**Data Flow Diagram for myretailapp**

Level 0 (Context Diagram):

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| External Entity: User |

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| User Actions (Signup, Login, Browse products

| Add to cart, Place order)

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| Jewelry Website |

| (Process: 1.0) |

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| Jewelry data and Order Confirmation

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| Data Store: |

| - User Data |

| - Jewelry Data |

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Explanation:

* **External Entity (User):** The user interacts with the website to perform the actions.
* **Process (Jewelry Website):** This represents the entire website as a single process, handling all functionalities.
* **Data Store:** This combines both user data (email, password, cart) and jewelry data (product details, images) for simplicity at this level. But in the real projects, they would be separate databases.

Level 1 DFD (Decomposition of Process 1.0)

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| External Entity: User |

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| User Actions (Signup, Login)

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| Process 1.1 - |

| User Authentication |

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| User Data (Email, Password)

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| Data Store: User Data |

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| User Actions (Browse, Add to Cart, Place Order)

| Jewelry Data

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| Process: 1.2 - |

| Shopping Cart |

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| Order Confirmation, Updated Cart Data

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| Data Store: |

| - User Data |

| - Jewelry Data |

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Explanation:

* **Process 1.1 (User Authentication):** Handles user login and signup, validating credentials against the user data store.
* **Process 1.2 (Shopping Cart):** Manages the user's shopping cart, including adding/removing items, calculating totals, and processing orders.
* **Data Flow:** Shows how user actions and data flow between the processes and data stores.

Additional Notes:

* We can further decompose these processes into sub-processes for a more detailed representation.
* For a production system, we would likely have separate data stores for user data and product data, potentially using a database.
* This DFD provides a visual representation of the data flow and processes within our React jewelry website, helping to understand the system's architecture and interactions.