



**Bahria University, Islamabad**

**Department of Software Engineering**

**Object Oriented Programming**

**Lab (Spring-2024)**

**Teacher: Engr. M Waleed Khan**

**Student : Emaan Fatima**

**Enrollment : 01-131232-020**

**Lab Journal: 07**

**Date: 21<sup>th</sup> March 2024**

| Task No: | Task Wise Marks |          | Documentation Marks |          | Total Marks (25) |
|----------|-----------------|----------|---------------------|----------|------------------|
|          | Assigned        | Obtained | Assigned            | Obtained |                  |
| 1        |                 |          |                     |          |                  |

**Comments:**

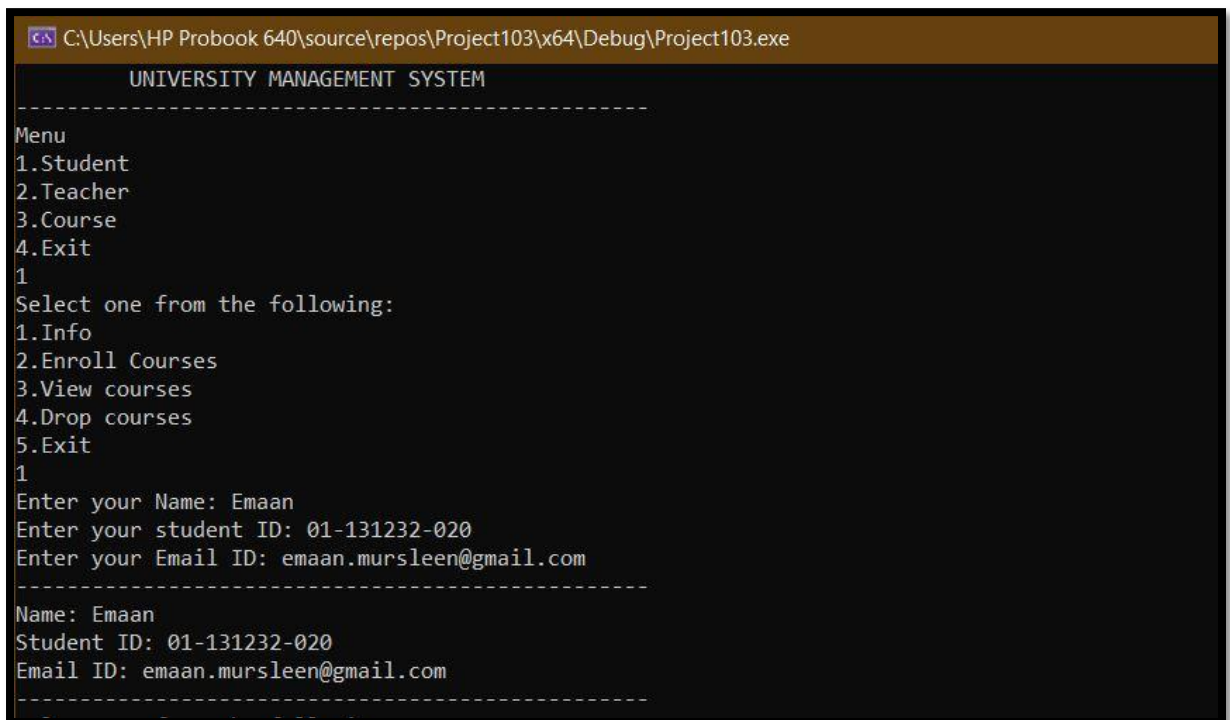
**Signature**

## Lab No: 07 – OPEN ENDED LAB

### Task 1: Screenshot

#### Option 1 functionalities

- This function has subfunctionalities as shown in output.
- We have also shown each and every functionality by running it one by one.



```
C:\Users\HP Probook 640\source\repos\Project103\x64\Debug\Project103.exe
UNIVERSITY MANAGEMENT SYSTEM
-----
Menu
1.Student
2.Teacher
3.Course
4.Exit
1
Select one from the following:
1.Info
2.Enroll Courses
3.View courses
4.Drop courses
5.Exit
1
Enter your Name: Emaan
Enter your student ID: 01-131232-020
Enter your Email ID: emaan.mursleen@gmail.com
-----
Name: Emaan
Student ID: 01-131232-020
Email ID: emaan.mursleen@gmail.com
-----
```

```
-----  
Select one from the following:  
1.Info  
2.Enroll Courses  
3.View courses  
4.Drop courses  
5.Exit  
2  
Enter the number of courses in which you want to enroll: 2  
Courses Offered  
1. Discrete Structures(DS)  
2. Introduction to Software Engineering(ISE)  
3. Islamic Studies(IS)  
4. Effective Communication Skills(ECS)  
5. Understanding Quran  
6. Object-Oriented Programming(OOP)  
7. Object-Oriented Programming Lab(OOP Lab)  
8. Linear Algebra(LA)  
Select the course from the list in which you want to get enrolled: 1  
Select the course from the list in which you want to get enrolled: 3  
-----
```

```
-----  
Number of courses: 2  
Enrolled Courses:  
Discrete Structures (DS)  
Effective Communication Skills (ECS)  
-----
```

```
C:\Users\HP Probook 640\source\repos\Project103\x64\Debug\Project103.exe  
Select one from the following:  
1.Info  
2.Enroll Courses  
3.View courses  
4.Drop courses  
5.Exit  
3  
Enrolled Courses:  
Discrete Structures (DS)  
Effective Communication Skills (ECS)  
-----
```

```
Select one from the following:
1.Info
2.Enroll Courses
3.View courses
4.Drop courses
5.Exit
4
Enter the number of courses you want to drop: 1
Enter the code of the course you want to drop: ECS
Course ECS dropped successfully.
-----
Number of courses: 2
Enrolled Courses:
Discrete Structures (DS)
-----
```

#### Option 2 functionalities

- This function has subfunctionalities as shown in output.
- We have also shown each and every functionality by running it one by one.

```
C:\Users\HP Probook 640\source\repos\Project103\x64\Debug\Project103.exe
-----
UNIVERSITY MANAGEMENT SYSTEM
-----
Menu
1.Student
2.Teacher
3.Course
4.Exit
2
Select one from the following
1. Enter Teacher Information
2. Assign Courses
3. View Courses
4. Remove Courses
5. Exit
1
^^^^^^^^^^Teacher's information^^^^^^^^^^
Enter Teacher ID: 01-131232-040
Enter Teacher Name: Madeiha
Enter Teacher Email: madeihasatti08@gmail.com
-----
```

```
Select one from the following
1. Enter Teacher Information
2. Assign Courses
3. View Courses
4. Remove Courses
5. Exit
2
Available courses:
1. OOP
2. Linear Algebra
3. Discrete Structure
4. ISE
5. ECS
6. OOP Lab
7. Islamiyat
Enter the numbers corresponding to the courses you want to teach (Max 3): 1
3
2
Courses assigned to Madeiha are: OOP, Discrete Structure, Linear Algebra
-----
```

C:\Users\HP Probook 640\source\repos\Project103\x64\Debug\Project103.exe

```
3
Courses assigned to Madeiha are:
Course: Linear Algebra
Teacher ID: 01-131232-040
Teacher Name: Madeiha
Teacher Email: madeihasatti08@gmail.com
-----
Course: Discrete Structure
Teacher ID: 01-131232-040
Teacher Name: Madeiha
Teacher Email: madeihasatti08@gmail.com
-----
Course: OOP
Teacher ID: 01-131232-040
Teacher Name: Madeiha
Teacher Email: madeihasatti08@gmail.com
-----
-----
```



```
How many courses do you want to remove? 1
Enter the name of course 1 you want to remove: ECS
Course 'ECS' removed successfully.
Courses assigned to madeiha are:
Course: Discrete Structure
Teacher ID: 01-1322-040
Teacher Name: madeiha
Teacher Email: madeiasatti08@gmail.com
-----
Course: Linear Algebra
Teacher ID: 01-1322-040
Teacher Name: madeiha
Teacher Email: madeiasatti08@gmail.com
-----
```

#### Option 3 functionalities

- This function has subfunctionalities as shown in output.
- We have also shown each and every functionality by running it one by one.

```
C:\Users\HP Probook 640\source\repos\Project103\x64\Debug\Project103.exe
-----
UNIVERSITY MANAGEMENT SYSTEM
-----
Menu
1.Student
2.Teacher
3.Course
4.Exit
3
^^^^^^^^^^Teacher's information^^^^^^^^^^
Enter Teacher ID: 01-131232-020
Enter Teacher Name: EMAAN
Enter Teacher Email: emaan.mursleen@gmail.com

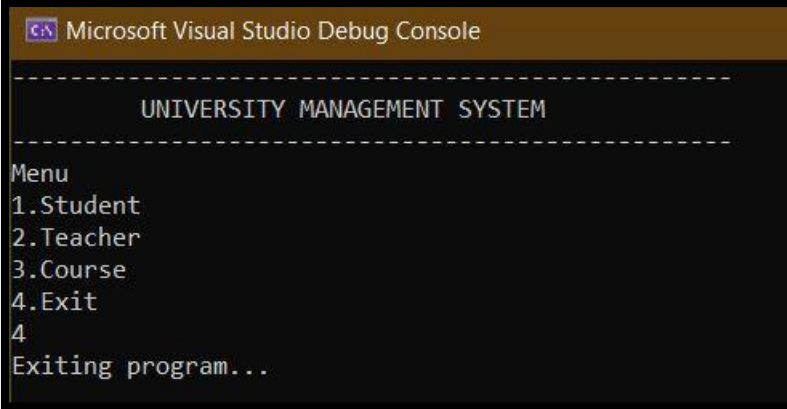
Select one from the following:
1. Add Student
2. Remove Student
3. View Enrolled Students
4. Save Course Information
5. Load Course Information
6. Exit
1
Enter your Name: emaan
Enter your student ID: 01
Enter your Email ID: emaan@gmail.com
Student added to the course.
```

```
Select one from the following:
1. Add Student
2. Remove Student
3. View Enrolled Students
4. Save Course Information
5. Load Course Information
6. Exit
2
Enter the name of the student you want to remove: emaan
```

```
Select one from the following:
1. Add Student
2. Remove Student
3. View Enrolled Students
4. Save Course Information
5. Load Course Information
6. Exit
3
Enrolled Students:
emaan
```

```
Select one from the following:
1. Add Student
2. Remove Student
3. View Enrolled Students
4. Save Course Information
5. Load Course Information
6. Exit
4
Enter the filename to save course information: atudent.cpp
Course information saved successfully.
```

```
Course information saved successfully.
Select one from the following:
1. Add Student
2. Remove Student
3. View Enrolled Students
4. Save Course Information
5. Load Course Information
6. Exit
5
Enter the filename to load course information: student.cpp
Unable to open file for reading.
Course information loaded successfully.
```



```
Microsoft Visual Studio Debug Console

-----
UNIVERSITY MANAGEMENT SYSTEM
-----
Menu
1.Student
2.Teacher
3.Course
4.Exit
4
Exiting program...
```

Github Link

<https://github.com/emaanfatim/oop-open-ended>

(By Emaan Fatima & Madeiha Arshad)