

**Project Name:** Micro Collection Partner (MCP) System

**Codes:**

**App.js file :-**

```
import logo from "./logo.svg";
import "./App.css";

function App() {
  return (
    <div className="App">
      <h1 style={{ padding: "20px" }}>Welcome to MCP Dashboard</h1>

      </div>
    );
}

export default App;
```

**MCPDashboard.js file :-**

```
import React, { useState } from "react";

const MCPDashboard = () => {
  const [walletBalance, setWalletBalance] = useState(10000);
```

```
const [amount, setAmount] = useState("");
const [selectedPartner, setSelectedPartner] = useState(1);
const [topUpAmount, setTopUpAmount] = useState("");
const [transactionHistory, setTransactionHistory] = useState([]);
```

```
const [pickupPartners, setPickupPartners] = useState([
  {
    id: 1,
    name: "Rahul",
    status: "Active",
    orders: { total: 10, completed: 7, pending: 3 },
    wallet: 500,
    role: "Collector",
    commission: 10,
  },
  {
    id: 2,
    name: "Anjali",
    status: "Inactive",
    orders: { total: 5, completed: 5, pending: 0 },
    wallet: 300,
    role: "Supervisor",
    commission: 15,
  },
])
```

```
]);
```

```
const [newPartner, setNewPartner] = useState({  
  name: "",  
  role: "Collector",  
  commission: 0,  
});
```

```
const handleTopUp = () => {  
  const amt = parseInt(topUpAmount || 0);  
  if (amt > 0) {  
    setWalletBalance(walletBalance + amt);  
    setTransactionHistory([  
      ...transactionHistory,  
      {  
        type: "Top-up",  
        amount: amt,  
        target: "MCP Wallet",  
        time: new Date().toLocaleString(),  
      },  
    ]);  
    setTopUpAmount("");  
  }  
};
```

```
const handleFundChange = (id, type) => {  
  const amt = parseInt(amount || 0);  
  if (amt <= 0) return;  
  
  const updatedPartners = pickupPartners.map((partner) => {  
    if (partner.id === id) {  
      const newWallet =  
        type === "add"  
          ? partner.wallet + amt  
          : Math.max(partner.wallet - amt, 0);  
      return { ...partner, wallet: newWallet };  
    }  
    return partner;  
  });  
  
  setPickupPartners(updatedPartners);  
  
  if (type === "add") {  
    setWalletBalance(walletBalance - amt);  
  } else {  
    setWalletBalance(walletBalance + amt);  
  }  
}
```

```
setTransactionHistory([
  ...transactionHistory,
  {
    type: type === "add" ? "Added to Partner" : "Deducted from
Partner",
    amount: amt,
    target: pickupPartners.find((p) => p.id === id).name,
    time: new Date().toLocaleString(),
  },
]);
```

```
setAmount("");
};
```

```
const toggleStatus = (id) => {
  const updatedPartners = pickupPartners.map((partner) => {
    if (partner.id === id) {
      return {
        ...partner,
        status: partner.status === "Active" ? "Inactive" : "Active",
      };
    }
    return partner;
  });
};
```

```
    setPickupPartners(updatedPartners);  
  };
```

```
const handleAddPartner = () => {  
  if (!newPartner.name || newPartner.commission < 0) return;  
  const newId = pickupPartners.length + 1;  
  const newEntry = {  
    id: newId,  
    name: newPartner.name,  
    status: "Active",  
    orders: { total: 0, completed: 0, pending: 0 },  
    wallet: 0,  
    role: newPartner.role,  
    commission: newPartner.commission,  
  };  
  setPickupPartners([...pickupPartners, newEntry]);  
  setNewPartner({ name: "", role: "Collector", commission: 0 });  
};
```

```
const deletePartner = (id) => {  
  setPickupPartners(pickupPartners.filter((p) => p.id !== id));  
};
```

```
return (
```

```
<div style={{ padding: "20px", fontFamily: "Arial" }}>
```

```
<h1>MCP Dashboard</h1>
```

```
<div>
```

```
<p>
```

```
<strong>MCP Wallet Balance:</strong> ₹{walletBalance}
```

```
</p>
```

```
<input
```

```
  type="number"
```

```
  value={topUpAmount}
```

```
  onChange={(e) => setTopUpAmount(e.target.value)}
```

```
  placeholder="Add to MCP Wallet"
```

```
<button onClick={handleTopUp}>Top-Up Wallet</button>
```

```
</div>
```

```
{/* Add Partner */}
```

```
<h2>Add Pickup Partner</h2>
```

```
<input
```

```
  type="text"
```

```
  placeholder="Name"
```

```
  value={newPartner.name}
```

```
  onChange={(e) => setNewPartner({ ...newPartner, name:
e.target.value })}
```

```

/>
<select
  value={newPartner.role}
  onChange={(e) => setNewPartner({ ...newPartner, role:
e.target.value })}
>
  <option value="Collector">Collector</option>
  <option value="Supervisor">Supervisor</option>
</select>
<input
  type="number"
  placeholder="Commission / Order"
  value={newPartner.commission}
  onChange={(e) =>
    setNewPartner({
      ...newPartner,
      commission: parseInt(e.target.value || 0),
    })
  }
/>
<button onClick={handleAddPartner}>Add Partner</button>

<h2>Pickup Partners</h2>
{pickupPartners.map((partner) => {

```



```
const completedPercent =  
  (partner.orders.completed / partner.orders.total) * 100 || 0;
```

```
return (  
  <div  
    key={partner.id}  
    style={{  
      border: "1px solid #ccc",  
      padding: "10px",  
      marginBottom: "15px",  
    }}  
  >  
    <p>  
      <strong>Name:</strong> {partner.name}  
    </p>  
    <p>  
      <strong>Role:</strong> {partner.role}  
    </p>  
    <p>  
      <strong>Status:</strong> {partner.status}  
      <button  
        onClick={() => toggleStatus(partner.id)}  
        style={{ marginLeft: "10px" }}  
      >  
        </div>
```

Toggle

</button>

</p>

<p>

<strong>Commission/Order:</strong> ₹{partner.commission}

</p>

<p>

<strong>Wallet:</strong> ₹{partner.wallet}

</p>

<div>

<button>  Completed:  
{partner.orders.completed}</button>

<button>  Pending: {partner.orders.pending}</button>

<button>  Total: {partner.orders.total}</button>

</div>

<div

style={{

background: "#eee",

height: "10px",

borderRadius: "6px",

margin: "10px 0",

}}

>

```

<div
  style={{
    width: `${completedPercent}%`,
    background: "#4caf50",
    height: "100%",
    borderRadius: "6px",
  }}
/>
</div>
<small>{completedPercent.toFixed(0)}% Completed</small>

<div style={{ marginTop: "10px" }}>
  <input
    type="number"
    value={partner.id === parseInt(selectedPartner) ? amount :
""}

    onChange={(e) => {
      setSelectedPartner(partner.id);
      setAmount(e.target.value);
    }}
    placeholder="Amount"
  />
  <button onClick={() => handleFundChange(partner.id,
"add")}>

```

```

        Add Money
      </button>
      <button onClick={() => handleFundChange(partner.id,
"subtract")}>
        Deduct Money
      </button>
      <button
        onClick={() => deletePartner(partner.id)}
        style={{ marginLeft: "10px", color: "red" }}
      >
        Delete Partner
      </button>
    </div>
  </div>
);
}}

```

```

<h2>Transaction History</h2>
<ul>
  {transactionHistory.map((tx, index) => (
    <li key={index}>
      [{tx.time}] {tx.type} ₹{tx.amount}{" "}
      {tx.target ? `to/from ${tx.target}` : ""}
    </li>

```

```
    )})  
  </ul>  
</div>  
);  
};
```

```
export default MCPDashboard;
```

Then we to import the MCPDashboard.js in App.js

Then the App.js file will be as :-

```
import logo from "./logo.svg";  
import "./App.css";  
import MCPDashboard from "./MCPDashboard";  
function App() {  
  return (  
    <div className="App">  
      <h1 style={{ padding: "20px" }}>Welcome to MCP Dashboard</h1>  
  
      <MCPDashboard />  
    </div>  
  );  
}  
export default App;
```

Here the OUTPUT Oof the above code :-

Welcome to MCP Dashboard

MCP Dashboard

MCP Wallet Balance: ₹9920

Add to MCP Wallet

Top-Up Wallet

Add Pickup Partner

Name

Collector 

▼

0

Add Partner

Pickup Partners

Name: Rahul

Role: Collector

Status: Active 

Toggle

Commission/Order: ₹10

Wallet: ₹500

✔ Completed: 7

⌚ Pending: 3

🔥 Total: 10

70% Completed

Amount

Add Money

Deduct Money

Delete Partner

Name: Anjali

Role: Supervisor

Status: Inactive 

Toggle

Commission/Order: ₹15

Wallet: ₹300

✔ Completed: 5

⌚ Pending: 0

🔥 Total: 5

100% Completed

Amount

Add Money

Deduct Money

Delete Partner

Transaction History

- [9/4/2025, 6:55:25 pm] Added to Partner ₹100 to/from santosh
- [9/4/2025, 6:55:31 pm] Deducted from Partner ₹20 to/from santosh

The detailed explanation of the codes:-

## 1.Importing React and useState

```
import React, { useState } from "react";
```

**React** is the library that lets you build interactive UIs.

**useState** is a React Hook that allows us to track state (data that changes over time) inside functional components.

---

## 2.Component Definition

```
const MCPDashboard = () => {
```

This defines a **functional component** called MCPDashboard. It returns JSX (HTML-like syntax) that React will render to the screen.

## 3.State Declarations

```
const [walletBalance, setWalletBalance] = useState(10000);
```

- This keeps track of the **MCP wallet balance** (initially ₹10,000).
- setWalletBalance is a function to update the balance.

```
const [amount, setAmount] = useState("");
```

- Used to temporarily hold the input amount for **adding/deducting money** from a pickup partner's wallet.

```
const [selectedPartner, setSelectedPartner] = useState(1);
```

- Stores the **currently selected partner ID** when performing wallet operations.

```
const [selectedPartner, setSelectedPartner] = useState(1);
```

- Holds the **input for MCP wallet top-up**.

```
const [transactionHistory, setTransactionHistory] = useState([]);
```

- An array storing all **wallet-related transactions** (top-ups, fund changes) with details like type, amount, and time.

---

#### 4.Pickup Partners List

```
const [pickupPartners, setPickupPartners] = useState([...]);
```

- This is the core list of all pickup partners with details:
  - id, name, status, orders, wallet, role, and commission.

---

#### 5.New Partner Form State

```
const [newPartner, setNewPartner] = useState({  
  name: "",  
  role: "Collector",  
  commission: 0,  
});
```



- Tracks form data for **adding a new partner**.
- 

## Functional Logic

### 6.handleTopUp

```
const handleTopUp = () => {
```

- Called when user clicks "Top-Up Wallet".
  - It:
    1. Converts topUpAmount to integer.
    2. Increases walletBalance.
    3. Logs the transaction.
    4. Clears the input field.
- 

### 7.handleFundChange

```
const handleFundChange = (id, type) => {
```

- Triggered when adding or deducting money from a partner's wallet.
- Steps:
  1. Validates amount.
  2. Finds the partner by ID.
  3. Updates partner's wallet.
  4. Adjusts MCP's balance accordingly.

5. Adds a transaction to history.

---

## 8.toggleStatus

```
const toggleStatus = (id) => {
```

- Toggles a partner's status between **Active** and **Inactive**.
- 

## 9.handleAddPartner

```
const handleAddPartner = () => {
```

- When adding a new partner:
    1. Checks if name exists and commission is valid.
    2. Creates a new partner object.
    3. Adds to the list.
    4. Resets form input.
- 

## 10.deletePartner

```
const deletePartner = (id) => {
```

- Removes a partner from the list based on their id.
- 

## JSX: The UI Rendering

### 11.Main Container

```
<div style={{ padding: "20px", fontFamily: "Arial" }}>
  <h1>MCP Dashboard</h1>
```

- Styles the page and sets the title.
- 

## 12.MCP Wallet Top-Up Section

```
<p><strong>MCP Wallet Balance:</strong> ₹{walletBalance}</p>
<input ... />
<button onClick={handleTopUp}>Top-Up Wallet</button>
```

- Shows wallet balance.
  - Input for adding money.
  - Button to top-up the wallet.
- 

## 13.Add New Pickup Partner

```
<h2>Add Pickup Partner</h2>
<input ... /> // Name
<select ... /> // Role
<input ... /> // Commission
<button onClick={handleAddPartner}>Add Partner</button>
```

- Inputs to add a new partner with name, role, and commission.
-

## 14. Render List of Pickup Partners

```
{pickupPartners.map((partner) => {
```

- Loops over each partner and renders:
  - Name, role, status, wallet, commission, order stats.
  - Buttons to toggle status, add/deduct funds, and delete the partner.

## 15. Completion Bar

```
const completedPercent =  
(partner.orders.completed / partner.orders.total) * 100 || 0;
```

- Calculates what percentage of orders are completed for a progress bar.

## 16. Order Stats

```
<button> Completed: {partner.orders.completed}</button>
```

- Displays completed, pending, and total order stats.

## 16. Progress Bar

```
<div style={{ width: `${completedPercent}%` }} />
```

- A visual indicator showing order completion % using a filled bar.

## 17. Fund Management

```
<input value={partner.id === selectedPartner ? amount : ""} ... />
<button onClick={() => handleFundChange(partner.id,
"add")}>Add</button>
<button onClick={() => handleFundChange(partner.id,
"subtract")}>Deduct</button>
```

- Inputs and buttons to add/deduct money for each partner.
- 

## 18.Transaction History Section

```
<h2>Transaction History</h2>
<ul>
  {transactionHistory.map((tx, index) => (
    <li key={index}>...</li>
  ))}
</ul>
```

- Lists all transactions (top-ups and partner wallet updates).
- 

## 19.Export the Component

```
export default MCPDashboard;
```

- Makes this component usable in other parts of the app.
-

## 20. Summary of Features

Feature	Purpose
MCP Wallet Top-Up	Add money to main wallet
Add Pickup Partner	Dynamically add new collectors/supervisors
Partner Wallet Management	Transfer money to/from individual partners
Status Toggle	Activate/Deactivate partners
Order Stats	Track total, completed, and pending orders
Progress Bar	Visual representation of order completion
Transaction History Logging	Shows full audit trail of wallet-related actions