

INVENTORY MANAGEMENT SYSTEM Submitted by

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Subject: Programming for Problem Solving with C

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Department: Basic Science and Humanities

Under the supervision of

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**PROJECT REPORT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE
SECOND SEMESTER**



**DEPARTMENT OF BASIC SCIENCE AND HUMANITIES INSTITUTE
OF ENGINEERING AND MANAGEMENT, KOLKATA**



CERTIFICATE OF RECOMMENDATION

We hereby recommend that the project prepared under our supervision by Aditya prasad, entitled Inventory Management System be accepted in partial fulfillment of the requirements for the degree of partial fulfillment of the second semester.

Head of the department,
Basic science and humanities,
IEM Kolkata.

Project supervisor

VARIABLE DESCRIPTION: -

- **choice:** an integer variable to store the user's choice from the menu options.
- **j:** an integer variable used in the while loop for the menu options.
- **K:** an integer variable used in the while loop for generating the report.
- **add_product:** an integer variable to store the number of products the user wants to add.
- **product_amt:** an integer array to store the amount of each product.
- **product_cp:** an integer array to store the cost price of each product.
- **product_sp:** an integer array to store the selling price of each product.
- **i:** an integer variable used as a counter in the while loop to add products.
- **add_stock:** an integer array to store the number of stocks to add for each product.
- **remove_stock:** an integer array to store the number of stocks to remove for each product.
- **product_sales:** an integer variable to store the product number for tracking sales.
- **n:** an integer variable to store the user's choice in the stock management menu.
- **product_name:** a 2D character array to store the name of each

product

- **choose_name:** an integer variable to store the product number for adding stocks.
- **choose_name1:** an integer variable to store the product number for removing stocks.

FUNCTION DESCRIPTION: -

main(): This function is the entry point of the program and uses a while loop to keep the program running until the user chooses to exit. It prompts the user to choose between the different functions of the program using a switch statement.

FEATURES: -

This is a simple inventory management system written in C programming language. It has the following features:

- **CREATE INVENTORY:** This feature allows the user to add new products to the inventory by specifying the name, amount, cost price, and selling price of each product.
- **TRACK PRODUCT SALES:** This feature enables the user to track the sales of a particular product by entering the product number. It displays the product name and the stock remaining for that product.
- **STOCK MANAGEMENT:** This feature allows the user to add or remove stock from the inventory. If the user chooses to add stock, they will need to select the product and enter the number of stocks to add. If they choose to

remove stock, they will need to select the product and enter the number of stocks to remove.

- **GENERATE REPORT:** This feature allows the user to generate a report for all the products in the inventory. The report displays the name of the product, the amount of the product remaining in stock, the initial stock, the stock sold, the total cost price, the total sell price, and the profit or loss incurred by selling the product. · **EXIT:** This feature allows the user to exit the program.

CODE:

```
#include <stdio.h>
#include<math.h>

int main(){

    int choice,j,k=0;

    printf("\n-----CREATE INVENTORY-----\n");
    int add_product, product_amt[100],product_cp[100],product_sp[100],i=0,add_stock[100],
    remove_stock[100];
    int product_sales;
    int n;
    char product_name[100][100];
    printf("Enter the number of products you want to add : ");
    scanf("%d",&add_product);
    while(i < add_product){
        printf("Enter product name:- ");
        scanf("%s",&product_name[i]);
        printf("Enter product amount:- ");
        scanf("%d",&product_amt[i]);
        printf("Cost price of product:- ");
        scanf("%d",&product_cp[i]);
        printf("Selling price of product:- ");
        scanf("%d",&product_sp[i]);
        i++;
    }

    while(j=1){
        printf("\n----- INVENTORY MANAGEMENT SYSTEM-----\n");
        printf("1.Track product sales\n2.Stock management\n3.Generate report\n4.Exit\n");
        printf("Enter your choice : ");
```

```
scanf("%d", &choice);
```

```
switch (choice)
```

```
{
```

```
case 1:
```

```
    printf("Enter the Product you want to track the sales of : ");
```

```
    scanf("%d", &product_sales);
```

```
    printf("Product name = %s",product_name[product_sales-1]);
```

```
    printf("\nStock remaining= %d",product_amt[product_sales-1]);
```

```
    break;
```

```
case 2:
```

```
    printf("1.Add stock\n2.Remove stock\n");
```

```
    printf("Enter your choice : ");
```

```
    scanf("%d", &n);
```

```
    if(n == 1){
```

```
        int choose_name;
```

```
        printf("Choose the Product you want to add stocks to : ");
```

```
        scanf("%d", &choose_name);
```

```
        printf("Enter the number of stocks you want to add : ");
```

```
        scanf("%d",&add_stock[choose_name-1]);
```

```
        product_amt[choose_name-1] += add_stock[choose_name-1];
```

```
    }
```

```
    else if(n == 2){
```

```
        int choose_name1;
```

```
        printf("Choose the Product you want to remove stocks from : ");
```

```
        scanf("%d", &choose_name1);
```

```
        printf("Enter the number of stocks you want to remove : ");
```

```
        scanf("%d",&remove_stock[choose_name1-1]);
```

```
        product_amt[choose_name1-1] -= remove_stock[choose_name1-1];
```

```
    }
```

```
    else{
```

```
        printf("Wrong input\n");
```

```
    }
```

```
    Break;
```

```
case 3:
```

```
    while(k<add_product){
```

```
        printf("\nStock name = %s",product_name[k]);
```

```
        printf("\nProducts remaining= %d", product_amt[k]);
```

```
        printf("\nInitial Stocks= %d", add_stock[k]);
```

```
        printf("\nStocks sold= %d", remove_stock[k]);
```

```
        printf("\nTotal cost price= %d", add_stock[k]*product_cp[k]);
```

```
        printf("\nTotal sell price= %d", remove_stock[k]*product_sp[k]);
```

```
        if (((remove_stock[k]*product_sp[k]) - (remove_stock[k]*product_cp[k]))>0){
```

```
            printf("\nProfit= %d", ((remove_stock[k]*product_sp[k]) -
```

```
(remove_stock[k]*product_cp[k])) );  
    }  
    else{  
        printf("\nLoss= %d", (((remove_stock[k]*product_sp[k])-  
(remove_stock[k]*product_cp[k])) ));  
    }  
    k++;  
}  
break;
```

```
case 4:  
    j=0;  
    break;
```

```
default:
```

```
    break;  
}  
}
```

```
    return 0;  
}
```

OUTPUT:

```
-----CREATE INVENTORY-----
Enter the number of products you want to add : 2
Enter product name:- Milk
Enter product amount:- 8
Cost price of product:- 10
Selling price of product:- 20
Enter product name:- Biscuits
Enter product amount:- 8
Cost price of product:- 5
Selling price of product:- 10

----- INVENTORY MANAGEMENT SYSTEM-----
1.Track product sales
2.Stock management

----- INVENTORY MANAGEMENT SYSTEM-----
1.Track product sales
2.Stock management
3.Generate report
4.Exit
Enter your choice : 2
1.Add stock
2.Remove stock
Enter your choice : 1
Choose the Product you want to add stocks to : 1
Enter the number of stocks you want to add : 10

----- INVENTORY MANAGEMENT SYSTEM-----
1.Track product sales
2.Stock management
3.Generate report
4.Exit
Enter your choice : 2
1.Add stock
2.Remove stock
Enter your choice : 1
Choose the Product you want to add stocks to : 2
Enter the number of stocks you want to add : 20
```

```
----- INVENTORY MANAGEMENT SYSTEM-----
1.Track product sales
2.Stock management
3.Generate report
4.Exit
Enter your choice : 2
1.Add stock
2.Remove stock
Enter your choice : 2
Choose the Product you want to remove stocks from : 1
Enter the number of stocks you want to remove : 5

----- INVENTORY MANAGEMENT SYSTEM-----
1.Track product sales
2.Stock management
3.Generate report
4.Exit
Enter your choice : 2
1.Add stock
2.Remove stock
Enter your choice : 2
Choose the Product you want to remove stocks from : 2
Enter the number of stocks you want to remove : 5
```


----- INVENTORY MANAGEMENT SYSTEM-----

- 1.Track product sales
- 2.Stock management
- 3.Generate report
- 4.Exit

Enter your choice : 1

Enter the Product you want to track the sales of : 1

Product name = Milk

Stock remaining= 5

----- INVENTORY MANAGEMENT SYSTEM-----

- 1.Track product sales
- 2.Stock management
- 3.Generate report
- 4.Exit

Enter your choice : 1

Enter the Product you want to track the sales of : 2

Product name = Biscuits

Stock remaining= 15

----- INVENTORY MANAGEMENT SYSTEM-----

- 1.Track product sales
- 2.Stock management
- 3.Generate report
- 4.Exit

Enter your choice : 3

Stock name = Milk

Products remaining= 5

Initial Stocks= 10

Stocks sold= 5

Total cost price= 100

Total sell price= 100

Profit= 50

Stock name = Biscuits

Products remaining= 15

Initial Stocks= 20

Stocks sold= 5

Total cost price= 100

Total sell price= 50

Profit= 25