### **Data Flow Diagram (DFD) for Drag and Drop Image Reordering System**

### **Level 0 (Context Diagram)**

At the highest level, the system involves:

* **External Entity (User)**: The user interacts with the UI by dragging and dropping images.
* **Process (Drag and Drop System)**: Handles image reordering.
* **Data Store (Image List State)**: Stores the current image order in state.
* **Data Flow**:
  + The user drags an image to a new position.
  + The system updates the image list state.
  + The updated order is displayed in the UI.

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| External Entity |

| (User) |

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| Process: Drag and |

| Drop System |

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| Data Store: Image List |

| (State Updates) |

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| Output: Updated UI |

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### **Level 1 DFD (Decomposition of Process)**

This breaks down the **Drag and Drop System** into detailed processes:

1. **Process 1.1 (User Drags Image)**
   * The user clicks and drags an image.
2. **Process 1.2 (Drag Operation Begins)**
   * The system visually indicates that the image is being dragged.
3. **Process 1.3 (Drop Operation & Order Update)**
   * The user drops the image in a new position.
   * The system updates the **image list state** to reflect the new order.
4. **Process 1.4 (Re-render UI)**
   * The UI updates with the new image order.

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| External Entity | | External Entity |

| (User) | | (Drag and Drop System) |

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| Process: 1.1 User | | Process: 1.2 Dragging |

| Drags Image | | Begins |

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| Process: 1.3 Drop | | Data Store: Image List |

| Operation & Order | | (State Updates) |

| Update | +------------------------+

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| Process: 1.4 UI Update |

| (Display New Order) |

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### **Data Flow Summary:**

1. The **User** drags an image to a new position.
2. The **Drag and Drop System** detects the movement.
3. When the **User** releases the image, the **Image List State** is updated.
4. The **UI updates** dynamically to reflect the new image order.