**Authentication**

**Level 0 DFD (Context Diagram):**

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

| External Entity |

| (User) |

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

|

v

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

| Login Component |

| (Process 1.0) |

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

|

v

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

| Authentication |

| Service |

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

**Explanation:**

* **External Entity (User):** The individual interacting with the login form.
* **Process (Login Component):** Handles user input and initiates authentication.
* **Data Store (Authentication Service):** Validates user credentials.

**Level 1 DFD (Decomposition of Process 1.0):**

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

| External Entity |

| (User) |

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

|

v

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

| Input Credentials |

| (Process 1.1) |

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

|

v

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

| Validate Inputs |

| (Process 1.2) |

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

|

v

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

| Authenticate User |

| (Process 1.3) |

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

|

v

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

| Display Feedback |

| (Process 1.4) |

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

**Explanation:**

* **Process 1.1 (Input Credentials):** The user enters their email and password into the form fields.
* **Process 1.2 (Validate Inputs):** The system checks if both fields are filled. If not, an error message is set.
* **Process 1.3 (Authenticate User):** The system verifies if the entered credentials match the predefined valid credentials.
* **Process 1.4 (Display Feedback):** Based on the authentication result, the system displays a success message or an error message.