**SOFTWARE PROJECT PLAN**

**Student Course Enrollment System**

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**Introduction**

The Student Course Enrollment System is designed to simplify and automate the process of managing course enrollments for both administrators and students in an educational setting. The platform enables Admins to create and manage courses with specific enrollment capacities, while providing students with an intuitive interface to browse and enroll in available classes.

**1.1 Project Scope**

The **Student Course Enrollment System** is a web-based platform that allows an institution to manage student enrollment in courses. The system provides two main user roles: Admin and Student. Admins can create classes, set a maximum number of students, and manage student progress. Students can browse available classes and enroll in up to three active classes at a time. Once a class is completed, the Admin can mark it as complete, allowing students to join new classes.

**1.2 Major Software Functions**

**1.Admin Functions**:

* 1. Create and update classes with specific enrollment limits.
  2. View and manage class enrollment, including marking student progress.
  3. Monitor student progress to ensure they do not exceed three active classes.

**2.Student Functions**:

* 1. Log in to access the course enrollment platform.
  2. View available classes and details (class name, description, seats available).
  3. Enroll in up to three classes simultaneously.
  4. Monitor their enrolled classes and progress.

**1.3 Performance/Behavior Issues**

1. **Website Performance**:

The website should be optimized for fast loading times, even when managing high numbers of students and class data.

1. **User Engagement**:

Simple and intuitive design to facilitate quick student logins, class browsing, and enrollment processes.

1. **Data Security**:

Secure login and class management functions to ensure that only authorized students can enroll and only Admins can manage class data.

1. **Content Quality**:

Admins should input accurate class details (name, description, seat count) to ensure clarity for students.

**1.4 Management and Technical Constraints**

1. **Budget**:

Minimal, as the system will focus on core CRUD operations and simple UI/UX design without additional external integrations.

1. **Regulatory Compliance**:

Ensure compliance with relevant data protection regulations (e.g., GDPR for handling student information).

1. **Integration Standards**:

The system will follow standard web development practices and allow for future integrations with other platforms if necessary.

**2.Risk Management**

**2.1 Project Risks**

1. **Technical Challenges**:
   * Potential difficulties in handling class enrollment limits and ensuring seamless admin-student interaction without data conflicts.
2. **User Engagement**:
   * Students may find the system difficult to use if the user interface is not intuitive.
3. **Data Security**:
   * Risk of unauthorized access to student or admin accounts without proper security measures (e.g., SSL, password encryption).
4. **Content Quality**:
   * Admins may fail to update or enter accurate course information, leading to confusion for students.

**2.2 Risk Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Name** | **Probability** | **Impact** | **RM3 Pointer** |
| Technical Challenges | Medium | High | 12 |
| User Engagement | Low | Medium | 3 |
| Data Security | Medium | High | 12 |
| Content Quality | Low | Medium | 3 |

**2.3 Overview of Risk Mitigation, Monitoring, Management (RM3)**

* **Technical Challenges**: Thorough testing during the development phase to identify and resolve any enrollment logic issues.
* **User Engagement**: Develop user-friendly interfaces with simplified navigation and clear instructions for students.
* **Data Security**: Implement encryption for user data, use HTTPS for secure communication, and enforce strong password policies.
* **Content Quality**: Provide clear instructions and verification checks for Admins to ensure accurate class data entry.

**3. Project Schedule**

**3.1 Project Task Set**

**Phase 1: Planning and Design**

1. Conduct initial planning, including requirements gathering and technical constraints.
2. Design wireframes for both Admin and Student interfaces, obtaining stakeholder approval.

**Phase 2: Development**

1. Develop the basic website infrastructure and host it.
2. Implement core features, including class creation, enrollment management, and student registration.

**Phase 3: Testing and Launch**

1. Conduct thorough testing for functionality, including limits on student enrollment and marking classes complete.
2. Prepare for the initial launch, focusing on ensuring system stability and data integrity.

**Phase 4: Post-Launch**

1. Monitor system performance, address any issues that arise post-launch, and enhance features as necessary.
2. Gather feedback from users (students and admins) and implement improvements accordingly.

**3.2 Functional Decomposition**

* **Class Management Module (Admin)**: Handles creation, update, and deletion of classes, along with student management.
* **Student Enrollment Module (Student)**: Allows students to view available classes, enroll in them, and track their progress.
* **Login/Authentication Module**: Secures access for both Admins and Students, ensuring data privacy and proper access control.

**3.4 Timeline Chart**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Deadline** | **Status** |
| Project Kickoff | September End | Started |
| Planning | October 1st week | In-process |
| Design | October 1st week | In-process |
| Development | October 4Th week | In-process |
| Testing | November 1st week | To be picked up |
| Launch | December 1st week | To be picked up |
| Post-Launch Evaluation | December 2nd week | To be picked up |

**4 Appendix**

**4.1 Project Team Contact Information**

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