Relational Schema

Entities & Attributes:

- Users (userID, name, username, password)
- Inventory (inventoryID, userID, inventoryName)
- Reminder (reminderID, itemID, reminderName, daysTillNextPurchase)
- Item (itemID, inventoryID, storeID, consumableItemID, householdItemID, usesOrServingSizeLeft, servingPerDay)
- ConsumableItem (consumableItemID, itemName, consumableTypeID, daysTillExpiration)
- ConsumableType (consumableTypeID, typeConsumable)
- HouseholdItem (householdItemID, itemName, householdItemTypeID, brand)
- HouseholdItemType (householdItemTypeID, itemType)
- Store (storeID, itemID, name, address)

Primary Keys:

- userID, inventoryID, reminderID, itemID, consumableItemID, consumableTypeID, householdItemID, householdItemTypeID, storeID

Relationships:

- User has a one to many relationship with inventory
  (Inventory has a many to one relationship with user)
- Inventory has a many to many relationship with Item
  (Item has a many to many relationship with Inventory)
- Item has a many to one relationship with store
  (Store has a one to many relationship with item)
- Item has a one to zero or one relationship with reminder
  (Reminder has a zero or one to one relationship with item)
- Item has a one to one relationship with consumableItem
  (ConsumableItem has a one to one relationship with item)
- ConsumableItem has a one to one relationship with consumableType
  (ConsumableType has a one to one relationship with consumableItem)
- Item has a one to one relationship with householdItems
  (HouseholdItems has a one to one relationship with item)
- HouseholdItems has a one to one relationship with HouseholdItemType
  (HouseholdItemType has a one to one relationship with householdItems)

Foreign Keys:

- Inventory refers to userID
- Reminder refers to itemID
- Item refers to inventoryID, storeID, consumableItemID and householdItemID
- ConsumableItems refers to consumableTypeID
- HouseholdItems refer to householdItemTypeID

Data Types:

- VARCHAR for text
- INTEGER for numbers

Constraints:

- All primary keys must be NOT NULL and UNIQUE

Functional Dependencies:

- User Table
    - userID -> Username, password
    - Username, password -> userID
- Inventory Table
    - inventoryID
- Item Table
    - itemID
- Reminder Table
    - reminderID -> itemID
    - itemID -> reminderID
- Store Table
    - storeID
- Consumable Item Table
    - consumableItemID -> itemName
    - itemName -> consumableItemTableID
- Consumable Type Table
    - consumableItemTypeID -> typeConsumable
    - typeConsumable -> consumableItemTypeID
- Household Item Table
    - householdItemID -> itemName
    - itemName -> householdItemID
- Household Item Type Table
    - householdItemTypeID -> itemType
    - itemType -> householdItemTypeID