

Elicitation Session #4 - Requirements Specifications (Use Case Specifications)

BUS4053-0001

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UC01 – Create User

Use Case Description

This use case describes the process of creating new user accounts in the Learning Management System (LMS). The administrator can create single users manually or multiple users in bulk, either by uploading a CSV file or integrating with the Student Information System (SIS). The system validates user data and provides confirmation upon successful user creation.

Actors

Primary: Admin

Secondary: Student Information System (SIS)

Pre-Conditions

- Admin is authenticated and has the necessary permissions to create users.
- Student Information System (SIS) has APIs to integrate with the Learning Management System (Brightspace).

Post-Condition

- A new user is created with the selected role (Student, Faculty, Administrator) and stored in the system database.
- Administrator will receive notification for successful user creation.

Basic Flow

	Step	Alternative Flow
1	The administrator navigates to the "Create New Users" page.	AF01 - Insufficient Permission
2	The administrator chooses between creating a single user or multiple users.	
3.1	Creating Single user <ul style="list-style-type: none">• Administrator selects "Add Single User"• Administrator adds the user's Personal and Account Information• Assigns appropriate Institution or System Role to the user• Administrator clicks "Submit" button	AF02 - Invalid User Input AF03 - User Already Exist
3.2	Creating multiple users <ul style="list-style-type: none">• Administrator selects "Add Multiple Users"• Select one of the options "upload .csv" or "import from SIS"	
3.2.1	Administrator uploads .csv file containing user data	
3.2.2	Administrator imports data from Student Information System <ul style="list-style-type: none">• SIS gathers and feeds data to LMS	AF05 - SIS Integration Failure
4	The system validates the provided data (Single user/batch) (e.g., email format, missing data in csv).	AF03 - User Already Exist AF04 - CSV Upload Error
5	A new user profile is created, and confirmation (prompt and notification) is displayed.	AF06 - Notification Error
6	Use case ends.	

AF01 – Insufficient Permissions

	Step	Alternative Flow, Data, Rules
1	This flow starts when the system detects the user has insufficient permissions to access Administrator Tools.	
2	The system displays an error message: "Insufficient permissions to access this feature."	BR01 DE02
3	The user is redirected to the home page or a restricted access page.	

AF02 – Invalid User Input

	Step	Alternative Flow, Data, Rules
1	This flow starts after Step 3.1 of the Basic Flow when the system determines that the user input is invalid (e.g., incorrect email format, incorrect name format, use of special character).	DE03
2	The system highlights the fields with errors and provides error messages indicating the specific issues (e.g., "Email format is incorrect" or "invalid characters detected").	
3	The system prompts the admin to correct the invalid input and resubmit.	
4	The flow resumes at Step 2 of the Basic Flow once the admin corrects the errors and resubmits the form.	

AF03 – User Already Exists

	Step	Alternative Flow, Data, Rules
1	This flow starts after Step 3.1 or 4 of the Basic Flow when the system detects that the provided user id is already associated with an existing user.	
2	The system displays an error message indicating that the user id is already registered.	
3	The system prompts the admin to correct the user id or cancel the creation process.	DE04
4	The flow resumes at Step 2 of the Basic Flow after the admin provides correct details.	

AF04 – CSV Upload Error

	Step	Alternative Flow, Data, Rules
1	This flow starts at step 4 when the system validates the uploaded CSV file having user information. (missing data, incorrect data format)	BR06
2	The system generates an error report for the incorrect records in the CSV file.	
3	The admin is prompted to correct the errors in the CSV file and re-upload it.	
4	The flow resumes at the CSV upload step 3.2 in the Basic Flow after the file is corrected	

AF05 – SIS Integration Error

	Step	Alternative Flow, Data, Rules
1	This flow starts at Step 3.2.2 when the system fails to integrate with the SIS (Student Information System).	
2	The system displays an error message: "Failed to integrate with SIS. Please try again later."	BR04
3	The user can retry the SIS integration or proceed with .csv file upload.	
4	The flow resumes at Step 3.2 SIS integration or upload .csv file step in the Basic Flow.	

AF06 – Notification Error

	Step	Alternative Flow, Data, Rules
1	This flow starts at Step 5 when a notification error occurs after new user creation.	BR04
2	The system displays an error message: "Failed to send notification. Please try again later."	
3	The flow end.	

AF07 – System Error

	Step	Alternative Flow, Data, Rules
1	This flow starts at any step when system error occurs	
2	System informs user that error occurs	
3	Use case ends	

Business Rules

ID	Name	Business Rule
BR01	Determine User Permissions	Only Admins have permission to create, update, and delete users. Faculty can assign students to courses and view student reports.
BR02	Unique User Information	Each user's id must be unique in the system to prevent duplicate accounts.
BR03	Data Validation Rules	User input data must follow validation rules: email format, missing data, data format, etc.
BR04	Error Logging	Any system errors encountered must be logged for auditing and troubleshooting, with appropriate error messages shown to the user.

Data Dictionary

ID	Business Name	Description	Validation Rule	Calculation Rule	Sample Data
DE01	Institution Role	User's role within the institution (e.g., Student, Faculty, Admin).	Must be one of: "Student", "Faculty", "Admin".	N/A	"Student", "Admin"
DE02	System Role	User's role within the LMS system (e.g., Instructor, Teaching Assistant, Observer)	Must be one of the predefined system roles in the LMS		"Instructor", "Observer"
DE03	Email Address	Email is used as a unique identifier for user accounts.	Must follow email format: example@domain.com.	Must be unique.	"john.doe@example.com"
DE04	User ID	Unique identifier for each user in the system, automatically generated.	Must be a positive integer, auto generated by the system.	N/A	"1002345"
DE05	First Name	User's First Name	Must contain only letters, spaces, hyphens, and apostrophes	Maximum 50 characters	"John"
DE06	Last Name	User's Last Name	Must contain only letters, spaces, hyphens, and apostrophes	Maximum 50 characters	"Doe"

ID	Business Name	Description	Validation Rule	Calculation Rule	Sample Data
DE07	Notification Message	Messages sent by the system to admin regarding successful user creation.	Max 250 characters.	N/A	"User successfully created."
DE08	Status	User's account status (e.g. Active, Inactive)	Must be either "Active" or "Inactive"	N/A	Active