**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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**2024-20****25**

**NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET**

**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

**This is to certify that Mylavarapu Lakshmi Gayathri, Roll No: 23471A0CK, 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 HEAD OF THE DEPARTMENT

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**Asst. Professor Professor**

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| --- | --- |
| **S.No** | **Description** |
|  | Departmental store management system (stock management and biling system) |

**Stock management and Billing**

**AIM** :

**Write a C program on stock management and billing**

#include <stdio.h>

#include <stdlib.h>

#define MAX\_ITEMS 200

typedef struct

{

char name[50];

int quantity;

float price;

}

Item;

Item stock[MAX\_ITEMS];

int itemCount = 0;

void addItem()

{

if (itemCount < MAX\_ITEMS)

{

printf("Enter item name: ");

scanf("%s", stock[itemCount].name);

printf("Enter quantity: ");

scanf("%d", &stock[itemCount].quantity);

printf("Enter price: ");

scanf("%f", &stock[itemCount].price);

itemCount++;

}

else

{

printf("Stock is full!\n");

}

}

void removeItem()

{

int i;

char name[50];

printf("Enter item name: ");

scanf("%s", name);

for (i = 0; i < itemCount; i++)

{

if (strcmp(stock[i].name, name) == 0)

{

for (i=0; i < itemCount - 1; i++)

{

stock[i] = stock[i + 1];

}

itemCount--;

printf("Item removed!\n");

return;

}

}

printf("Item not found!\n");

}

void updateQuantity()

{

int i;

char name[50];

int quantity;

printf("Enter item name: ");

scanf("%s", name);

for (i = 0; i < itemCount; i++)

{

if (strcmp(stock[i].name, name) == 0)

{

printf("Enter new quantity: ");

scanf("%d", &quantity);

stock[i].quantity = quantity;

printf("Quantity updated!\n");

return;

}

}

printf("Item not found!\n");

}

void generateBill()

{

float total = 0;

printf("\nBill of Stock:\n");

printf("----------------\n");

for (int i = 0; i < itemCount; i++)

{

float subtotal = stock[i].quantity \* stock[i].price;

total += subtotal;

printf("Item: %s\n", stock[i].name);

printf("Quantity: %d\n", stock[i].quantity);

printf("Price: $%.2f\n", stock[i].price);

printf("Subtotal: $%.2f\n\n", subtotal);

}

printf("Total: $%.2f\n", total);

}

int main()

{

int choice;

while (1)

{

printf("\nStock Management System\n");

printf("1. Add Item\n");

printf("2. Remove Item\n");

printf("3. Update Quantity\n");

printf("4. Generate Bill\n");

printf("5. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice)

{

case 1:

addItem();

break;

case 2:

removeItem();

break;

case 3:

updateQuantity();

break;

case 4:

generateBill();

break;

case 5:

exit(0);

default:

printf("Invalid choice. Please try again.\n");

}

}

return 0;

}

**OUTPUT:**



