Report: Object-Oriented Analysis, Design & Programming
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Course: Prog 10004 Programming Principles
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Due date: November 6th, 2022

**Tables:**

| No. | Object |
|-----|--------|
| 1 | Item |

| No. | Object | Datatype: User defined Class | Datatype: Predefined Class / Type (Python) |
|-----|--------|------------------------------|--------------------------------------------|
| 1. | Item | Product | Not Applicable |

UML Diagram:

| Product |
|---------|
| procode: int |
| proSalePrice: string |
| proManu: int |
| Stoklev: int |
| MonUnit: int |

**Difficulties Encountered:**

An issue I encountered during the creation of the code is if the user inputted a value type that could not be converted into an integer. This would cause an error in the program and in order to resolve it, I used the isdigit() function to first check if the datatype can be converted to a string. If it can be, I would then proceed to convert the string to integer, and if it cannot be converted, the program requests a new input from the user that applies to the conditions.

**Limitations:**

A limitation my program has is the inability to repeat the code for another product.

```
----------------------------------------------------------------
Product Sales Predictor
----------------------------------------------------------------

Enter the product code: 150
Are you sure.(y/n)
y
Enter the product name: Game
Are you sure.(y/n)
y
Enter product sale price: 70
Are you sure.(y/n)
y
Enter product manufacture cost: 20
Are you sure.(y/n)
y
Enter Stock level: 90
Are you sure.(y/n)
y
Enter estimated monthly units: 60
Are you sure.(y/n)
y
```

```
--------------------------------------------------------------
Month 1 :
  Manufactured: 60
  Units Sold: 67
  Stock: 83
--------------------------------------------------------------
Month 2 :
  Manufactured: 60
  Units Sold: 62
  Stock: 81
--------------------------------------------------------------
Month 3 :
  Manufactured: 60
  Units Sold: 52
  Stock: 89
--------------------------------------------------------------
Month 4 :
  Manufactured: 60
  Units Sold: 57
  Stock: 92
--------------------------------------------------------------
Month 5 :
  Manufactured: 60
  Units Sold: 53
  Stock: 99
--------------------------------------------------------------
Month 6 :
  Manufactured: 60
  Units Sold: 58
  Stock: 101
--------------------------------------------------------------
Month 7 :
  Manufactured: 60
  Units Sold: 62
  Stock: 99
--------------------------------------------------------------
Month 8 :
  Manufactured: 60
  Units Sold: 67
  Stock: 92
--------------------------------------------------------------
Month 9 :
  Manufactured: 60
  Units Sold: 50
  Stock: 102
--------------------------------------------------------------
Month 10 :
  Manufactured: 60
  Units Sold: 58
  Stock: 104
--------------------------------------------------------------
Month 11 :
  Manufactured: 60
  Units Sold: 63
  Stock: 101
--------------------------------------------------------------
Month 12 :
   Manufactured: 60
   Units Sold: 61
   Stock: 100
--------------------------------------------------------------
The total units sold over 12 months is 710
The total units made over the 12 months are 720
Net Profit: 35300
PS C:\Users\User\OneDrive\Sheridan\Prog Assignment 2> []
```