

# Functional Requirements

The SSS system should meet the following functional requirements:

<b>Title: Viewing Subject List</b>	
<b>ID: FR 1.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall display a list of all available subjects, including subject names, codes, and lecturers.</b>	
The initial conditions: User must be logged into the system.	
Acceptance criteria: The subject list is correctly displayed with all relevant details.	
Main scenario: 1. Student navigates to the subject list page. 2. The system displays the available subjects.	
Alternative scenarios and extensions: 4. System error occurs: a. Display an error message. b. Prompt the user to retry.	

<b>Title: Viewing Subject Details</b>	
<b>ID: FR 1.2</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to view subject details, including name, description, lecturer, schedule, and assessment methods.</b>	
The initial conditions: User selects a subject from the list.	
Acceptance criteria: The system correctly displays all details of the selected subject.	
Main scenario: 1. Student clicks on a subject. 2. The system displays subject details.	
Alternative scenarios and extensions: 4. Subject not found: a. Display a 'not found' error message. b. Redirect back to the subject list.	

<b>Title: Enrolling in a Subject</b>	
<b>ID: FR 2.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to enroll in subjects available for their program.</b>	
The initial conditions: User must be logged in and within the enrollment period.	
Acceptance criteria: Student successfully enrolls and sees the subject in their list.	
Main scenario: 1. Student selects a subject. 2. The system verifies prerequisites. 3. The system confirms enrollment.	
Alternative scenarios and extensions: 4. Prerequisite not met: a. Display an error message. b. Suggest prerequisite courses.	

<b>Title: Viewing Timetable</b>	
<b>ID: FR 3.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall provide students with a personalized timetable based on their enrolled subjects.</b>	
The initial conditions: User is logged in and has enrolled in at least one subject.	
Acceptance criteria: Timetable correctly displays the enrolled subjects.	
Main scenario: 1. Student navigates to the timetable page. 2. The system displays the timetable.	
Alternative scenarios and extensions: 4. No enrolled subjects: a. Display a message stating no subjects found. b. Provide a link to enroll.	

<b>Title: Viewing Grades</b>	
<b>ID: FR 4.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to view their grades for enrolled subjects.</b>	
The initial conditions: User is logged in and has received at least one grade.	
Acceptance criteria: Grades are correctly displayed.	
Main scenario: 1. Student navigates to the grades page. 2. The system displays grades.	
Alternative scenarios and extensions: 4. No grades available: a. Display a message stating no grades yet. b. Provide a link to course details.	

<b>Title: Viewing Tuition Payment Status</b>	
<b>ID: FR 5.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to view their tuition payment history and current balance.</b>	
The initial conditions: User is logged in and has an active student account.	
Acceptance criteria: Payment history and balance are correctly displayed.	
Main scenario: 1. Student navigates to the payment status page. 2. The system displays payment details.	
Alternative scenarios and extensions: 4. No payment records: a. Display a message stating no payments found. b. Provide a link to payment information.	

<b>Title: Viewing Library Borrows / Arrears / Bookings</b>	
<b>ID: FR6.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to view their borrowed books, arrears, and reservations.</b>	
The initial conditions: User must be logged in and have at least one transaction in the library.	
Acceptance criteria: Library borrowing history, arrears, and bookings are displayed correctly.	
Main scenario: 1. Student navigates to the library section. 2. The system displays the borrowing history and status.	
Alternative scenarios and extensions: 4. No borrowed books: a. Display a message stating no borrowings. b. Provide a link to the library catalog.	

<b>Title: User Account Management</b>	
<b>ID: FR 7.1</b>	
Actors: (to be skipped)	
Use Case: (to be skipped)	
Priority: (to be skipped)	
<b>Description: The system shall allow students to register, log in, edit profiles, and manage security settings.</b>	
The initial conditions: User interacts with the authentication system.	
Acceptance criteria: Account operations function correctly.	
Main scenario: 1. User performs an account operation (register, login, update profile, etc.). 2. The system processes and confirms the action.	
Alternative scenarios and extensions: 4. Invalid login: a. Display an error message. b. Lock account after three failed attempts.	

## Non-functional Requirements

The SSS system should meet the following non-functional requirements to ensure efficiency and usability:

ID	Name	Priority	Description
NFR-001	Scalability	High	The system must be able to handle a large number of students accessing the platform simultaneously and support future expansion without major restructuring.
NFR-002	Efficiency	High	The system must load and display content within 3 seconds under normal load and process user requests with minimal latency.
NFR-003	Security	Critical	The system must implement secure authentication mechanisms, encrypt sensitive user data (e.g., passwords), and comply with data protection regulations.
NFR-004	Accessibility & Compatibility	Medium	The system must be accessible from various devices (desktops, tablets, mobile phones), be compatible with modern web browsers, and adhere to web accessibility standards.