

MICRO-PROJECT REPORT

ON

Book Issue System of Library.

In Partial fulfilment of Diploma in Computer Engineering

(Second Semester)

In the subject of

FC3401 Programming in C

By

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Mrs. Aastha N. Chandankar

Mrs. Gargi V. Chaudhari

Mr. Ashish I Chavhan

Mrs. Harshita P Chhangani

Submitted To



Government Polytechnic, Amravati

(An Autonomous Institute of Govt. of Maharashtra)

Under the guidance of

Mrs. C.P Ahir Mam

Lecturer in Programming in C

Department of Computer Engineering

Government Polytechnic, Amravati

(2019-2020)



Government Polytechnic, Amravati.

(An Autonomous Institute of Govt. of Maharashtra)

Department of Computer Engineering

Certificate

This is to certify the **Mrs. Ayush S Bulbule (19CM007)**, **Mrs. Aastha N. Chandankar(19CM008)**, **Mrs. Gargi V. Chaudhari(19CM009)**, **Ashish I. Chavhan(19CM011)**, **Mrs. Harshita P Chhangani(19CM012)** of First Semester Diploma in **Computer Engineering** has satisfactorily completed the micro project entitled “**Book Issue System of Library.**” in **FC3401 P. I.C** for the academic year 2019-20 as prescribed in curriculum.

Place: Amravati

Date: / /

Lecturer in P.I.C

Annexure-I

PART A- Plan (About 1-2 pages)

Format for Micro-Project Proposal

Title of Micro Project: " Book Issue System of Library"

0.1 Brief Introduction (Importance of the project, in about 4 to 5 sentences)

1.0 Aim of the Micro-Project (in about 4 to 5 sentences)

Make A Programme on Book Issue System Of library

This Micro-Project aims at:

- 1. Making A Software on book issue system of library using 'C' language.**

Course Outcomes Integrated (Write any one of the following related to microproject)

Become able to make use of File Handling.

4.0 Actual Procedure Followed.

The given Topic was learned first. Then all necessary information was find out from various books and Internet. The program Was then Designed from topic using file handling, jump statements etc.

5.0 Actual Resources Used (Mention the actual resources used).

S. No.	Name of Resource/material	Specifications	Qty	Remarks
1	Code Blocks	--		
2	www.Sololearn.com	----		
3	Internet (Google)	---		

6.0 Outputs of the Micro-Projects

- To learn make long program.
- To learn use of file handling.

7.0 Skill Developed / Learning outcome of this Micro-Project

- Management programme developing Skills

2. Programming Skills.

8.0 Assessment by Faculty as per Rubrics

Process Assessment (03)	Product Assessment (02)	Total Marks (05)	Signature of Faculty

9.0 Action Plan (Sequence and time required for major activities for 8 weeks)

S.N.	Details of activity	Planned start date	Planned Finish date	I. Code & Name of Team Members
1	Finding All the Data related to Project.(preparing)	1/04/2020	03/04/2020	19CM007
2	Finding out Program related to project.	2/04/2020	03/04/2020	19CM009 19CM0012
3	Preparing A report	2/04/2020	03/04/2020	19CM010
4	Preparing Draft	2/04/2020	03/04/2020	19CM008

10.0 Resources Required (major resources such as raw material, some machining facility, software etc)

S.N.	Name of Resource/material	Specifications	Qty	Remarks
1	www.Sololearn.com			
2	Google (Internet)			
3	ANSI C Book			

- **Names of Team Members with Identity Code.**

1. Mrs. Ayush S Bulbule (19CM007)
2. Mrs. Aastha N. Chandankar(19CM008)
3. Mrs. Gargi V. Chaudhari(19CM009)
4. Mr.Ashish I. Chavhan(19CM011)
5. Mrs.Harshita P Chhangani(19CM012)

What is 'C'?

C is a general-purpose, procedural computer programming language supporting structured programming, lexical variable scope, and recursion, while a static type system prevents unintended operations. By design, C provides constructs that map efficiently to typical machine instructions and has found lasting use in applications previously coded in assembly language. Such applications include operating systems and various application software for computers, from supercomputers to embedded systems.

C was originally developed at Bell Labs by Dennis Ritchie between 1972 and 1973 to make utilities running on Unix. Later, it was applied to re-implementing the kernel of the Unix operating system.^[6] During the 1980s, C gradually gained popularity. It has become one of the most widely used programming languages,^{[7][8]} with C compilers from various vendors available for the majority of existing computer architectures and operating systems. C has been standardized by the ANSI since 1989 (see ANSI C) and by the International Organization for Standardization.

C is an imperative procedural language. It was designed to be compiled using a relatively straightforward compiler to provide low-level access to memory and language constructs that map efficiently to machine instructions, all with minimal runtime support. Despite its low-level capabilities, the language was designed to encourage cross-platform programming. A standards-compliant C program written with portability in mind can be compiled for a wide variety of computer platforms and operating systems with few changes to

its source code. The language is available on various platforms, from embedded microcontrollers to supercomputers.

Library Book issue System Using C:

This program is totally build in C language. It uses various C functions such as Jump statements, printf, scanf, File handeling, etc. When you run the software and Enter-> 1. Then It ask you to store the data of student whom book has issued. When you <enter>>2. It Shows you all the stored record.When you <enter>>3.You get out of the Software.

Code :

```
#include<stdio.h>
struct Lib
{
int RN,d,m,y,c;
char N[20];
char D[20];
char B[20];
char G[10];

};
int main()
{
struct Lib a;
int n;
FILE *f1;
printf("\n\n\t*****\n\n");
```

```

printf("\t\t\tBOOK ISSUE SYSTEM OF LIBRARY");
printf("\n\n\t*****\n\n");
do{
printf("\n\n\t\t\tEnter 1 : Save Student Info.\n");
printf("\t\t\tEnter 2 : Display All Books issued\n");
printf("\t\t\tEnter 3 : Exit\n");
printf("\n\n\t\t\t**Enter Valid input**\n");

```

```

printf("\n\n\t\t\tEnter:");
scanf("%d",&n);

```

```

switch(n)
{
case 1:
f1=fopen("C:/Users/AYUSH/Desktop/MCP-PIC/libr.dat","ab");
if(f1==NULL)
{
printf("File not Exist");
break;
}
else
{
printf("\t\t\t\t\tRoll Number:");
scanf("%d",&a.RN);
printf("\t\t\t\t\tStudent Name(eg.Aditya_S_Deshpande):");
scanf("%s",a.N);
printf("\t\t\t\t\tDepartment:");
scanf("%s",a.D);
printf("\t\t\t\t\tBook issued:");
scanf("%s",a.B);
printf("\t\t\t\t\tGenre:");
scanf("%s",a.G);
printf("\t\t\t\t\tEnter Today's date (in dd mm yy format):");
scanf("%d%d%d",&a.d,&a.m,&a.y);
fwrite(&a,sizeof(a),1,f1);
fclose(f1);

```



```
printf("\t\tRecord Saved!!\n");
```

```
break;  
}
```

```
case 2:
```

```
f1=fopen("C:/Users/AYUSH/Desktop/MCP-PIC/libr.dat","rb");
```

```
if(f1==NULL)
```

```
{  
printf("\t\tFile Not Exist\n");  
break;  
}
```

```
else
```

```
{  
while(fread(&a,sizeof(a),1,f1))  
{  
printf("\n\t\t\tRoll Number: %d",a.RN);  
printf("\n\t\t\tStudent Name: %s",a.N);  
printf("\n\t\t\tDepartment: %s",a.D);  
printf("\n\t\t\tBook issued: %s",a.B);  
printf("\n\t\t\tGenre: %s",a.G);  
printf("\t\t\tIssued Date:%d/%d/%d\n\n",a.d,a.m,a.y);  
}
```

```
fclose(f1);
```

```
break;
```

```
}
```

```
case 3:
```

```
printf("\t\tPress any Key to Exit....\n");
```

```
break;
```

```
default:
```

```
printf("Invalid Input...\n");
```

```
}
```

```
}while(n!=3);
```

```
return(0);
```

```
}
```

Output:

```
C:\Users\AYUSH\Desktop\MCP-PIC\PIC_microproject.exe

BOOK ISSUE SYSTEM OF LIBRARY

*****

Enter 1 : Save Student Info.
Enter 2 : Display All Books issued
Enter 3 : Exit

**Enter Valid input**

Enter:1

Roll Number:1012
Student Name:Sushant
Department:Computer
Book issued:Programing_in_C
Genre:CSE
Enter Today's date (in dd mm yy format):22 03 20

Record Saved!!

Enter 1 : Save Student Info.
Enter 2 : Display All Books issued
Enter 3 : Exit

**Enter Valid input**

Enter:
```

When you Enter 2

```
C:\Users\AYUSH\Desktop\MCP-PIC\PIC_microproject.exe

*****
BOOK ISSUE SYSTEM OF LIBRARY
*****

Enter 1 : Save Student Info.
Enter 2 : Display All Books issued
Enter 3 : Exit

**Enter Valid input**

Enter:2

Roll Number: 1012
Student Name: Sushant
Department: Computer
Book issued: Programing_in_C
Genre: CSE
Issued Date:22/3/20

Enter 1 : Save Student Info.
Enter 2 : Display All Books issued
Enter 3 : Exit

**Enter Valid input**

Enter:
```

When You Enter 3:

```
C:\Users\AYUSH\Desktop\MCP-PIC\PIC_microproject.exe

*****
BOOK ISSUE SYSTEM OF LIBRARY
*****

Enter 1 : Save Student Info.
Enter 2 : Display All Books issued
Enter 3 : Exit

**Enter Valid input**

Enter:3
Press any Key to Exit....

Process returned 0 (0x0)   execution time : 2.496 s
Press any key to continue.
```

