**Application For Online Course Enrollment**

Need to prepare a console application for Online Course Enrollment and tracking.

The application should allow for the below process.

# Main Menu:

The Main Menu must have the following options:

1. **User Registration**
2. **User Login**
3. **Exit**

If the user selects option 3, Exit, then the application should be closed.

## User Registration:

On selection of the option “1. User Registration” from the main menu,

1. Need to get the below details from the user for the user registration.
   1. Username
   2. Age
   3. Gender
   4. Qualification
   5. Mobile Number
   6. Mail ID
2. On completion of the user registration, we need to display the **userID** (auto-generated registration number).
3. Then Need to show the main menu again.

## User Login

On selection of the “User Login” option from the main menu ,

1. Ask for the “**UserID**” of the user. Check the “**UserID**” in the user list.
2. If the **userID** does not exist, show “**Invalid User ID. Please enter a valid one.**”.
3. If “**UserID**” exists, then show the below menu.
   1. **Enroll Course**
   2. **View Enrollment History**
   3. **Next Enrollment**
   4. **Exit**
4. **Enroll Course**
5. Show the list of courses available by printing **CourseID**, **CourseName**, **TrainerName**, **CourseDuration**, and **SeatsAvailable**.
6. Then ask the user to pick one course by asking, “Enter Course ID to enroll”.
7. Check seat availability for the course selected. If there is no seat available, display “Seats are not available for the current course” and show the submenu.
8. If the seat is available for enrollment, need to check whether the user has already enrolled in any courses. Because users can enroll in 2 courses maximum at a time.
9. If the user has enrolled in less than 2 courses, then user can enroll in that course.
10. If the user already enrolled in 2 courses, find the course with the least duration, and calculate that course’s end date by using the enrollment date of that course and the course duration.
11. Print the next enrollable date. “**You have already enrolled in two courses. You can enroll in the next course on** (course end date).”.

**Example:**

* + Consider that the user enrolled in HTML on February 25, 2022, with a course duration of 5 days, and then JS on February 25, 2022, with a course duration of 2 days. If he wants to enroll in another course, we need to show, “**You have already enrolled in two courses." You can enroll in the next course on February 27, 2022."**

1. **View Enrollment History**

Show the course enrollment details of the current user.

1. **Next Enrollment**

Calculate the next enrollment data as mentioned earlier and show the course details which is going to end next.

1. **Exit**

Exit the submenu and go to the main menu.

## UserDetails Class:

UserDetails class should have the properties below.

Properties:

1. RegistrationID (Auto Incremented – SYNC1001)
2. UserName
3. Age
4. Gender – ( Enum – Male, Female, Transgender )
5. Qualification
6. MobileNumber
7. MailID

**Objects for UserDetails:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **RegistrationID** | **UserName** | **Age** | **Gender** | **Qualification** | **MobileNumber** | **MailID** |
| SYNC1001 | Ravichandran | 30 | Male | ME | 9938388333 | [ravi@gmail.com](mailto:ravi@gmail.com) |
| SYNC1002 | Priyadharshini | 25 | Female | BE | 9944444455 | [priya@gmail.com](mailto:priya@gmail.com) |

## CourseDetails Class:

CourseDetails class should have the properties below.

Properties:

* CourseID (Auto Incremented – CS2001)
* CourseName
* TrainerName
* CourseDuration
* SeatsAvailabe

**Objects for CourseDetails:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CourseID** | **CourseName** | **TrainerName** | **CourseDuration** | **SeatsAvailable** |
| CS2001 | C# | Baskaran | 5 | 0 |
| CS2002 | HTML | Ravi | 2 | 5 |
| CS2003 | CSS | Priyadharshini | 2 | 3 |
| CS2004 | JS | Baskaran | 3 | 1 |
| CS2005 | TS | Ravi | 1 | 2 |

## EnrollmentDetails Class:

EnrollmentDetails class should have below properties.

Properties:

* EnrollmentID (Auto Incremented – EMT3001)
* CourseID
* RegistrationID
* EnrollmentDate

|  |  |  |  |
| --- | --- | --- | --- |
| **EnrollmentID** | **CourseID** | **RegistrationID** | **EnrollmentDate** |
| EMT3001 | CS2001 | SYNC1001 | 28/01/2024 |
| EMT3002 | CS2003 | SYNC1001 | 15/02/2024 |
| EMT3003 | CS2004 | SYNC1002 | 18/02/2024 |
| EMT3004 | CS2002 | SYNC1002 | 20/02/2024 |