A Micro Project Report

on

Problem Solving using C Language

Submitted by

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

(AUTONOMOUS)

Accredited by NAAC with A+ Grade and NBA under Tier-1

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NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that Duddukuri Susmitha, Roll No: 23471A05DM, a Second Year Student of the Department of Computer Science and Engineering, has completed the Micro Project Satisfactorily in "Problem Solving using C Language" for the Academic Year 2024-2025..

Project Co-Ordinator

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DEPARTMENTAL STORE and MANAGEMENT

(Stock Management and Billing System)

AIM:

Write a C program for Departmental Store and Management (Stock Management and Billing System).

Source code:

```
#include<stdio.h>
#include <conio.h>
struct Item
{
  char name[30];
  int quantity;
  float price;
};
 int main()
{
  struct Item items[5];
  int count = 0, choice, qty;
  float total = 0.0;
  printf("***Stock Management and Billing System***\n");
  while (1)
   {
```

```
  printf("1. Add Item\n2. Display Items\n3. Generate Bill\n4. Exit\n");
  printf("Enter choice: ");
  scanf("%d", &choice);
  if (choice == 1 && count < 5)
  {
   printf("Enter item name: ");
   scanf("%s", items[count].name);
   printf("Enter quantity: ");
   scanf("%d", &items[count].quantity);
   printf("Enter price: ");
   scanf("%f", &items[count].price);
   printf("Item added successfully.\n");
   count++;
 }
else if (choice == 2)
 {
   printf("\nItems in Stock:\nName\tQuantity\tPrice\n");
   for (int i = 0; i < count; i++)
   printf("%s\t%d\t\t\t%.2f\n",items[i].name,items[i].quantity,items[i].price);
}
else if (choice == 3)
{
  printf("\nGenerating Bill:\n");
  for (int i = 0; i < count; i++)
```

```
            {
               printf("Enter quantity for %s: ", items[i].name);
               scanf("%d", &qty);
               if (qty <= items[i].quantity)
                 {
                    total += qty * items[i].price; items[i].quantity -= qty;
                 }
               else
                 {
                    printf("Insufficient stock for %s.\n", items[i].name);
                 }
            }
        printf("Total Bill: %.2f\n", total);
        total = 0; // Reset total for next billing
       }
      else if (choice == 4)
     {
          printf("Exiting...\n");
           break;
    }
   else
 {
   printf("Invalid choice or maximum items reached.\n");
}
```

```
 }
 return 0;
}
```

Input:

Stock Management and Billing System

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 1

Enter item name: cake

Enter quantity: 2

Enter price: 100

Output:

Item added successfully.

Input:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 1

Enter item name: chocos

Enter quantity: 5

Enter price: 10

Output:

Item added successfully.

Input:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 2

Output:

Items in Stock:

Name	Quantity	Price
cake	2	100.00
chocos	5	10.00

Input:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 3

Generating Bill:

Enter quantity for cake: 2

Enter quantity for chocos: 5

Output:

Total Bill: 250.00

Input:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 4

Output:

Exiting...

=== Code Execution Successful ===

INPUT:

Stock Management and Billing System

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 1

Enter item name: cake

Enter quantity: 2

Enter price: 10

OUTPUT:

Item added successfully.

INPUT:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 1

Enter item name: chocos

Enter quantity: 5

Enter price: 10

OUTPUT:

Item added successfully.

INPUT:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 2

OUTPUT:

Items in Stock:

Name	Quantity	Price
cake	2	100.00
chocos	5	10.00

INPUT:

1. Add Item

2. Display Items

3. Generate Bill

4. Exit

Enter choice: 3

OUTPUT:

Generating Bill:

Enter quantity for cake: 2

Enter quantity for chocos: 5

Total Bill: 250.00

INPUT:

1. Add Item

2. Display Items

3. Generate Bill

4.Exit

Enter choice: 4

OUTPUT:

Exiting...

=== Code Execution Successful ===