**Data Flow Diagram (DFD) for Form Handling App**

**Project Description**

The Form Handling App is a React-based web application that allows users to enter and submit a form with their name and email. Once submitted, the system displays the entered data. The application processes user input, manages form state, and dynamically updates the UI upon submission.

**Level 0 DFD (Context Diagram)**

The Level 0 DFD provides a high-level overview of the system, illustrating how users interact with the Form Handling App and how data flows between various components.

+-----------------------+  
| External Entities |  
| |  
| - User |  
+-----------------------+  
 |  
 v  
+---------------------------+  
| Form Handling App |  
| (Process: 1.0) |  
+---------------------------+  
 |  
 v  
+---------------------------+  
| Data Store: Application |  
| State (User Input) |  
+---------------------------+

**Explanation:**

• **External Entity (User):** The user interacts with the Form Handling App by entering and submitting form data.

• **Process (Form Handling App):** The system processes user input, updates the form state, and renders submitted data.

• **Data Store (Application State - User Input):**Stores user-provided information (name and email).

**Level 1 DFD (Detailed Breakdown)**

The Level 1 DFD further decomposes the Form Handling App process into sub-processes, showing how user interactions trigger different functionalities.

+-----------------------+  
| External Entity |  
| (User) |  
+-----------------------+  
 |  
 v  
+----------------------------+  
| Process: 1.1 - Enter Data |  
| (Name & Email Input) |  
+----------------------------+  
 |  
 v  
+----------------------------+  
| Process: 1.2 - Submit Form |  
| (Update State & Render) |  
+----------------------------+  
 |  
 v  
+----------------------------+  
| Process: 1.3 - Display Data|  
| (Show Submitted Details) |  
+----------------------------+  
 |  
 v  
+----------------------------+  
| Data Store: Application |  
| State (User Input) |  
+----------------------------+

**Explanation:**

1. **Process 1.1 (Enter Data - Name & Email Input):** The user enters data into the form fields.

2. **Process 1.2 (Submit Form - Update State & Render):** The form is submitted, updating the application state.

3. **Process 1.3 (Display Data - Show Submitted Details):** The UI updates to display the submitted data.

**Data Flow**

• The User enters their name and email in the form fields.

• The System processes the submission and updates the application state.

• The UI dynamically updates to display the submitted information.

**Additional Notes**

• This system currently operates as a simple React Form Handling App with local state management.

• Future enhancements could include form validation and backend integration for data storage.