**Data Flow Diagram for ShoppingApp**

Level 0(Context Diagram):

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| External Entity: User |

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| User Actions (Login, Logout, Add to Cart)

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| Shopping App |

| (Process: 1.0) |

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| Product Data, Cart Data

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| Data Store: |

| - User Data |

| - Product Data |

| - Cart Data |

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Explanation:

* Shows the user interacting with the "Shopping App" process.
* The app manages "User Data" (login status), "Product Data," and "Cart Data."

Level 1(Decomposition for Process: 1.0):

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| External Entity: User |

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| User Actions (Login, Logout)

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| Process: 1.1 - |

| User Authentication |

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| User Data (Login Status)

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| Data Store: User Data |

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| User Actions (Add to Cart)

| Product Data

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| Process: 1.2 - |

| Product Browsing |

| and Cart |

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| Cart Data

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| Data Store: |

| - Cart Data |

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Explanation:

Breaks down the app into two processes:

* "User Authentication": Handles user login and logout, updating the login status.
* "Product Browsing and Cart": Manages product display and adding items to the cart, updating the cart data.

Key points:

* This DFD illustrates how user interactions (login, logout, adding to cart) trigger changes in the application's data.
* It shows the flow of data between the user, the application, and the data stores.
* This is a simplified representation, and for a more complex app, you might have additional processes (e.g., data fetching, order processing) and data stores.