***User Scenarios***

**Scenario: Student Registration and Transition from High School to University**

**User**: New Student

**Goal**: A student is transitioning from high school to university and needs to be registered into the system.

**Steps**:

* The student provides basic information like their full name, high school, date of birth, and contact details.
* The system automatically assigns a unique matriculation number based on the student's high school ID or a pre-defined algorithm (e.g., first letters of the student’s name + a random number).
* The system verifies this information with the university's enrollment system and validates the student’s eligibility to register.
* Upon successful registration, the student’s profile is created with personal information, academic records, and an academic advisor.
* The student receives an email notification confirming their registration and matriculation number.

**Expected Outcome**: The student successfully becomes part of the university’s system, with no manual intervention needed. This eliminates administrative overhead, accelerates the registration process, and ensures accuracy.

**2. Scenario: Course Registration**

**User**: Student (Current or New)

**Goal**: A student wants to register for courses for the upcoming semester.

**Steps**:

* The student logs into the DOS-MS using their matriculation number and password.
* The system displays available courses for the upcoming semester, organized by department and program.
* The student selects courses based on their program requirements, prerequisites, and schedule preferences.
* The system checks for conflicts (e.g., two courses scheduled at the same time or exceeding credit limits).
* If no conflicts are found, the system confirms the registration, updates the student’s course schedule, and notifies the student via email or SMS.
* The student receives an overview of their registered courses, including room numbers, instructor information, and class timings.

**Expected Outcome**: The student can quickly and easily register for courses. The process is automated, ensuring no conflicts and reducing the possibility of errors or delays.

**3. Scenario: Scholarship Allocation**

**User**: Dean of Students / Admin

**Goal**: To allocate scholarships based on predefined criteria, such as academic performance or extracurricular involvement.

**Steps**:

* The Dean or an authorized admin logs into the system with special admin privileges.
* The system provides a list of eligible students based on predefined scholarship criteria (e.g., GPA, volunteer hours, leadership roles).
* The admin reviews the list and adjusts scholarship amounts or selects students to receive scholarships based on available funds or special conditions.
* The system automatically updates student records, applies scholarship details, and notifies the awarded students via email.
* Scholarship details are automatically logged into the system for reporting and auditing purposes.

**Expected Outcome**: The process of allocating scholarships is streamlined and transparent. Admins can manage allocations effectively, and students receive their awards promptly and accurately.

**4. Scenario: Academic Progress Tracking**

**User**: Student / Academic Advisor

**Goal**: A student or academic advisor wants to track the student’s academic progress.

**Steps**:

* The student or advisor logs into the system and accesses the student's academic profile.
* The system displays a summary of completed courses, grades, GPA, and credit hours earned.
* If the student is on academic probation, the system provides an alert and suggests corrective actions (e.g., tutoring, retaking courses).
* The advisor can add notes or recommendations, such as career advice or suggestions for improving academic performance.
* The student receives a report summarizing their progress and any actions they need to take.

**Expected Outcome**: Students and advisors can easily track academic progress in real-time, ensuring that students stay on track to meet graduation requirements and address any issues proactively.

**5. Scenario: Extracurricular Engagement and Tracking**

**User**: Student / Admin

**Goal**: A student wants to log and track their extracurricular activities (e.g., clubs, sports, volunteering) for personal development and scholarship eligibility.

**Steps**:

* The student logs into their profile and navigates to the "Extracurricular Activities" section.
* The student enters details of their activities (e.g., club name, position, volunteer hours, events attended).
* The system validates the entries based on university guidelines and ensures the activities align with recognized extracurricular categories.
* The admin verifies the activities and approves them for scholarship and credit purposes.
* The system generates a report summarizing the student’s extracurricular involvement over the semester/year.

**Expected Outcome**: The student can easily manage and track their extracurricular engagement, which can be used for scholarship applications and personal growth records. The admin also has oversight for approval and validation.

**6. Scenario: Real-Time Reporting and Analytics**

**User**: Dean of Students / Admin / University Stakeholders

**Goal**: Generate real-time reports to assess various metrics, such as student enrollment, academic performance, and scholarship distribution.

**Steps**:

* The admin or dean logs into the reporting dashboard.
* They select the type of report they wish to generate (e.g., enrollment status, GPA distribution, extracurricular participation, scholarship allocation).
* The system pulls data from various student records and generates the requested report in real-time.
* The user can filter and customize the report based on specific parameters, such as department, grade level, or academic performance.
* The report is automatically saved, and the system sends a copy to the user’s email or allows for export to formats like PDF or Excel.

**Expected Outcome**: Admins and stakeholders can generate comprehensive, data-driven reports at any time, ensuring transparency, informed decision-making, and efficient tracking of university operations.

**7. Scenario: Data Security and Compliance**

**User**: System Admin

**Goal**: Ensure that sensitive student information is protected, and that the system complies with legal and institutional regulations.

**Steps**:

* The system admin configures security settings for the DOS-MS, including encryption for sensitive student data (e.g., personal details, academic records).
* Role-based access control is applied, ensuring that only authorized users (e.g., deans, department heads) can access sensitive information.
* Regular backups of the system are scheduled to ensure data integrity in case of system failures.
* The system automatically audits data access and changes, logging who made changes to student records and when.
* Compliance checks are periodically conducted to ensure the system meets legal and institutional requirements, such as GDPR or FERPA.

**Expected Outcome**: The system ensures the privacy and security of student data while meeting compliance standards, preventing unauthorized access and data breaches.