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

**Simple Form Handling App** allows users to input their name and email, submit the form, and display the submitted data. Below is the **DFD representation**:

**Level 0 (Context Diagram)**

At the highest level, the system consists of:

1. **External Entity: User** → Inputs name and email, then submits the form.
2. **Process: Form Handling System** → Captures user input and displays submitted data.
3. **Data Store: React State (useState Hook)** → Stores user input and form submission status.

+--------------------+

| External Entity: |

| User |

+--------------------+

|

v

+--------------------+

| Form Handling | (Process 1.0)

| System |

+--------------------+

|

v

+--------------------+

| useState Hook | (Stores name, email, submission status)

+--------------------+

**Level 1 DFD (Decomposed Processes)**

Breaking down **Process 1.0 (Form Handling System)** into detailed steps:

+--------------------+ +------------------------+

| External Entity: | | Process 1.1 - Input |

| User | -----> | (Enter Name & Email) |

+--------------------+ +------------------------+

| |

v v

+--------------------+ +------------------------+

| Process 1.2 - | | Process 1.3 - Submit |

| Validate Input | -----> | (Update useState) |

+--------------------+ +------------------------+

| |

v v

+--------------------+ +------------------------+

| Process 1.4 - | | Process 1.5 - Display |

| Store Data | -----> | (Show Submitted Info)|

+--------------------+ +------------------------+

**Explanation of Level 1 DFD Processes**

1. **Process 1.1 - Input Handling**
   * The user enters their name and email.
2. **Process 1.2 - Validate Input**
   * The system ensures that both fields are filled before submission.
3. **Process 1.3 - Submit Form**
   * The form is submitted, and useState is updated with the entered values.
4. **Process 1.4 - Store Data**
   * The submitted name and email are stored in React state.
5. **Process 1.5 - Display Submitted Info**
   * If the form is successfully submitted, the entered data is displayed on the screen.

**Data Flow Summary**

**✔** User enters name and email → System validates input → Stores data → Displays submitted info  
**✔** Uses React state (useState Hook) for real-time form handling. **✔** No backend or database—only front-end state management.