

Sure, here is an example of an HTML file that includes JavaScript to create a user object and functions to manipulate it. The functions will allow you to change the user's name, update the email, and calculate the user's birth year based on their age.

HTML Code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>User Object Manipulation</title>
</head>
<body>
  <h1>User Object Manipulation</h1>

  <div>
    <label for="name">Name:</label>
    <input type="text" id="name">
  </div>
  <div>
    <label for="email">Email:</label>
    <input type="email" id="email">
  </div>
  <div>
    <label for="age">Age:</label>
    <input type="number" id="age">
  </div>
  <button onclick="changeName()">Change Name</button>
  <button onclick="updateEmail()">Update Email</button>
  <button onclick="calculateBirthYear()">Calculate Birth Year</button>

  <h2>Output</h2>
  <pre id="output"></pre>

  <script src="script.js"></script>
</body>
</html>
```

JavaScript Code (script.js)

```
// User object
let user = {
  name: "John Doe",
  email: "john.doe@example.com",
  age: 30
};

// Function to change the user's name
function changeName() {
  let newName = document.getElementById('name').value;
  if (newName) {
    user.name = newName;
    displayUser();
  } else {
    alert('Please enter a name.');
```

```

    }
}

// Function to calculate the user's birth year
function calculateBirthYear() {
    let currentYear = new Date().getFullYear();
    let birthYear = currentYear - user.age;
    document.getElementById('output').textContent = `User's birth year: ${birthYear}`;
}

// Function to display the user object
function displayUser() {
    document.getElementById('output').textContent = JSON.stringify(user, null, 2);
}

```

```

// Initial display of the user object
displayUser();

```

Explanation

HTML Structure: The HTML file includes input fields for the user's name, email, and age, and buttons to trigger the respective functions.

JavaScript Object: A user object is created with properties for name, email, and age.

Functions:

changeName(): Updates the user's name with the value from the input field.

updateEmail(): Updates the user's email with the value from the input field.

calculateBirthYear(): Calculates and displays the user's birth year based on the current year and the user's age.

Output: The displayUser() function displays the current state of the user object in a formatted JSON string within a pre element.

You can open this HTML file in a web browser to see the output and manipulate the user object interactively.