

# St. Mary university

# RAPID APPLICATION DEVELOPMENT PROJECT

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# **ONLINE REGISTRATION SYSTEM**

❖ In our project we include 4 actors in the system:

# 1. Actors:

Guest: A user who visits the registration website but is not logged in.

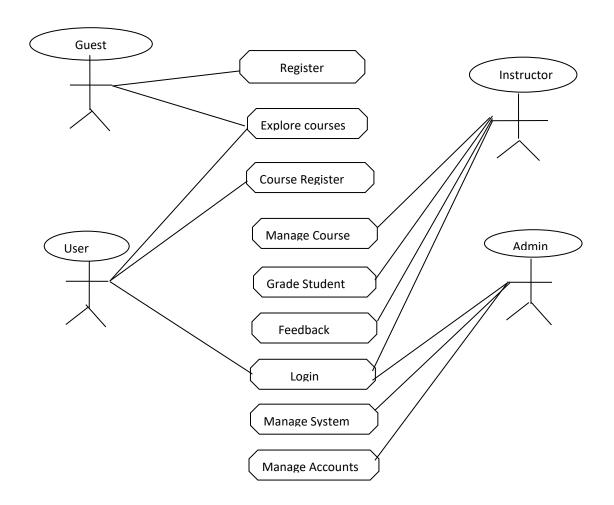
Registered User: A user who has successfully created an account and can log in.

**Admin:** An administrator who manages user accounts and system settings.

Instructor: An actor who interacts with the system to manage and update course materials,

provide grades and feedback to students, and communicate with enrolled students.

# 2. <u>Use Case Diagram:</u>



# 3. <u>Use case Description:</u>

The Online Registration System is designed to simplified and automate the registration process for various courses, or programs conducted online. It provides a user-friendly interface for both administrators and participants to manage and register for course efficiently. The system aims to simplify the registration process, eliminate manual paperwork, and enhance overall user experience.

# A. Guest Registration:

**Actors:** Guest (Unregistered user)

#### Flow of Events:

- The Guest initiates the registration process by clicking on the "Register" link.
- The system presents a registration form, requesting necessary information such as username, email, password, etc.
- The Guest enters the required details into the registration form.
- The system validates the entered information to ensure it meets the required criteria (e.g., valid email format, strong password).
- If validation is successful, the system creates a new user account and associates it with the provided information.
- The system sends a confirmation email to the registered email address containing a verification link.
- The Guest clicks the verification link to activate the account.

#### **Description:**

- The student can access detailed information about a specific course, including its description, schedule, prerequisites, and instructor.
- The student can view a list of available courses or programs.
- The student can filter courses based on criteria such as subject, level, or schedule.

# B. User Login:

Actors: Registered User

#### Flow of Events:

- The Registered User navigates to the login page and enters their username and password.
- The system verifies the entered credentials against the stored user data.
- If the credentials are valid, the system logs in the user and redirects them to the user dashboard.
- If the credentials are invalid, an error message is displayed, and the user is prompted to re-enter the information.

### **Description:**

- The student selects a course of interest.
- > The student provides necessary details for course registration, such as course code or ID.
- The system checks for course availability and prerequisites.
- If eligible, the student is successfully registered for the course.

# C. Instructor Login:

**Actors:** Instructor (Teacher)

#### Flow of Events:

- > The Instructor navigates to the login page and enters their username and password.
- The system verifies the entered credentials against the stored Instructor data.
- If the credentials are valid, the system logs in the Instructor and redirects them to the Instructor dashboard.
- If the credentials are invalid, an error message is displayed, and the Instructor is prompted to re-enter the information.

#### **Description:**

Instructor interacts with the system to manage and update course materials, provide grades and feedback to students, and communicate with enrolled students.

# D. Admin Management:

**Actors:** Admin (System administrator)

#### Flow of Events:

- > The Admin navigates to the admin panel or dashboard.
- The system presents administrative options, such as user management and system settings.
- The Admin can view a list of registered users and their details.
- The Admin can deactivate or delete user accounts if necessary.
- The Admin can configure system settings, such as security parameters and registration options.

#### **Description:**

- The Admin can manage user accounts (e.g., view details, deactivate accounts).
- The Admin can configure system settings.
- ➤ The Admin can generate reports on student registrations, course enrollment, or other relevant statistics.

# 4. Key Features:

#### A. User Registration:

- Participants can create their accounts by providing necessary personal information such as name, contact details, and email address.
- User authentication ensures secure access to the system.

# B. Payment Processing:

- The system integrates with a secure payment gateway to facilitate online payments.
- Participants can make payments using various methods such as credit cards, debit cards, or online banking.
- Payment status is updated in real-time, and participants receive payment receipts.

#### C. User Dashboard:

- Participants have a personalized dashboard to manage their registrations and view upcoming events.
- They can modify their registration details or cancel registrations if allowed by the system.
- The dashboard also provides access to payment history and event-related notifications.

#### D. Admin Panel:

- Administrators have a dedicated panel to manage events, registrations, and user
- They can view and edit event details, monitor registration status, and generate reports.
- The admin panel allows administrators to send notifications or announcements to participants.

# 5. Benefits:

- Simplify and facilitate the registration process, saving time and effort for both participants and administrators.
- Reduces paperwork and manual data entry errors.
- Enhances user experience with a user-friendly interface and self-service capabilities.
- Improves event management efficiency and data accuracy.
- Provides real-time updates on event availability and payment status.
- Enables administrators to make data-driven decisions based on reports.

Overall, the Online Registration System makes the registration process easier for online courses, or programs, ensuring a seamless experience for participants and administrators.

# 6. Class Diagram:

The diagram shows four main classes: Guest, Registered User, Instructor, and Admin, representing the different types of users in the system.

Each class has attributes (username, email, password) that store the user's information. The Guest Registration class is responsible for the registration process, including the Register method to create a new user and the VerifyEmail method to confirm the email address. The User\_Login\_Result class is used to encapsulate the result of a user login attempt, including success status and a message.

The System class represents the functionality related to user and system management for administrators, such as managing users (ManageUsers) and configuring the system (ConfigureSystem)

