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Assignment: LAC Survey

1. How would you model the individual item?

I would model individual with a unique product ID. In that product ID, I would code in 2 metadata fields, Category and Sub Category and unique product id.

IE 555-333-12345 555=category, 333=sub category, 12345 = unique ID; That product ID would be the key field, with the bar code and item description and price.

|  |  |  |  |
| --- | --- | --- | --- |
| Product ID | Bar Code | Price | Description |
| 111-222-12345 | xxxxx | 12.99 | Item is good for things. |

2. How would you model a collection of items?

A collection of Items would just be a list of the product ID and the quantity. This is purely a model of what should be contained within the shopping cart list. We have a key value, so whatever data we need to display that is tied to that key value (product ID) can become available to us.

|  |  |
| --- | --- |
| Product ID | Quantity |
| 111-222-12345 | 3 |

3. When scanning the bar code, you should be able to retrieve the item description and price. How would you model that inventory?

Bar Code is a key value candidate, so retrieval would be via s simple query. The same model would still be used:

|  |  |  |  |
| --- | --- | --- | --- |
| Product ID | Bar Code | Price | Description |
| 111-222-12345 | xxxxx | 12.99 | Item is good for things. |

4. The inventory is potentially big. How would you speed up the retrieval process?

The purpose of having a category and sub category built into the key value is to speed up searching. By grouping items by category and sub category, allowing searches to be more targeted. Instead of searching an inventory of possibly millions of items, we search a subset of that for the unique ID.