UniX Student Course Enrolment System

Sprint 1 — Requirements & Annotated Wireframes (PDF)

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Lucidchart Link: https://lucid.app/lucidchart/a50ad0d2-0bbb-4ddf-af30-e7aa9645d5f3/edit?view_items=-Pox88KUfxGJ&page=0_0&invitationId=inv_44d00eee-eea0-4c32-b9b4-3f6bf9574c10

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1. Project Overview

This project designs a web application for students to log in, select a semester that is open for enrolment, and enrol in offered courses for that semester. The Sprint 1 deliverable documents the requirements, wireflow (navigation), and annotated wireframes for both desktop and mobile interfaces.

2. Scope

2.1 In Scope (Sprint 1)

- Student login UI

- Semester selection UI (open/closed handling)

- Course enrolment UI (selection + submission)

- Confirmation/success UI

- Error/empty/session handling UI

- Desktop + Mobile wireframes

2.2 Out of Scope (Sprint 1)

- Actual backend implementation

- Database setup

- Admin portal

3. Assumptions

- Only authenticated students can access semester/course enrolment pages.

- Semester and course offering data will be provided by the system (API/DB) in later sprints.

- Enrolment rules (max units, prerequisites) are not enforced in Sprint 1 unless stated later; basic validation is still shown in UI.
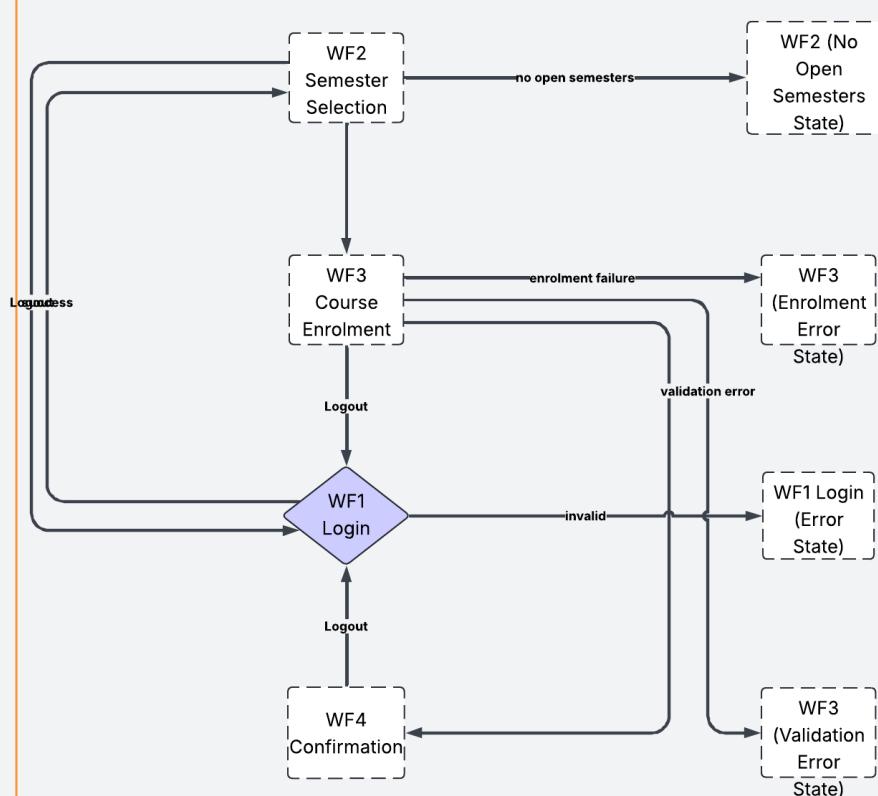
4. Functional Requirements (FR)

- **FR1:** Student can log in with username/student ID and password.

- **FR2:** System shows an error message for invalid login.

- **FR3:** Student can view a list of semesters and their enrolment status (Open/Closed).

- **FR4:** Student can select only a semester that is Open for enrolment.

- **FR5:** Student can view courses offered in the selected semester.

- **FR6:** Student can select one or more courses for enrolment.

- **FR7:** System blocks enrolment submission when no course is selected and shows a validation message.

- **FR8:** System shows enrolment success and displays enrolled course summary.

- **FR9:** System shows an enrolment failure message when submission fails.

- **FR10:** Student can log out from authenticated pages.

- **FR11:** If session is missing/expired, system shows a session expired/access denied screen.

5. Non-Functional Requirements (NFR)

- **NFR1 (Usability):** Consistent layout, clear labels, and primary actions visible.

- **NFR2 (Accessibility):** Readable text size; clear error messages; buttons large enough on mobile.

- **NFR3 (Security):** Password field masked by default; logout clears session; protected pages require session.

- **NFR4 (Performance):** Course list filter/search should respond quickly (client-side or fast query).

6. Wireflow (Navigation)

```
                    WF2                                          WF2 (No
                 Semester         ──no open semesters──►          Open
                 Selection                                      Semesters
                                                                  State)

                    WF3           ──enrolment failure──►          WF3
                  Course                                       (Enrolment
                 Enrolment                                        Error
                                                                  State)
                                                    validation error

                   Logout

                    WF1           ────invalid────►              WF1 Login
Logout    Login    Login                                         (Error
                                                                  State)

                   Logout

                    WF4                                           WF3
                 Confirmation                                  (Validation
                                                                  Error
                                                                  State)
```

```
Any Page (not                                        WF5
logged in /          ──────────────────────►       Session
 session                                            Expired /
expired)                                             Access
                                                     Denied
```

Annotations
ID │ UI Element │ Behaviour/Rules │
Navigation/Outcome │ Data/Dependency
1 │ WF1 Login │ Auth checks on submit │
success→WF2; invalid→WF1e │ Auth service
2 │ WF2 Semester Selection │ Requires active
open term │ no open→WF2n; select→WF3 │
Term API
3 │ WF3 Course Enrolment │ Validate
selection & units │ error→WF3v/WF3f;
success→WF4 │ Course API
4 │ WF4 Confirmation │ Shows enrol
summary │ Logout→WF1 │ Enrolment record
5 │ WF5 Session Expired │ Blocked access if
no session │ Login redirect │ Session
middleware

7. Annotated Wireframes

WF1 — Login
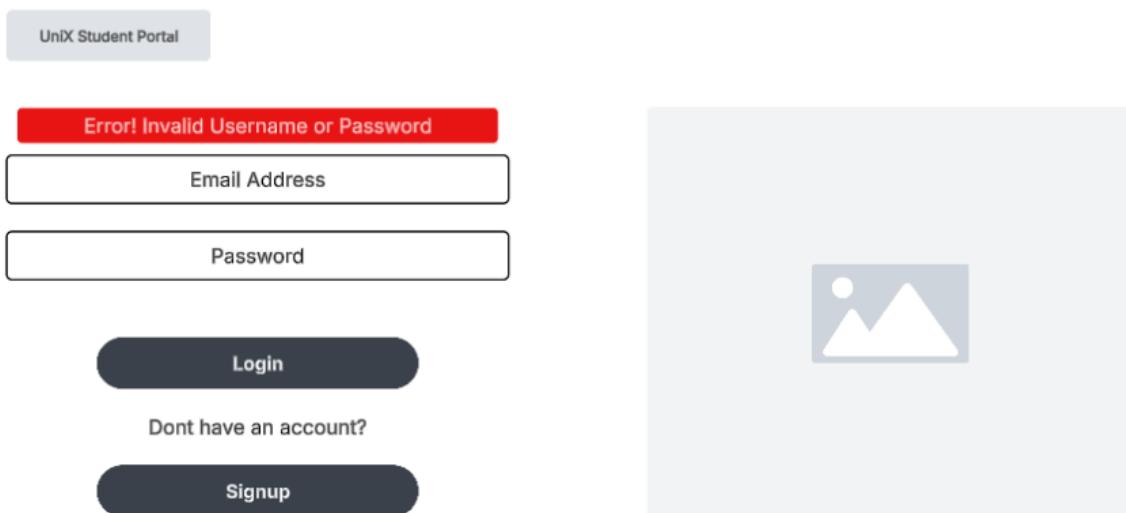
ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Username / Student ID field	Required; text input	N/A	Valid student username/ID exists in system
2	Password field	Required; masked input	N/A	Password verification against stored hash
3	Show password toggle	Toggles mask/unmask	N/A	None
4	Login button	Submits login form; validate inputs	Success → WF2 Semester Selection	Authentication service; session creation

			If not	
5	"Forgot password?" link	Optional link (can be not implemented)	implemented → show "Not available"	None / future enhancement
6	Page title / branding	Informational only	N/A	None

WF1 — Login Error

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Error banner/message	Shows only after failed login	Stays on WF1	Result returned from authentication
2	Username field highlight/helper	Shows "required/invalid" if empty	N/A	Client-side validation

3	Password field highlight/helper	Shows "required/invalid" if empty	N/A	Client-side validation
4	Login button (retry)	Re-attempt login	Success → WF2; Failure → show error	Authentication service

WF2 — Semester Selection
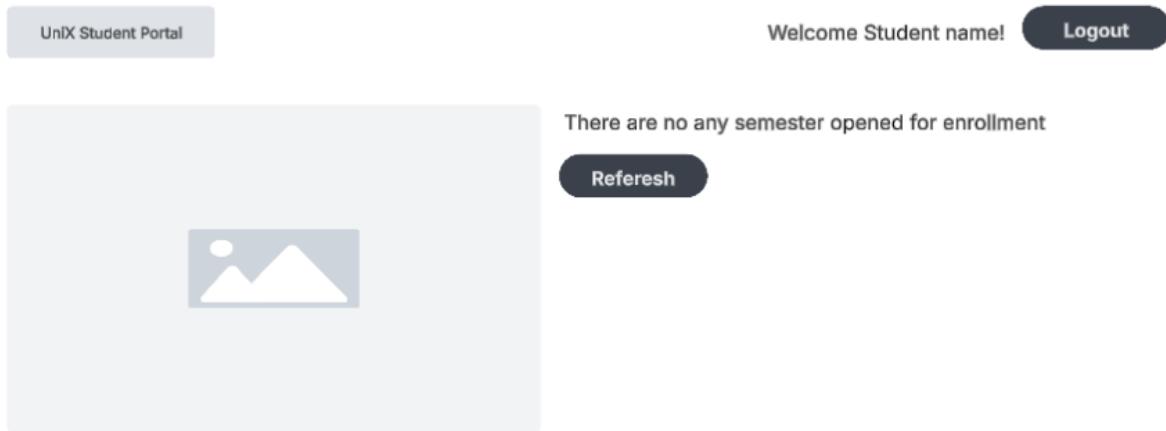
ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Welcome text (student name)	Displays logged-in student	N/A	Session must store student name/ID
2	Logout button	Ends session	Logout → WF1 Login	Session clear
3	Semester list/table	Shows available semesters	N/A	Semester dataset from system
4	Status badge (Open/Closed)	Closed = disabled selection	N/A	Enrolment status from system
5	Select semester control (radio/button)	Only Open selectable	Enables Continue	Selected semester stored (session/state)

6	Continue button	Disabled until Open semester selected	Continue → WF3 Course Enrolment	Selected semester ID

WF2 — No Open Semesters

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Empty-state message	Display when no Open semesters exist	N/A	Semester list query result
2	Refresh button	Re-check open semesters	Refresh → stays on WF2	Re-fetch semesters
3	Logout button	Ends session	Logout → WF1	Session clear

WF3 — Course Enrolment

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Semester label (e.g., "2026 S1")	Shows currently selected semester	N/A	Selected semester ID from WF2
2	Logout button	Ends session	Logout → WF1	Session clear
3	Search box	Filters course list by code/name	Updates list live/on enter	Course list in memory / query
4	Course table/list	Displays offered courses for semester	N/A	Course offerings dataset
5	Select checkbox (per course)	Toggle selection	Adds/removes from Selected panel	Selected courses state
6	Course details columns	Code/Name/Units/etc.	N/A	Course data fields

7	Selected Courses panel	Shows chosen courses	N/A	Selected courses state
8	Remove (x) in Selected panel	Removes a selected course	Updates table + totals	Selected courses state
9	Total Units counter	Auto-calculates from selection	Updates instantly	Units per course
10	Enrol button	Submits selected courses	Success → WF4 Confirmation	Enrolment endpoint + validation
11	Back to Semesters button	Navigate back	WF2 Semester Selection	Keep session active

WF3 — Validation Error

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency

1	Validation banner/message	Show when Enrol clicked with zero selection	Stays on WF3	Client/server validation
2	Enrol button (disabled or retry)	Either disabled until selection OR retry after selecting	Stays / then submit	Selected courses state
3	Course selection control	User must select ≥1 course	Enables Enrol	Selected courses state

WF3 — Enrolment Error

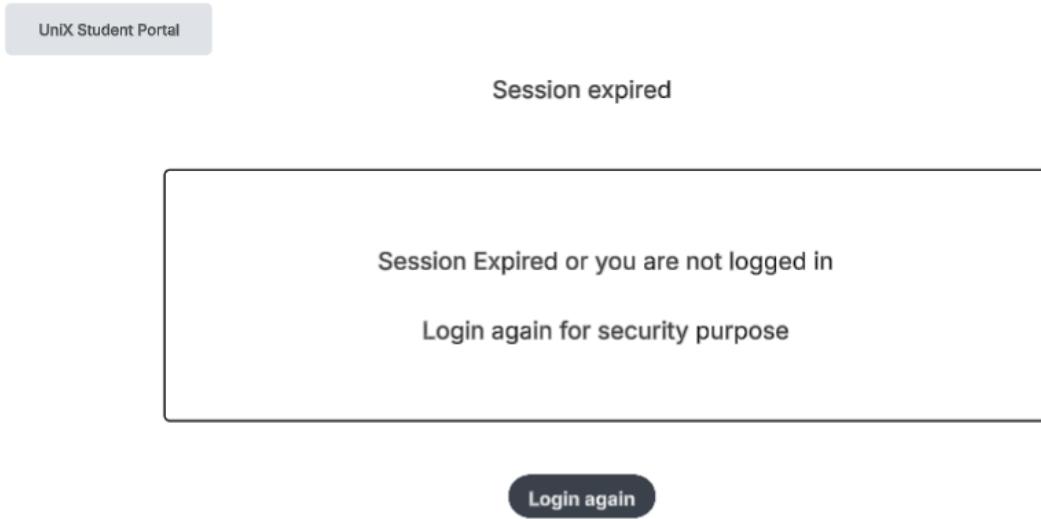| ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Error banner/message	Show when enrolment request fails	Stays on WF3	Enrolment API response
2	Try again / Enrol button	Re-submit request	Success → WF4; failure → error persists	Enrolment endpoint
3	Back button	Leave enrolment screen	WF2 Semester Selection	Session active
4	Selected courses panel	Keep selection after failure	N/A	Selected courses state

WF4 — Confirmation

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Success heading	Visible after successful enrolment	N/A	Enrolment success response
2	Enrolled course summary table/list	Displays enrolled courses	N/A	Enrolment result data
3	Enrol more button	Go back to enrolment	WF3 Course Enrolment	Selected semester retained
4	Back to semesters button	Return to semester page	WF2 Semester Selection	Session active
5	Logout button	Ends session	WF1 Login	Session clear

WF5 — Session Expired / Access Denied

UniX Student Portal

Session expired

Session Expired or you are not logged in

Login again for security purpose

Login again

ID	UI element	Behaviour / rule	Click outcome / navigation	Data / dependency
1	Message panel	Shows when session missing/expired	N/A	Session timeout / auth check
2	Go to Login button	Navigate to login	WF1 Login	None
3	Note (security)	Informational	N/A	None