

Child-to-Parent Component Communication

Till now we are able to gather our expense data, our user input and combine it into this object and clear the form thereafter.

- Now , we have our data in ExpenseForm file when a user give some input.
- And, we want to pass that information in our up componenet NewExpenses and then up copmonent 'app'.
- ExpenseForm < NewExpense < App - Child to Parent.

1. First transer the data from ExpenseForm to NewExpense. By adding a new prop to ExpenseForm where we are calling this component.

```
//NewExpense file
return(<div className="new-expense">
  <ExpenseForm onSaveExpenseData = {saveExpenseDataHandler}/>
</div>);
```

2. then define the saveExpenseDataHandler function and accept parameter(enteredExpenseData) .So, once form is submitted then form will return the object into saveExpenseDataHandler.

```
const NewExpenses = (props) => {

  const saveExpenseDataHandler = (enteredExpenseData) =>{
    const expenseData = {
      ...enteredExpenseData,
      id: Math.random().toString()
    };
  };
};
```

3. In above we have just passed a pointer and we haven't call our function. So, in oder to call it we have to write it in child component using prop .

```
//Expenseform
props.onSaveExpenseData(expenseData)
```

Note : So it's this function defined in the new expense component which we will now execute in a different component, inside of expense them to be precise. And we can execute the function even though it's not defined inside of expense form because we are passing a pointer edit through the onSave expense data prop.

4. Now, we have to transfer the data from 'NewExpense' child component to 'App' parent component in the same way.

- First will define a handler on the NewExpense custom element.

```
<NewExpenses onAddExpenseData = {addExpenseDataHandler}></NewExpenses>
```

- define the function above addExpenseDataHandler.

```
const addExpenseDataHandler = (expenses) =>{  
  console.log(expenses)  
}
```

- call the onAddExpenseData that is defined function inside child component using prop and pass the data that needs to be transferred.

```
props.onAddExpenseData(expenseData)
```