Add Data:**

1. Enter the number of credits completed.
2. Click “Add” to generate a new row in the table.

**Edit Data:**

1. Click the "Edit" button on a row.
2. Modify the credit value.
3. Click “Save” to update.

**Delete Data:**

* Click the “Delete” button to remove the corresponding row.

The table will automatically recalculate how many classes are still required, assuming each class is worth 3 credits (or whatever rule is coded in).

**Development Process**

**1. Initial Setup**

* Scaffolded using create-react-app for rapid setup:

npx create-react-app form-editing-react-app

**2. State Management**

* Used useState for storing credit data.
* Used useEffect for tracking and updating calculations dynamically.

**3. Form Handling**

* Controlled components to manage input fields.
* Validated inputs to prevent submission of invalid or empty values.

**4. Dynamic Table Rendering**

* map() used to render each table row from state.
* Added conditional logic for formatting and message display.

**5. Edit/Delete Functionality**

* Implemented editing by populating the form with the selected row’s data.
* Delete button removes rows directly from state.

**6. Testing**

* Manually tested edge cases (e.g., 0 or 120+ credits).
* Validated UI interactions and form logic.

**Screenshots**

**Example: Credit Entry Form**

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**Example: Dynamic Table**

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**Technologies Used**

| **Technology** | **Purpose** |
| --- | --- |
| React | Front-end framework |
| JavaScript | Application logic |
| HTML/CSS | Structure and styling |
| React Hooks | State (useState) and effects (useEffect) |

**Contributing**

Contributions are welcome! To contribute:

1. Fork the repository
2. Clone your fork:  
   git clone https://github.com/your-username/form-editing-react-app.git
3. Create a feature branch:  
   git checkout -b feature/your-feature
4. Commit your changes and push
5. Submit a pull request

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