Bamazon Application

User Guide

A simple but functional inventory management and order placement system developed using node js and mysql as the database.

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1.   Requirements:

For detailed specification and requirements please refer to the following link.

https://miami.bootcampcontent.com/Miami-Boot-Camp/MIACOR201801FSF3-Class-Repository-FSF/blob/master/12-Week-mysql/homeWork/homework_instructions.md

2.   Assumptions:

1) The customer is accustomed to using command line interface for now.
2) Navigate to the source directory of the application.
3) Invoke the command line or the Gitbash utility.

3.   Module One: Customer Module:

This module can be invoked using the following command at the CLI.

```
Manoj@DESKTOP-7A2BNJ2 MINGW64 ~/Desktop/code/assignment_week_12_sql_node (master)
$ node bamazon_customer.js
```

This module has 2 functions built into the application.

1) Displaying the Inventory List.
2) Order placement for Customer.

From the CLI, please type the following to initiate the program as below.

1.1 Functionality: Displaying Inventory List

```
.................
Existing Inventory:
.................

Item ID: 1  //  Product Name: Dove Shampoo  //  Department: Cosmetics  //  Price: $5.75

Item ID: 2  //  Product Name: Dove Conditioner  //  Department: Cosmetics  //  Price: $6.25

Item ID: 3  //  Product Name: Glad 12 Gal Trash Bags  //  Department: Grocery  //  Price: $5.99

Item ID: 4  //  Product Name: Brawny Paper Towels  //  Department: Grocery  //  Price: $4.25

Item ID: 5  //  Product Name: Granny Smith Apples  //  Department: Produce  //  Price: $0.35

Item ID: 6  //  Product Name: Chiquita Bannana  //  Department: Produce  //  Price: $0.2

Item ID: 7  //  Product Name: Tropicana Orange Juice  //  Department: Grocery  //  Price: $4.45

Item ID: 8  //  Product Name: Horizon Organic Milk  //  Department: Grocery  //  Price: $4.5

Item ID: 9  //  Product Name: Huggies Diapers  //  Department: Children  //  Price: $2.75

Item ID: 10  //  Product Name: Charmin Toiler Paper  //  Department: Grocery  //  Price: $12.99

Item ID: 11  //  Product Name: Pampers Baby Wipes  //  Department: Children  //  Price: $1.5

Item ID: 12  //  Product Name: Yoga Mat  //  Department: Sports  //  Price: $12.75

Item ID: 13  //  Product Name: Soccerballs  //  Department: Sports  //  Price: $7.99

Item ID: 14  //  Product Name: Cotton Shirt  //  Department: Clothing  //  Price: $5.55

Item ID: 15  //  Product Name: Nike Shorts  //  Department: Clothing  //  Price: $17.88

Item ID: 16  //  Product Name: Purina Cat Chow  //  Department: Pet  //  Price: $7.25

Item ID: 17  //  Product Name: Fancy Feast Wet Cat Food  //  Department: Pet  //  Price: $12.5

Item ID: 18  //  Product Name: Ibuprophen  //  Department: Pharmacy  //  Price: $4.95

Item ID: 19  //  Product Name: Band Aid  //  Department: Pharmacy  //  Price: $3.25

Item ID: 20  //  Product Name: Ben & Jerry Ice Cream  //  Department: Grocery  //  Price: $3.25
```

3.2 Functionality: Order Placement

Based on the product number, that is unique, the orders can be placed.

```
Please enter the Item ID which you would like to purchase. 2
How many do you need? 2
Congratulations, the product you requested is in stock! Placing order!
updateQueryStr = UPDATE products SET stock_quantity = 625,product_sales = 12.5 WHERE id = 2
Your oder has been placed! Your total is $12.5
Thank you for shopping with us!
```

Few validations also occur at the order placement.

1. **Check if the product exists in the inventory list.**

```
? Please enter the Item ID which you would like to purchase. 400
? How many do you need? 400
ERROR: Invalid Item ID. Please select a valid Item ID.
...................
```

2. **If there is sufficient quantity of inventory available to meet the order.**

```
? Please enter the Item ID which you would like to purchase. 13
? How many do you need? 4000
Sorry, there is not enough product in stock, your order can not be placed as is.
Please modify your order.
```

3. **Quantity cannot be entered in fractions.**

```
? Please enter the Item ID which you would like to purchase. 2
? How many do you need? |
>> No Fractions Allowed , please enter integers.
```

4. Module Two: Manager Module:

The manager module can be invoked using the following command at the CLI.

```
Manoj@DESKTOP-7A2BNJ2 MINGW64 ~/Desktop/code/assignment_week_12_sql_node (master)
$ node bamazon_manager.js
```

This module has 4 functions built into the application.

```
1) View Products for Sale
2) View Low Inventory
3) Add to Inventory
4) Add New Product
```

From the CLI, please type the following to initiate the program as below.

2.1 Functionality: Displaying Products for Sale

```
Manoj@DESKTOP-7A2BNJ2 MINGW64 ~/Desktop/code/assignment_week_12_sql_node (master)
$ node bamazon_manager.js
? Please select an option: (Use arrow keys)
> View Products for Sale
  View Low Inventory
  Add to Inventory
  Add New Product
```

Selecting the highlighted menu option will display the items for sale.

```
*** Existing Inventory ***
.........................
Item ID: 1   //   Product Name: Dove Shampoo   //   Department: Cosmetics   //   Price: $5.75 // Stock: 498
Item ID: 2   //   Product Name: Dove Conditioner   //   Department: Cosmetics   //   Price: $6.25 // Stock: 625
Item ID: 3   //   Product Name: Glad 12 Gal Trash Bags   //   Department: Grocery   //   Price: $5.99 // Stock: 300
Item ID: 4   //   Product Name: Brawny Paper Towels   //   Department: Grocery   //   Price: $4.25 // Stock: 400
Item ID: 5   //   Product Name: Granny Smith Apples   //   Department: Produce   //   Price: $0.35 // Stock: 800
Item ID: 6   //   Product Name: Chiquita Bannana   //   Department: Produce   //   Price: $0.2 // Stock: 10000
Item ID: 7   //   Product Name: Tropicana Orange Juice   //   Department: Grocery   //   Price: $4.45 // Stock: 267
Item ID: 8   //   Product Name: Horizon Organic Milk   //   Department: Grocery   //   Price: $4.5 // Stock: 200
Item ID: 9   //   Product Name: Huggies Diapers   //   Department: Children   //   Price: $2.75 // Stock: 476
Item ID: 10   //   Product Name: Charmin Toiler Paper   //   Department: Grocery   //   Price: $12.99 // Stock: 575
Item ID: 11   //   Product Name: Pampers Baby Wipes   //   Department: Children   //   Price: $1.5 // Stock: 423
Item ID: 12   //   Product Name: Yoga Mat   //   Department: Sports   //   Price: $12.75 // Stock: 150
Item ID: 13   //   Product Name: Soccerballs   //   Department: Sports   //   Price: $7.99 // Stock: 89
Item ID: 14   //   Product Name: Cotton Shirt   //   Department: Clothing   //   Price: $5.55 // Stock: 120
Item ID: 15   //   Product Name: Nike Shorts   //   Department: Clothing   //   Price: $17.88 // Stock: 250
Item ID: 16   //   Product Name: Purina Cat Chow   //   Department: Pet   //   Price: $7.25 // Stock: 157
Item ID: 17   //   Product Name: Fancy Feast Wet Cat Food   //   Department: Pet   //   Price: $12.5 // Stock: 163
Item ID: 18   //   Product Name: Ibuprophen   //   Department: Pharmacy   //   Price: $4.95 // Stock: 389
Item ID: 19   //   Product Name: Band Aid   //   Department: Pharmacy   //   Price: $3.25 // Stock: 545
Item ID: 20   //   Product Name: Ben & Jerry Ice Cream   //   Department: Grocery   //   Price: $3.25 // Stock: 432
```

4.2 Functionality: View Low Inventory

This option provides the manage a list of all products that are less than 100 numbers in quantity at the store.

```
? Please select an option: View Low Inventory
.......................................
*** Low Inventory Items (below 100): ***
.......................................
Item ID: undefined  //  Product Name: Soccerballs  //  Department: Sports  //  Price: $7.99  //  Quantity: 89
```

4.3 Functionality: Add to Inventory

This option provides the manager an option to update the stock inventory of any product in the store.

```
? Please select an option: Add to Inventory
? Please enter the Item ID for stock_count update. 13
? How many would you like to add? 1
Updating Inventory...
Stock count for Item ID 13 has been updated to 90.
```

4.4 Functionality: Add New Product

This option provides the manager an option to add a new product the store for sale.

```
Manoj@DESKTOP-7A2BNJ2 MINGW64 ~/Desktop/code/assignment_week_12_sql_node (master)
$ node bamazon_manager.js
? Please select an option: Add New Product
? Please enter the new product name. Single Malt
? Which department does the new product belong to? Liquor
? What is the price per unit? 45.00
? How many items are in stock? 100
Adding New Item:
    product_name = Single Malt
    department_name = Liquor
    price = 45.00
    stock_quantity = 100
New product has been added to the inventory under Item ID 21.
```

5. Module Three: Supervisor Module

This module can be invoked using the following command at the CLI.

```
$ node bamazon_supervisor.js
? What is the action to be performed ?
>(*) Add a New Department
 ( ) View Revenue by Department
```

This module has 2 different functions built into the application.

1) Create a new department.
2) View Product Sales by Department.

3.1 Create a new department.

On selecting the add new department option from the menu, the use is
prompted for the new details required to create the new department.

```
? What is the action to be performed ? Add a New Department
Adding a New Department
? What is the New Department Name? Garden
? What is the New Department overhead? 100
New department has been added under dept ID 18.
```

3.2 View product Sales by Department.

```
PS C:\Users\Manoj\desktop\code\assignment_week_12_sql_node> node bamazon_supervisor.js
? What is the action to be performed ?
View Revenue report
-------------------------------------------------

  *** Revenue Report By Department ***
-------------------------------------------------

Dept ID: 3  //  Dept Name: Children  //  Dept Cost: 8  //  Dept Sale: 400  //  Dept Profit: 392

Dept ID: 5  //  Dept Name: Clothing  //  Dept Cost: 10  //  Dept Sale: 300  //  Dept Profit: 290

Dept ID: 1  //  Dept Name: Grocery  //  Dept Cost: 6  //  Dept Sale: 300  //  Dept Profit: 294

Dept ID: 12  //  Dept Name: Liquor  //  Dept Cost: 10  //  Dept Sale: null  //  Dept Profit: null

Dept ID: 6  //  Dept Name: Pet  //  Dept Cost: 12  //  Dept Sale: 100  //  Dept Profit: 88

Dept ID: 7  //  Dept Name: Pharmacy  //  Dept Cost: 15  //  Dept Sale: 100  //  Dept Profit: 85

Dept ID: 2  //  Dept Name: Produce  //  Dept Cost: 7  //  Dept Sale: 500  //  Dept Profit: 493

Dept ID: 4  //  Dept Name: Sports  //  Dept Cost: 9  //  Dept Sale: 150  //  Dept Profit: 141
```

A validation also occurs at the time of new department creation.

1. **Check if the department exists in the department table.**

```
PS C:\Users\Manoj\desktop\code\assignment_week_12_sql_node> node bamazon_supervisor.js
? What is the action to be performed ? Add a New Department
Adding a New Department
? What is the New Department Name? Liquor
? What is the New Department overhead? 10
Department already exists, No duplication allowed
```