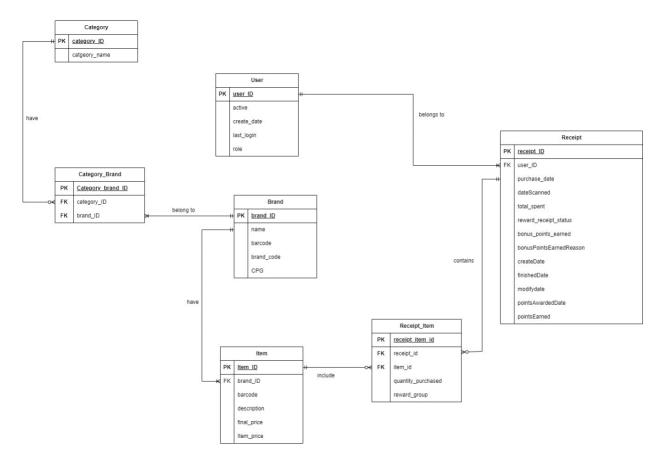
## **Entity Relationship Diagram**



## **ERD and Implementation Explanation**

- First, I analyzed the data well and extracted all attributes from different documents' JSON files.
- Then I assumed it was one relation and normalized it up to 3NF.
- In the above ER diagram, I have Brand, Category, User, Item, and Receipt entities. All entities have their own attributes and primary keys.
- All Entities have relationships with each other. For example:
  - 1- One category has many brands; similarly, one brand can have many categories, so there is a many-to-many relationship.
  - 2- On user can have many Receipts, but a Receipt belongs to one and only one user.
  - 3- One brand can have many items, but an item belongs to only one brand.
  - 4- One receipt can have many Items. Similarly, one Item can be a part of many Receipts.