Directories

```
loan-approval-frontend/
├── public/
├── src/
│   ├── components/
│   │   ├── AddUser.jsx
│   │   ├── AddAmount.jsx
│   │   ├── WithdrawAmount.jsx
│   │   ├── ApplyLoan.jsx
│   │   ├── ScoreValidation.jsx
│   │   └── HistoryAnalysis.jsx
│   ├── pages/
│   │   ├── HomePage.jsx
│   │   └── Dashboard.jsx
│   ├── App.js
│   ├── index.js
│   └── services/api.js
├── package.json
```


Run this in the terminal:

```
npx create-react-app loan-approval-frontend
cd loan-approval-frontend
npm install react-router-dom axios
```

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index.js

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import { BrowserRouter } from 'react-router-dom';
import './index.css';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <BrowserRouter>
    <App />
  </BrowserRouter>
);
```

App.js

```
import React from 'react';
import { Routes, Route } from 'react-router-dom';
import AddUser from './components/AddUser';
import AddAmount from './components/AddAmount';
import WithdrawAmount from './components/WithdrawAmount';
import ApplyLoan from './components/ApplyLoan';
import ScoreValidation from './components/ScoreValidation';
import HistoryAnalysis from './components/HistoryAnalysis';
import HomePage from './pages/HomePage';

function App() {
  return (
    <Routes>
      <Route path="/" element={<HomePage />} />
      <Route path="/register" element={<AddUser />} />
      <Route path="/add-amount" element={<AddAmount />} />
      <Route path="/withdraw" element={<WithdrawAmount />} />
      <Route path="/apply-loan" element={<ApplyLoan />} />
      <Route path="/validate-score" element={<ScoreValidation />} />
      <Route path="/history" element={<HistoryAnalysis />} />
    </Routes>
  );
}

export default App;
```

----

components/AddUser.jsx

```
import React, { useState } from 'react';
import axios from 'axios';

export default function AddUser() {
  const [form, setForm] = useState({ name: '', email: '', password: '' });

  const handleChange = e => {
    setForm({ ...form, [e.target.name]: e.target.value });
  };
```

```jsx
  const handleSubmit = async e => {
    e.preventDefault();
    try {
      await axios.post('http://localhost:8080/api/users', form);
      alert('User registered!');
    } catch (err) {
      console.error(err);
      alert('Registration failed');
    }
  };

  return (
    <form onSubmit={handleSubmit}>
      <h2>Register</h2>
      <input name="name" placeholder="Name" onChange={handleChange} required />
      <input name="email" placeholder="Email" type="email" onChange={handleChange}
required />
      <input name="password" placeholder="Password" type="password"
onChange={handleChange} required />
      <button type="submit">Register</button>
    </form>
  );
}
```

----

components/AddAmount.jsx


```jsx
import React, { useState } from 'react';
import axios from 'axios';

export default function AddAmount() {
  const [amount, setAmount] = useState('');

  const handleSubmit = async e => {
    e.preventDefault();
    try {
      await axios.post('http://localhost:8080/api/transactions/add', { amount });
      alert('Amount added successfully!');
    } catch (err) {
      console.error(err);
      alert('Error adding amount');
    }
  };

  return (
```

```jsx
    <form onSubmit={handleSubmit}>
      <h2>Add Amount</h2>
      <input
        type="number"
        placeholder="Enter amount"
        value={amount}
        onChange={e => setAmount(e.target.value)}
        required
      />
      <button type="submit">Add</button>
    </form>
  );
}
```

----

components/WithdrawAmount.jsx


```jsx
import React, { useState } from 'react';
import axios from 'axios';

export default function WithdrawAmount() {
  const [amount, setAmount] = useState('');

  const handleSubmit = async e => {
    e.preventDefault();
    try {
      await axios.post('http://localhost:8080/api/transactions/withdraw', { amount
});
      alert('Amount withdrawn!');
    } catch (err) {
      console.error(err);
      alert('Withdrawal failed');
    }
  };

  return (
    <form onSubmit={handleSubmit}>
      <h2>Withdraw Amount</h2>
      <input
        type="number"
        placeholder="Enter amount"
        value={amount}
        onChange={e => setAmount(e.target.value)}
        required
      />
```

```
      <button type="submit">Withdraw</button>
    </form>
  );
}

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components/ApplyLoan.jsx


import React, { useState } from 'react';
import axios from 'axios';

export default function ApplyLoan() {
  const [loanData, setLoanData] = useState({
    amount: '',
    duration: '',
    purpose: ''
  });

  const handleChange = e => {
    setLoanData({ ...loanData, [e.target.name]: e.target.value });
  };

  const handleSubmit = async e => {
    e.preventDefault();
    try {
      await axios.post('http://localhost:8080/api/loans/apply', loanData);
      alert('Loan application submitted!');
    } catch (err) {
      console.error(err);
      alert('Loan application failed');
    }
  };

  return (
    <form onSubmit={handleSubmit}>
      <h2>Apply for Loan</h2>
      <input name="amount" placeholder="Amount" onChange={handleChange} required />
      <input name="duration" placeholder="Duration (months)" onChange={handleChange}
required />
      <input name="purpose" placeholder="Purpose" onChange={handleChange} required
/>
      <button type="submit">Apply</button>
    </form>
  );
}
```

----

components/ScoreValidation.jsx

```jsx
import React, { useState } from 'react';
import axios from 'axios';

export default function ScoreValidation() {
  const [userId, setUserId] = useState('');

  const handleCheck = async () => {
    try {
      const res = await axios.get(`http://localhost:8080/api/score/${userId}`);
      alert(`Credit Score: ${res.data.score}`);
    } catch (err) {
      console.error(err);
      alert('Failed to fetch score');
    }
  };

  return (
    <div>
      <h2>Validate Credit Score</h2>
      <input placeholder="Enter User ID" value={userId} onChange={e =>
setUserId(e.target.value)} />
      <button onClick={handleCheck}>Check Score</button>
    </div>
  );
}
```

----

components/HistoryAnalysis.jsx

```jsx
import React, { useEffect, useState } from 'react';
import axios from 'axios';

export default function HistoryAnalysis() {
  const [transactions, setTransactions] = useState([]);

  useEffect(() => {
    const fetchHistory = async () => {
      try {
        const res = await axios.get('http://localhost:8080/api/history');
        setTransactions(res.data);
```

```
      } catch (err) {
        console.error(err);
      }
    };
    fetchHistory();
  }, []);

  return (
    <div>
      <h2>Transaction History</h2>
      <ul>
        {transactions.map((txn, index) => (
          <li key={index}>
            {txn.date} - {txn.type} - ${txn.amount}
          </li>
        ))}
      </ul>
    </div>
  );
}
```

----

pages/HomePage.jsx

```
import React from 'react';
import { Link } from 'react-router-dom';

export default function HomePage() {
  return (
    <div>
      <h1>Loan Approval System</h1>
      <nav>
        <ul>
          <li><Link to="/register">Add User</Link></li>
          <li><Link to="/add-amount">Add Amount</Link></li>
          <li><Link to="/withdraw">Withdraw Amount</Link></li>
          <li><Link to="/apply-loan">Apply for Loan</Link></li>
          <li><Link to="/validate-score">Validate Score</Link></li>
          <li><Link to="/history">Transaction History</Link></li>
        </ul>
      </nav>
    </div>
  );
}
```