

# Task

## Displaying Person Details with Age Calculation

Your task is to create a React component that displays the details of persons along with their ages calculated from their date of birth.

### Requirements:

#### PersonDetails Component:

Create a PersonDetails component that displays the name, date of birth, and age of each person.

Use the provided sample data from the personsData array.

#### Age Calculation:

Implement a function calculateAge that takes the date of birth as input and returns the age of the person.

The age should be calculated dynamically based on the current date and the date of birth.

### Sample Data:

```
export const personsData = [  
  { name: "John Doe", dateOfBirth: "1990-01-15" },  
  { name: "Jane Smith", dateOfBirth: "1985-05-20" },  
  { name: "Alice Johnson", dateOfBirth: "1995-09-10" },  
];
```

#### PersonDetails Component:

Render a list of persons' details including their names, dates of birth, and ages.

Utilize the provided sample data from the personsData array.

#### Age Calculation:

Implement the calculateAge function to calculate the age of a person based on their date of birth.

Use the current date to calculate the age dynamically.

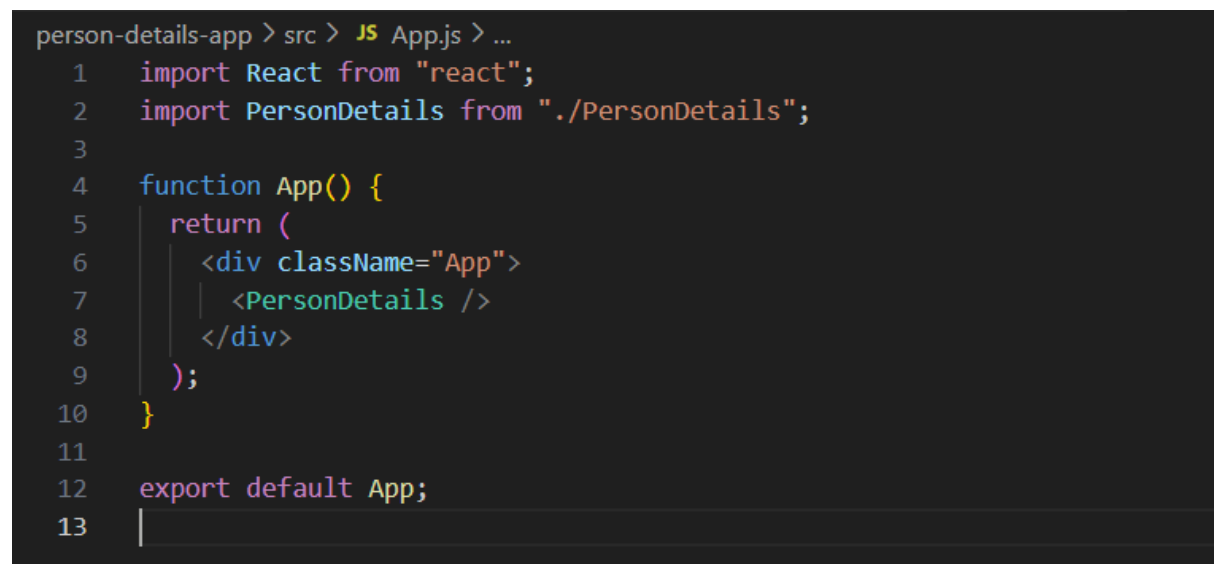
Solution –

### App.js

```
import React from "react";
import PersonDetails from "../PersonDetails";

function App() {
  return (
    <div className="App">
      <PersonDetails />
    </div>
  );
}

export default App;
```

A screenshot of a code editor with a dark background. The file path at the top is 'person-details-app > src > JS App.js > ...'. The code is written in a light-colored font with syntax highlighting. Line numbers 1 through 13 are visible on the left side of the editor. The code content is identical to the one in the previous block.

```
person-details-app > src > JS App.js > ...
1  import React from "react";
2  import PersonDetails from "../PersonDetails";
3
4  function App() {
5    return (
6      <div className="App">
7        <PersonDetails />
8      </div>
9    );
10 }
11
12 export default App;
13 |
```

## Index.css

/\* General Reset \*/

body {

margin: 0;

font-family: 'Arial', sans-serif;

background-color: #f9fafb; /\* Light background \*/

color: #333; /\* Neutral text color \*/

line-height: 1.6;

}

h1 {

text-align: center;

color: black; /\* Indigo \*/

font-size: 2.5rem;

margin-bottom: 1rem;

}

ul {

list-style-type: none;

padding: 0;

}

li {

background: white;

margin: 1rem auto;

padding: 1.5rem;

border-radius: 12px;

max-width: 500px;

box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1); /\* Soft shadow \*/

transition: transform 0.2s ease, box-shadow 0.2s ease;

```
}

/* Hover Effect */
li:hover {
  transform: translateY(-5px);
  box-shadow: 0 8px 16px rgba(0, 0, 0, 0.15);
}

p {
  margin: 0.5rem 0;
  font-size: 1.1rem;
}


strong {
  color: #f94922; /* Accent color */
}


/* Container Styling */
.App {
  padding: 2rem;
  display: flex;
  flex-direction: column;
  align-items: center;
}

/* Mobile Responsiveness */
@media (max-width: 768px) {
  li {
    padding: 1rem;
  }

  h1 {
    font-size: 2rem;
  }
}
```

```
}  
  
}
```

```
person-details-app > src > # index.css >  li  
1  /* General Reset */  
2  body {  
3    margin: 0;  
4    font-family: 'Arial', sans-serif;  
5    background-color: #f9fafb; /* Light background */  
6    color: #333; /* Neutral text color */  
7    line-height: 1.6;  
8  }  
9  
10 h1 {  
11   text-align: center;  
12   color: black; /* Indigo */  
13   font-size: 2.5rem;  
14   margin-bottom: 1rem;  
15 }  
16  
17 ul {  
18   list-style-type: none;  
19   padding: 0;  
20 }  
21  
22 li {  
23   background: white;  
24   margin: 1rem auto;  
25   padding: 1.5rem;  
26   border-radius: 12px;  
27   max-width: 500px;  
28   box-shadow: 0 4px 8px #reba(0.0, 0.0, 0.1); /* Soft shadow */
```

```
person-details-app > src > # index.css >  li  
22 li {  
29   transition: transform 0.2s ease, box-shadow 0.2s ease;  
30 }  
31  
32 /* Hover Effect */  
33 li:hover {  
34   transform: translateY(-5px);  
35   box-shadow: 0 8px 16px #rgba(0, 0, 0, 0.15);  
36 }  
37  
38 p {  
39   margin: 0.5rem 0;  
40   font-size: 1.1rem;  
41 }  
42  
43 strong {  
44   color: #f94922; /* Accent color */  
45 }  
46  
47 /* Container Styling */  
48 .App {  
49   padding: 2rem;  
50   display: flex;  
51   flex-direction: column;  
52   align-items: center;  
53 }  
54
```

```

54
55  /* Mobile Responsiveness */
56  @media (max-width: 768px) {
57      li {
58          padding: 1rem;
59      }
60
61      h1 {
62          font-size: 2rem;
63      }
64  }
65

```

## PersonDetails.js

```
import React from "react";
```

```
// Sample Data
```

```
export const personsData = [
  { name: "John Doe", dateOfBirth: "1990-01-15" },
  { name: "Jane Smith", dateOfBirth: "1985-05-20" },
  { name: "Alice Johnson", dateOfBirth: "1995-09-10" },
];
```

```
// Function to calculate age
```

```
const calculateAge = (dateOfBirth) => {
  const dob = new Date(dateOfBirth);
  const today = new Date();
  let age = today.getFullYear() - dob.getFullYear();
  const monthDifference = today.getMonth() - dob.getMonth();
  if (monthDifference < 0 || (monthDifference === 0 && today.getDate() <
dob.getDate())) {
    age--;
  }
}
```

```

    }
    return age;
  };

// PersonDetails Component
const PersonDetails = () => {
  return (
    <div className="p-4">
      <h1 className="text-2xl font-bold mb-4">Person Details</h1>
      <ul>
        {personsData.map((person, index) => (
          <li key={index} className="mb-4 p-2 border rounded shadow">
            <p>
              <strong>Name:</strong> {person.name}
            </p>
            <p>
              <strong>Date of Birth:</strong> {person.dateOfBirth}
            </p>
            <p>
              <strong>Age:</strong> {calculateAge(person.dateOfBirth)} years
            </p>
          </li>
        ))}
      </ul>
    </div>
  );
};

export default PersonDetails;

```

person-details-app > src > JS PersonDetails.js > ...

```
1  import React from "react";
2
3  // Sample Data
4  export const personsData = [
5    { name: "John Doe", dateOfBirth: "1990-01-15" },
6    { name: "Jane Smith", dateOfBirth: "1985-05-20" },
7    { name: "Alice Johnson", dateOfBirth: "1995-09-10" },
8  ];
9
10 // Function to calculate age
11 const calculateAge = (dateOfBirth) => {
12   const dob = new Date(dateOfBirth);
13   const today = new Date();
14   let age = today.getFullYear() - dob.getFullYear();
15   const monthDifference = today.getMonth() - dob.getMonth();
16   if (monthDifference < 0 || (monthDifference === 0 && today.getDate() < dob.getDate())) {
17     age--;
18   }
19   return age;
20 };
21
22 // PersonDetails Component
23 const PersonDetails = () => {
24   return (
25     <div className="p-4">
26       <h1 className="text-2xl font-bold mb-4">Person Details</h1>
27       <ul>
28         {personsData.map((person, index) => (
```

```
23   const PersonDetails = () => {
24     return (
25       <div className="p-4">
26         <h1 className="text-2xl font-bold mb-4">Person Details</h1>
27         <ul>
28           {personsData.map((person, index) => (
29             <li key={index} className="mb-4 p-2 border rounded shadow">
30               <p>
31                 <strong>Name:</strong> {person.name}
32               </p>
33               <p>
34                 <strong>Date of Birth:</strong> {person.dateOfBirth}
35               </p>
36               <p>
37                 <strong>Age:</strong> {calculateAge(person.dateOfBirth)} years
38               </p>
39             </li>
40           ))}
41         </ul>
42       </div>
43     );
44   };
45
46   export default PersonDetails;
47
```



## OUTPUT –

