UniFreelancer Academy - Requirements

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1. Problem Statement & Scope

UniFreelancer Academy is a learning and development platform designed for freelancers to upskill through Courses, Seminars, Tutorials, and Podcasts. The platform will support both free and paid tiers, reward completion with badges, and integrate achievements into the UniFreelancer marketplace to enhance professional visibility.

Primary Users: Freelance learners seeking skill development.
Secondary Users: Instructors, guest speakers, and platform partners who create content on the platform.

Context of Use:
- Web-based platform accessible globally.
- Desktop and mobile web support.
- Integration with Sharetribe marketplace for profile visibility.

System Boundaries:
- Include learning modules, user progress tracking, analytics, subscription system, live streaming and video hosting capabilities, and basic AI grading components.
- Excludes any marketplace payment logic (handled by Sharetribe).

Success Criteria:
- Over 70% course completion rate for paid users within 90 days.
- Over 50% return rate for free users.

Explicit Non-Goal: Replicating a full Canvas LMS. We will implement a lightweight, custom learning system in React.

2. Consolidated Requirements

ID	Derived From	Requirement	AC	Priority
REQ-001	A1, D2, B2, E1	The system shall provide a unified	• Homepage contains four primary links.	**MUST**

		Academy homepage linking to Courses, Tutorials, Seminars, and Podcasts.	• Each link routes correctly to its respective section. • Navigation verified on desktop and mobile.	
REQ-003	A3, D3, B8	The platform shall be fully responsive and usable on both desktop and mobile web devices.	• Layout adapts to ≥3 breakpoints (mobile, tablet, desktop).• All buttons and text remain legible and functional.	**MUST**
REQ-004	A4, E3	Within each course, a sidebar shall display module navigation and indicate progress.	• Sidebar lists all modules. • Clicking a module navigates without full reload. • Current module is visually highlighted.	**MUST**
REQ-005	D10, C8	The system shall implement a unified search and filter function across all content types (Courses, Tutorials, Seminars, Podcasts).	• Search returns relevant results within 2 s. • Filters (type, tier, difficulty) work independently and in combination.	**MUST**
REQ-006	D7, E4, C1, C9	The system shall track user progress,	• Progress saved server-side.	**MUST**

		manage tiered access (free/paid), and issue badges or certificates upon completion.	• Paid lessons blocked for free users. • Badge/certificate auto-issued and visible on profile after 100% completion.	
REQ-007	D6, E5	Each course or tutorial shall include downloadable learning materials.	• Each module displays "Download Materials." • Downloads succeed and match correct file type.	**MUST**
REQ-008	C2, B3, B4, D8	The platform shall support live streaming and video hosting for Courses, Seminars, and Podcasts.	• Live sessions hosted via integrated provider (e.g., Zoom/Agora).• Recordings stored and playable within 24 h.	**MUST**
REQ-009	C1, B10, E10	The system shall implement secure authentication and user accounts with persistent data storage.	• Users can sign up/in/out and reset passwords. • Auth uses encrypted tokens. • Data persists across sessions.	**MUST**
REQ-010	D1, B9	The system shall provide a secure subscription and payment integration via	• Payment handled by Stripe Checkout .• Successful payment	**MUST**

		Sharetribe and Stripe (no internal payment logic).	updates Sharetribe entitlement. • No card data stored locally.	
REQ-014	A6, C6	Each course shall display a progress bar and support subtitles/transc ripts for accessibility.	• Progress bar updates in real time. • Closed captions auto-generated and editable.	**MUST**
REQ-015	A7	The system shall maintain consistent typography and spacing across all pages.	• Style guide defines font, size, and spacing tokens. • All pages pass visual QA against style guide.	**MUST**
REQ-019	B7	The system shall use a centralized database (cloud or managed service) to store users, progress, and achievements.	• DB schema includes user, course, progress, badge tables. • CRUD ops validated via API tests.	**MUST**
REQ-020	C10, C6, B8	The platform shall meet basic NFRs: accessibility (WCAG 2.2 AA), performance (< 2 s load), security (OWASP Top 10), and uptime ≥ 99.9%.	• Lighthouse accessibility ≥ 90%. • Median TTI < 2 s. • Weekly uptime report ≥ 99.9%.	**MUST**

REQ-002	A2, B5	The system shall include a consistent global navigation bar accessible on all pages.	—	SHOULD
REQ-011	E2	The system shall include Course Catalog and Course Detail pages listing essential metadata (title, description, instructor, skills, price).	—	SHOULD
REQ-012	C3, B6	The system shall provide analytics dashboards for learners and instructors showing progress, completion, and engagement.	—	SHOULD
REQ-013	C5, D4, E8	The system shall recommend related or next-step courses/tutorials based on user activity and skills.	—	SHOULD
REQ-016	A8	The system shall auto-save learner progress every	—	SHOULD

REQ-017	C7	The system shall support per-lesson discussion threads with instructor moderation.	—	COULD
		10 seconds of activity.		
REQ-018	C10	The system shall implement adaptive onboarding checklists and periodic reminder notifications.	—	COULD

Non-Functional Requirements:

Attribute	Description
Availability	99% uptime during academic term.
Security	Encrypted data storage for all credentials and payment info.
Performance	Page load time < 3 seconds
Scalability	Support up to 10,000 concurrent users.
Accessibility	WCAG 2.1 AA compliance required.

3. Prioritization Method & Results

Method Used: *MoSCoW (Must, Should, Could, Won't)*
- **Must**: Core functionality needed for launch
- **Should**: Secondary but important enhancements
- **Could**: Optional or later-phase additions
- **Won't**: Not necessary for this project

Dependencies:

4. Ethics, Risks, and Constraints Traceability

Risk / Constraint	Affected Requirement(s)	Mitigation / Policy
Decoupled from the main Sharetribe code	REQ-009, REQ-010, REQ-020, REQ-006	Start with an independent build based on the structure of the current sharetribe build. Maintain strong contact with the Sharetribe team.
Need for a constantly updating database since new courses/seminars are added often	REQ-001, REQ-005, REQ-019, REQ-012, REQ-013	Use an automated database accompanied by an online service like MongoDB. Create automated checks to ensure data isn't being misplaced. Confirm token refresh and error handling early.
Potential separate databases for payment and user information	REQ-006, REQ-009, REQ-010, REQ-019, REQ-020	Strict boundaries between databases. Do not store payment data locally.
AWS and the process of hosting videos on it	REQ-008, REQ-009, REQ-010, REQ-019, REQ-012, REQ-013	Use proven compatible tools like AWS S3 and CloudFront. Compress media before upload.

5. Merge Methodology & Change References

Each team member drafted a personal top-10 list of requirements. Duplicates and similar requirements were combined, and final statements were standardized using the "The system shall…" format. You can see what requirements were derived from what tables using the "Derived From" column.

Appendix:

Individual Top-10s:

Aidan Caughey

ID	Requirement	Rationale	Priority
A1	Unified homepage linking Courses, Seminars, Tutorials, and Podcasts.	Enables clear user navigation across all content types	MUST
A2	Navigation bar which allows easy access to the other pages on the academy website (Courses, Seminars, Tutorials, Podcasts)	Improves usability and orientation	SHOULD
A3	Responsive UI elements and layouts for desktop and mobile devices	Ensures accessibility and consistent experience across devices	MUST
A4	In a course, there should be a sidebar for module navigation within a course	Enhances the learning experience and user control	MUST
A5	Show related courses on each course detail page and tutorial page	Increases engagement and upselling opportunities	SHOULD
A6	Display a progress bar for each individual course	Provides instant feedback and motivation	SHOULD
A7	Maintain consistent typography and spacing across all pages	Shows professionalism and creates a cohesive brand experience	MUST
A8	System should auto-save any progress every 10 seconds of activity	Prevents data loss and improves satisfaction	SHOULD
A9	Track returning users and frequency of visits	Measures platform statistics	SHOULD

ID	Requirement	Rationale	Priority
A10	Include a light/dark theme toggle	Supports accessibility and modern design norms	COULD

Aiden McCoy

ID	Requirement	Rationale	Priority
D1	Implement secure payment integration using Stripe's PCI-certified API.	Ensures safe and compliant transactions for course and subscription purchases.	MUST
D2	Create a unified Academy homepage linking Courses, Seminars, Tutorials, and Podcasts.	Provides clear navigation and consistent branding for all educational content.	MUST
D3	Develop a responsive UI for mobile and desktop users.	Enhances accessibility and provides a consistent experience across all devices.	MUST
D4	Add a course recommendation system on tutorial and course pages	Encourages continued learning and increases user engagement.	SHOULD
D5	Include a feedback and rating system for courses and instructors.	Promotes quality control and continuous improvement in course offerings.	SHOULD
D6	Include a "Download Materials" section within each course or tutorial.	Provides students with convenient access to lecture slides, assignments, and reference files.	MUST
D7	Implement progress	Motivates learners to	MUST

	tracking and completion certificates for tutorials and seminars.	complete modules and recognizes their achievements.	
D8	Integrate Zoom for hosting and recording live seminars or workshops.	Enables real-time interaction, community engagement, and hybrid learning opportunities.	MUST
D9	Integrate Zoom live sessions with an embedded chat display directly on the UniFreelancer Academy page.	Allows users to view and participate in discussions during live sessions and revisit the chat afterward for notes, links, or key insights.	SHOULD
D10	Implement a search and filter system across all Academy content (Courses, Tutorials, Seminars, Podcasts).	Allows users to quickly find topics, instructors, or media types, improving usability.	MUST

Baron Baker

ID	Requirement	Rationale	Priority
B1	Canvas-like Learning Management System (LMS)	Gives a clear structure on what already works	SHOULD
B2	Separate pages for courses, tutorials, seminars, and podcasts with easy	Enables the user to navigate through the content presented clearly.	MUST

	navigation		
B3	Video hosting for courses and tutorials	Most courses will follow the format of educational videos	MUST
B4	Live streaming capabilities for seminars and podcasts	Seminars are to be presented live first, and then saved as videos for later.	MUST
B5	Easy access toolbar to navigate between pages	Enables the user to navigate through the site more easily	SHOULD
B6	Analytic tools to track time spent on courses, average session duration, completion rate, return rate, etc	Helps us track our successes and user retention. This enables us to make changes for better user retention.	SHOULD
B7	Established a database, either in-house or an online service	Holds data specific to users, like the courses they've watched and the badges they've earned.	MUST
B8	Simple, clean user interface layouts for mobile and desktop browsing	Enables users to have an easier time navigating the page on any device	SHOULD
B9	Paywall structure for courses, additional badges for user profiles	Create structure between free and paid courses, seminars, etc.	MUST
B10	Users have unique accounts that hold their unique recommendations and data	Users need to keep their progress from previous courses, seminars, etc.	MUST

Daniel Molina

ID	Requirement	Rationale	Priority
E1	Unified Academy homepage linking to Courses, Tutorials, Seminars, and Podcasts.	Clear navigation to all content types	MUST
E2	Provide a Course Catalog and Course Detail pages with basic info (title, description, instructor, skills, tools, price).	Supports the discoverability of courses and aligns with the user journey	MUST
E3	Course Player with modules, progress bar, and finish button.	Core learning delivery	MUST
E4	Award a badge/certificate upon course completion, displayed on the user profile.	Supports motivation and credibility.	MUST
E5	Provide Tutorials as short video-based lessons with downloadable content and "Mark Complete.	Core tutorial delivery.	MUST
E6	Seminars section with Upcoming and Past events, registration/join, and replay access.	Supports both live interaction and long-term access to expert talks	MUST
E7	Provide Podcasts section with catalog view and playback.	Core podcast feature	MUST
E8	Provide recommendations	Expands learning content formats and	SHOULD

ID	Requirement	Rationale	Priority
	linking Tutorials to Courses	supports passive engagement	
E9	Provide advanced features for Courses/Seminars, such as reviews/ratings, related course carousels, and staff picks.	Improve user engagement	SHOULD
E10	Securely store user accounts, progress data, subscriptions, and achievements in a database, with authentication to protect privacy.	Required for personalization, persistence, and security	MUST

Nafizur Rahman

ID	Requirement	Rationale	Priority
C1	Role-Based Auth & Identity	Foundational for securing content, tailoring UX, and enabling instructor tooling	MUST
C2	Live Streaming & Video Hosting Integration	Seminars and office hours require dependable live + replay, with attendance tracked for progress.	MUST
C3	Analytics Dashboards	Learners need goal-tracking and nudges; instructors need engagement/completion/quiz insights to	SHOULD

		improve content and reach targets	
C4	AI-Assisted Grading & Feedback	Auto-evaluate objective items and provide formative hints to boost completion while keeping instructor review for subjective work.	WANT
C5	Discovery & Recommendations	Suggest next lessons/courses based on completed skills and marketplace demand to keep learners progressing.	SHOULD
C6	Subtitles & Transcripts	Accessibility for users and giving them more options in how they want to consume the content.	SHOULD
C7	Community Discussions & Q&A per Lesson	Lightweight threads with @mentions and instructor pinning create peer support that improves retention and outcomes.	WANT
C8	Universal Search & Faceted Browse	Typo-tolerant search with filters (type, difficulty, duration, tier, language) reduces friction finding the right content quickly.	WANT
C9	Tiered Access Control	Cleanly gates lessons/assessments/live sessions by tier using entitlements from Sharetribe/our subs system to	SHOULD

		support the business model.	
C10	Adaptive Onboarding & Reminder Nudges	Personalized checklists plus email/push/in-app reminders (opt-in) boost return and completion rates without human ops.	WANT