MILESTONE 2

PRG181

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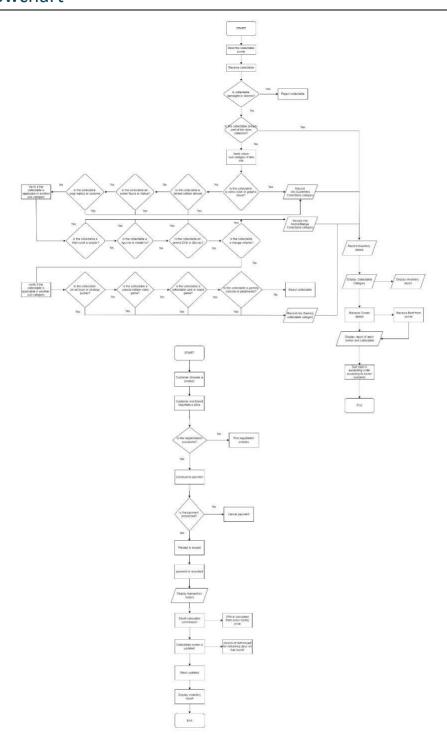
Contents

IPO TABLE:

For reference

Input	Processes	Output
Name of collectable Owner's detail	Sorting the data Managing stock Calculations of rent Calculations of commission	Item & owner's details
Category		Rent
Sub-category		Commission
Expected price		Inventory report.
		Transaction report

Flowchart

START

Meet the collectable owner

Receive collectable

Is collectable damaged or stolen? — Yes → Reject collectable

No

Is the collectable already part of the store collection? — Yes

No

Verify which sub-category it falls into

Is the collectable a comic/book or graphic novel? — Yes → Record into Superhero Collectable category

Is the collectable a limited edition artwork?

Is the collectable an action figure or statue?

Is the collectable a prop replica or costume?

Verify if the collectable is applicable in another sub-category

Is the collectable a wall scroll or poster?

Is the collectable a figurine or model kit?

Is the collectable an anime DVD or Blu-ray?

Is the collectable a manga volume? → Record into Anime/Manga Collectable category

Verify if the collectable is applicable in another sub-category

Is the collectable an art book or strategy guide?

Is the collectable a special edition video game?

Is the collectable a collectable card or board game?

Is the collectable a gaming console or peripheral? — No → Reject collectable

Record into Gaming collectable category

Record inventory details

Display Collectable Category → Display inventory report

Receive Owner details → Receive Rent from owner

Display report of each owner and collectable

Sort data in ascending order according to owner surname

End

START

Customer chooses a product

Customer and David negotiate a price

Is the negotiation successful? — No → End negotiation process

Yes

Continue to payment

Is the payment processed? — No → Cancel payment

Yes

Receipt is issued

Payment is recorded

Display transaction notion

David calculates commission → 20% is calculated from every selling price

Collectable owner is updated → Invoice of rent issued for remaining days on that month

Stock updated

Display inventory report

End

Pseudocode

BEGIN

//We begin by creating the categories and sub-categories of the collectables

Create categories: Superhero Collectables, Anime/Manga Collectables, Gaming Collectables, Sold.

Under category Superhero Collectables create sub-categories:

Comic books and graphic novels, Limited edition artwork, Action figures and statues, Prop replicas and costumes

Under category Anime/Manga Collectables create sub-categories:

Wall scrolls and posters, Manga volumes, Anime DVDs and Blu-rays, Figurines and model kits

Under category Gaming Collectables create sub-categories

Art books and strategy guides, Special edition video games, Collectible cards and board games, Gaming consoles & peripherals

//We set the constant values of the rent of all the sub-categories

Set Rent for comic books and graphic novels = R10

Set Rent for limited edition artwork =R20

Set Rent for action figures and statues = R45

Set Rent for Prop replicas and costumes = R75

Set Rent for wall scrolls and posters = R5

Set Rent for manga volumes = R15

Set Rent for anime DVD's and Blue-rays = R25

Set Rent for figurines and model kits = R45

Set Rent for art books and strategy = R15

Set Rent for special edition video games = R30

Set Rent for collectible cards and board games = R45

Set Rent for gaming consoles and peripherals = R65

//This is the information entered when a new collectable is placed in the store

Input Name of collectable

Input Detail owner

Input Category

Input Sub-category

Input Expected price

//The system then uses the following code to sort data into the correct category and   sub-category. First the system finds the correct category and then it searches for the   correct sub-category, when the system finds the correct category and sub-category it   stores the input data.

If category == Superhero Collectables THEN

For sub-categories in Superhero Collectables

If sub-category == Comic books and graphic novels THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

ELSE IF sub-category == Limited edition artwork THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌗

ELSE IF sub-category == Action figures and statues THEN

Store Name of collectable, Details of owner and Expected prices item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌗

ELSE IF sub-category == Prop replicas and costumes THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌑

END IF

END FOR

ELSE If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0.

ELSE IF sub-category == Manga volumes THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌑

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌑

ELSE IF sub-category == Figurines and modal kits THEN

Store Name of collectable, Details of owner and Expected price as item details.

Generate item code.

Set Item rent to 0.

Set Days in store to 0. ⌑

END IF

END FOR

ELSE If category == Gaming Collections THEN

    For sub-categories in Gaming Collections

        If sub-category == Art books and strategy guides THEN

            Store Name of collectable, Details of owner and Expected price as item details.

            Generate item code.

            Set Item rent to 0.

            Set Days in store to 0.

        ELSE IF sub-category == Special edition video games THEN

            Store Name of collectable, Details of owner and Expected price as item details.

            Generate item code.

            Set Item rent to 0.

            Set Days in store to 0. ⛶

        ELSE IF sub-category == Collectible cards and board games THEN

            Store Name of collectable, Details of owner and Expected price as item details.

            Generate item code.

            Set Item rent to 0.

            Set Days in store to 0. ⛶

        ELSE IF sub-category == Gaming consoles & peripherals THEN

            Store Name of collectable, Details of owner and Expected price as item details.

            Generate item code.

            Set Item rent to 0.

            Set Days in store to 0.

      END IF

    END FOR

//If stock sells

Input item code

IF item code == item code in database THEN

Dispaly item detail

Input if item is sold

IF item == sold THEN

Mark item as sold

Move item details to Sold category

END IF

ELSE

Display "Item code does not match any item in database."

END IF

// We need to calculate the commission of each category

input item price

commission=0.25

commission = item price*0.25

superhero collectable price=input price

manga collectable price=input price

gaming collectable price=input price

commission superhero = superhero collectable price * 0.25 Display "the commission for the superhero collectable is:"

commission manga= manga collectable price * 0.25 Display

"the commission for the manga collectable is:"

commission gaming= gaming collectable price * 0.25   Display

"the commission for the gaming collectable is:"

//This checks if the item is in the store at the end of each day and adds a day's rent if the item is still in the store.

FOR days in store

IF   item != sold THEN

     Days in store += 1

 END IF

//This code checks if the collectable is in the store for 6 months (182 days) and if so, it calculates the rent.

    IF Days in store == 182 days THEN

      If category == Superhero Collectables THEN

     For sub-categories in Superhero Collectables

        If sub-category == Comic books and graphic novels, THEN

          Item rent = 182 * Rent for comic books and graphic novels

         Display item rent

        ELSE IF sub-category == Limited edition artwork THEN

         Item rent = 182 * Rent for limited edition artwork

         Display item rent

        ELSE IF sub-category == Action figures and statues THEN

Item rent = 182 * Rent for action figures and statues

Display item rent

ELSE IF sub-category == Prop replicas and costumes THEN

Item rent = 182 * Rent for prop replicas and costumes

Display item rent

END IF

END FOR

Else If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Item rent = 182 * Rent for wall scrolls and posters

Display item rent

ELSE IF sub-category == Manga volumes THEN

Item rent = 182 * Rent for manga volumes

Display item rent

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Item rent = 182 * Rent for anime DVD's and Blue-rays

Display item rent

ELSE IF sub-category == Figurines and modal kits THEN

Item rent = 182 * Rent for figurines and modal kits

Display item rent

END IF

END FOR

ELSE If category == in Gaming Collections THEN

For sub-categories in Gaming Collections

If sub-category == Art books and strategy guides THEN

Item rent = 182 * Rent for art books and strategy guides

Display item rent

ELSE IF sub-category == Special edition video games THEN Item rent = 182 * Rent for special edition video games

Display item rent

ELSE IF sub-category == Collectible cards and board games THEN

Item rent = 182 * Rent for collectible cards and board games

Display item rent

ELSE IF sub-category == Gaming consoles & peripherals THEN

Item rent = 182 * Rent for gaming consoles & peripherals

Display item rent

END IF

END FOR

END IF

//This code calculates the rent if the item is sold before the end of the 6 months lease period.

IF item == sold THEN

If category == Superhero Collectables THEN

For sub-categories in Superhero Collectables

If sub-category == Comic books and graphic novels THEN

Item rent = Days in store * Rent for comic books and graphic novels

Display item rent

ELSE IF sub-category == Limited edition artwork THEN

Item rent = Days in store * Rent for limited edition artwork

Display item rent

ELSE IF sub-category == Action figures and statues THEN

Item rent = Days in store * Rent for action figures and statues

Display item rent

ELSE IF sub-category == Prop replicas and costumes THEN

Item rent = Days in store * Rent for prop replicas and costumes

Display item rent

END IF

END FOR

Else If category == Anime/Manga Collectables THEN

For sub-categories in Anime/Manga Collectables

If sub-category == Wall scrolls and posters THEN

Item rent = Days in store * Rent for wall scrolls and posters

Display item rent

ELSE IF sub-category == Manga volumes THEN

Item rent = Days in store * Rent for manga volumes

Display item rent

ELSE IF sub-category == Anime DVD's and Blue-rays THEN

Item rent = Days in store * Rent for anime DVD's and Blue-rays

Display item rent

ELSE IF sub-category == Figurines and modal kits THEN

Item rent = Days in store * Rent for figurines and modal kits

Display item rent

END IF

END FOR

ELSE If category == in Gaming Collections THEN

For sub-categories in in Gaming Collections

If sub-category == Art books and strategy guides THEN

Item rent = Days in store * Rent for art books and strategy guides

Display item rent

ELSE IF sub-category == Special edition video games THEN

Item rent = Days in store * Rent for special edition video games

Display item rent

ELSE IF sub-category == Collectible cards and board games THEN

Item rent = Days in store * Rent for collectible cards and board games

Display item rent

ELSE IF sub-category == Gaming consoles & peripherals THEN

Item rent = Days in store * Rent for gaming consoles & peripherals

Display item rent

END IF

END FOR

END IF

END