

Saad - Use Cases Documentation

Member: Saad

Assigned Use Cases: Generate Report, Manage User

UC-08: Generate Report

Attribute	Description
Use Case ID	UC-08
Use Case Name	Generate Report
Actor	FYP Coordinator, Admin
Description	System generates various analytical and administrative reports for FYP management and decision making
Preconditions	User is logged in with report generation privileges, Required data exists in system
Postconditions	Report is generated and displayed, Report can be exported, Report generation is logged
Priority	Medium
Frequency of Use	Weekly/Monthly basis
Normal Flow	1. User logs into system 2. User navigates to Reports section 3. System displays available report types 4. User selects specific report type 5. System displays report parameters form 6. User sets report criteria (date range, filters, etc.) 7. User selects output format (PDF, Excel, CSV) 8. User clicks "Generate Report" button 9. System validates report parameters 10. System queries database for required data 11. System processes and analyzes data 12. System applies formatting and calculations 13. System renders report in selected format 14. System displays report preview 15. User reviews generated report 16. User can export or save report 17. System logs report generation activity
Alternative Flows	A1: Progress Report - Shows project completion statistics- Displays student progress by supervisor- Includes timeline analysis- Highlights delayed projects A2: Supervisor Workload Report - Lists all supervisors and their current load- Shows capacity utilization- Identifies overloaded supervisors- Suggests workload redistribution A3: Department Performance Report - Overall FYP completion rates- Grade distribution analysis- Trend analysis over semesters- Comparison with previous years A4: Student Status Report - List of all students and their FYP status- Identifies at-risk students- Shows deadline compliance- Graduation readiness assessment

Attribute	Description
Exception Flows	E1: Insufficient Data - If selected criteria returns no data- System displays "No data available" message- User adjusts criteria and regenerates E2: Report Generation Timeout - If report processing takes too long- System offers to email report when ready- User can continue with other tasks E3: Export Failure - If report export fails- System offers alternative formats- User can try different export options
Business Rules	BR-01: Only authorized users can generate reports BR-02: Reports containing sensitive data require admin approval BR-03: Report generation must be logged for audit BR-04: Large reports should be processed asynchronously BR-05: Historical data older than 5 years may have limited availability
Special Requirements	SR-01: Report generation should complete within 30 seconds SR-02: Support for multiple export formats SR-03: Automated report scheduling capability SR-04: Email delivery for large reports
Technology Variations	Mobile-optimized reports for dashboard viewing
Frequency	20-50 reports generated per month
Open Issues	Integration with external reporting tools

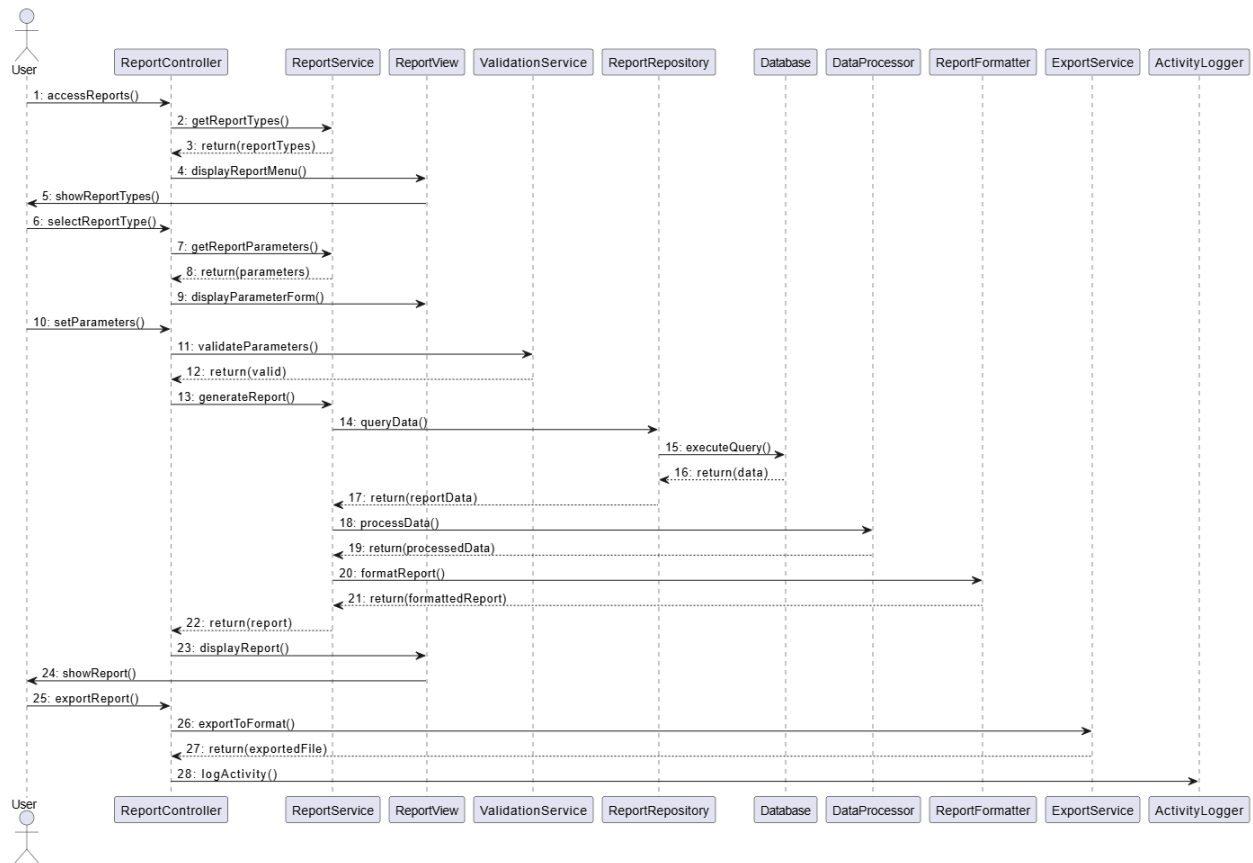
UC-09: Manage User

Attribute	Description
Use Case ID	UC-09
Use Case Name	Manage User
Actor	Admin, FYP Coordinator
Description	System administrators manage user accounts including creation, modification, deactivation, and role assignment
Preconditions	User is logged in with administrative privileges, System is operational
Postconditions	User account is created/modified/deactivated, Changes are logged, Affected users are notified
Priority	High
Frequency of Use	Daily during active periods
Normal Flow	1. Admin logs into system 2. Admin navigates to User Management section 3. System displays user management dashboard 4. Admin selects user

Attribute	Description
	management action5. System displays appropriate form/interface6. Admin performs user management task7. System validates all input data8. System applies changes to user account9. System updates user permissions10. System logs administrative action11. System sends notification to affected user12. System displays confirmation message13. System updates user management dashboard
Alternative Flows	<p>A1: Create New User- Admin fills new user form- System validates university credentials- System creates account with default settings- System sends welcome email with login details- User activates account on first login</p> <p>A2: Modify Existing User- Admin searches and selects user- System displays user profile- Admin modifies user details/roles- System validates changes- System updates user account- User notified of changes</p> <p>A3: Deactivate User Account- Admin selects user to deactivate- System shows confirmation dialog- Admin confirms deactivation with reason- System deactivates account- System notifies user of deactivation- User loses system access</p> <p>A4: Reset User Password- Admin initiates password reset- System generates temporary password- System emails temporary password to user- User must change password on next login</p> <p>A5: Bulk User Operations- Admin uploads CSV file with user data- System validates file format and data- System processes users in batch- System provides operation summary- Failed operations logged for review</p>
Exception Flows	<p>E1: Invalid User Data- If user data validation fails- System highlights problematic fields- Admin must correct data before proceeding</p> <p>E2: Duplicate User Account- If user already exists in system- System displays duplicate user warning- Admin can choose to update existing account</p> <p>E3: Permission Conflict- If role assignment creates permission conflict- System displays conflict resolution options- Admin must resolve conflicts before proceeding</p> <p>E4: User Currently Active- If trying to deactivate user with active session- System terminates user session first- Then proceeds with deactivation</p>
Business Rules	<p>BR-01: Only Admin and Coordinator can manage users</p> <p>BR-02: User deactivation requires documented reason</p> <p>BR-03: All user management actions must be logged</p> <p>BR-04: Student accounts auto-expire after graduation</p> <p>BR-05: Supervisor accounts linked to employment status</p> <p>BR-06: Password reset requires user verification</p>
Special Requirements	<p>SR-01: User data encryption for sensitive information</p> <p>SR-02: Audit trail for all user management actions</p> <p>SR-03: Integration with university HR system</p> <p>SR-04: Automated account lifecycle management</p>
Technology Variations	LDAP integration for university authentication
Frequency	10-30 user management operations per day
Open Issues	Single Sign-On (SSO) integration timeline

Collaboration Diagrams

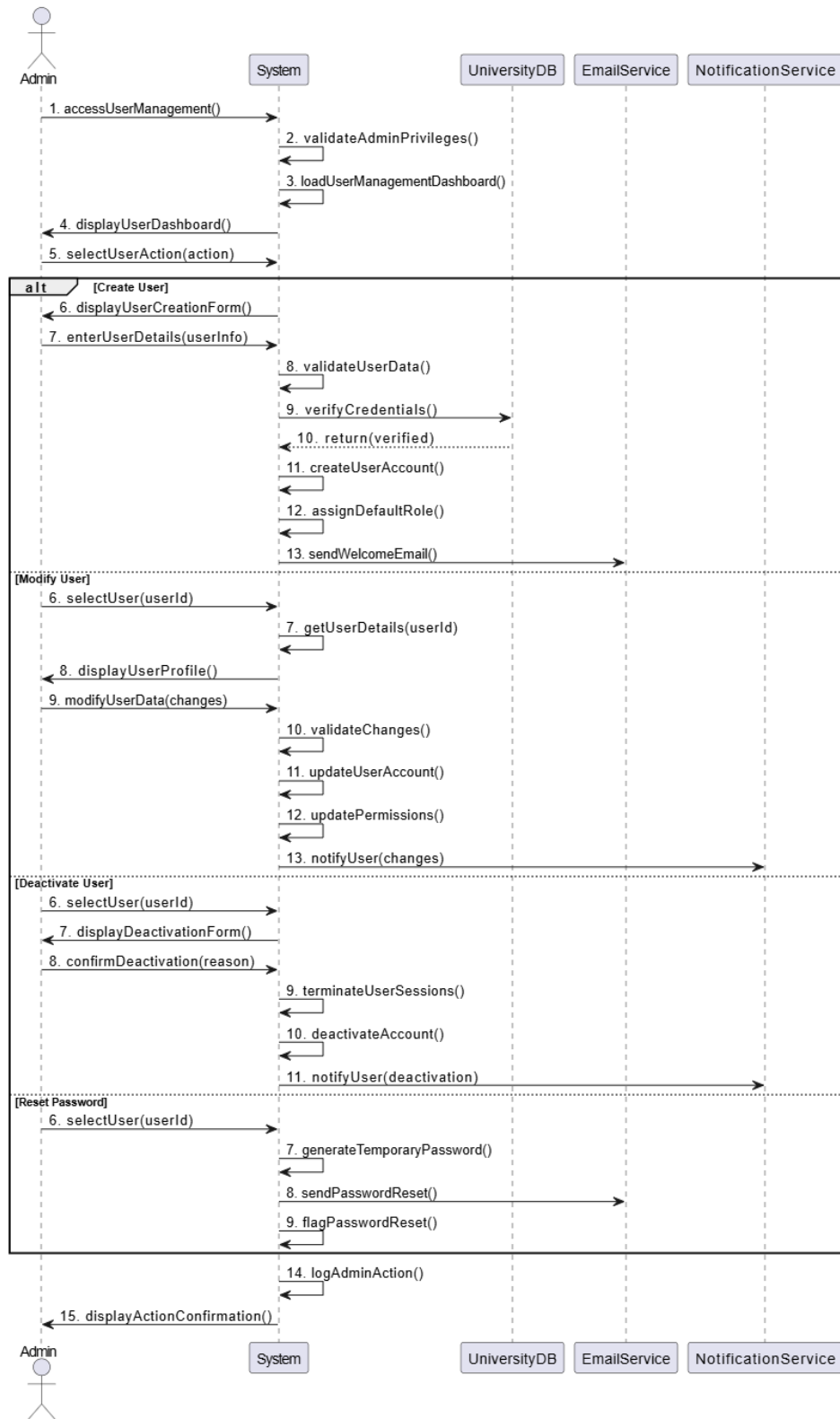
1. Generate Report Collaboration Diagram



Manage User Collaboration Diagram:



Manage User System Sequence Diagram:



Bulk User Management System Sequence Diagram:

