**Documentation for the Payment Options UI Element**

**Overview**

The **‘Form’** component is a React component designed to handle user input for a payment form. It dynamically renders different input fields based on the selected payment method (checking or debit card). It also validates user input and displays appropriate error messages.

The project is developed using the React library, which I find familiar and comfortable to work with. React enables writing concise and clear code compared to traditional JavaScript. The codebase is smaller and more manageable, making it easier to understand and maintain.

**Usage**

The **Form** component is used to capture user payment information. It can be integrated into any React application where payment forms are required.

**Props**

The Form component accepts no props directly. However, it renders the FormInputs component and passes props to it. Below are the props passed to FormInputs

* **handleSubmit:** A function to handle form submission.
* **formData:** An object containing form data fields and their values.
* **handleChange:** A function to handle input field changes.
* **formErrors:** An object containing validation errors for form fields.
* **selectedOption**: A string indicating the selected payment option (checking or debit card).
* **handleOptionChange:** A function to handle changes in the selected payment option.
* **isSuccess:** A boolean indicating whether the form submission was successful.

**Components**

The Form component consists of the following child components:

* **FormInputs:** Renders the form inputs and handles their state changes based on user input.
* **CheckingFields:** Renders input fields specific to checking account payment method.
* **DebitFields**: Renders input fields specific to debit card payment method.

**Validation**

The Form component conducts client-side validation for input fields based on the selected payment method. It verifies the following validations:

* Empty fields.
* Check for numerical values only for account, routing, credit card, and CVV fields.
* CVV accepts only a 3-digit number, and the input field restricts entry to more than three digits.
* The routing number accepts only a 9-digit number, and the input field limits entry to more than nine digits.
* The card number accepts only a 16-digit number, and the input field restricts entry to more than 16 digits.

All validation errors are displayed to the user in real-time.

**Workflow**

* User selects a payment method (checking or debit card).
* Form inputs are dynamically rendered based on the selected payment method.
* User fills out the form fields.
* Input values are validated in real-time.
* Upon submission, the form data is validated again.
* If there are no errors, the form is submitted successfully.