

Career Growth Platform — UX Case Study

(INFO 7375 · Fall 2025)

1. Project Overview

The Career Growth Platform is an AI-enabled web application designed to help students, job seekers, and professionals identify skill gaps, receive personalized learning paths, build portfolios, connect with mentors and peers, and track long-term progress. Across ten weeks, I led the full UX lifecycle—from research and synthesis to prototyping, heuristic evaluation, and usability testing.

My role spanned **UX Research, Information Architecture, Interaction Design, Visual Design, and AI-augmented prototyping**.

Tools included **Miro, Dovetail, Figma & Figma Make, Claude MCP, ChatGPT, Google Sheets**.

2. Problem Statement

Learners use fragmented tools—résumé builders, course platforms, spreadsheets, LinkedIn, notes apps—to understand their skills, plan learning, track progress, and connect with peers or mentors. This fragmentation leads to:

- No clear understanding of skill gaps or progress.
- Overwhelming choices and low trust in AI recommendations.
- Non-existent integration between learning, portfolio building, and mentorship.

The platform aims to create **one cohesive system** that reduces cognitive overload, builds trust through explainable AI, and enables meaningful career progression.

(Research evidence: task analysis, observation logs, thematic insights, usability issues, persona needs)

3. Research Summary

Methods Used

- Task Analysis & Future-State Flows
- Observation Guide + Interview Guide (moderated sessions)
- Cognitive Walkthroughs with users + AI-simulated feedback
- Thematic analysis using Dovetail (tagging, clustering needs, requirements)
- Low- and high-fidelity prototyping in Figma Make
- Heuristic Evaluation (Nielsen + mobile heuristics)
- Final moderated usability tests with structured metrics (errors, confusion, quotes)

Key Insights (4–6 bullet points)

- **Users lacked clarity and trust**—they needed explainability for AI-generated skills, learning paths, and scores.
(Pain points around radar interpretation, missing context)
- **Cognitive overload was high** across dense modules, long pages, and unclear labels.
(High cognitive load sensitivity P01, P05)
- **Navigation lacked transparency**, making it difficult to retrace steps or understand where tasks began/ended.
- **Mentorship and peer community expectations differed**: professionals wanted immediacy; students valued structure.
(Persona scenarios and journey maps)
- **Progress tracking was motivating**, but users needed clearer hierarchy and fewer redundant metrics.
(Task 5 usability findings)

Opportunities

- Provide explainable AI.
 - Reduce cognitive effort through progressive disclosure.
 - Create unified, predictable navigation.
 - Offer immediate value in mentorship and community flows.
 - Simplify the learning path and portfolio-building processes.
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4. Persona (Summarized)

(Representative persona derived from your three personas and demographic patterns)

Aanya Deshmukh — Early-Career Student Explorer

- **Age:** 22
- **Context:** Graduate student seeking internships; uses desktop for structured career tasks.
- **Goals:**

- Understand real skill gaps
 - Build a credible portfolio
 - Follow a guided learning plan
- **Frustrations:**
 - Cognitive overload
 - Unclear AI scoring
 - Lack of rationale behind recommendations
- **Needs:**
 - Guidance, transparency, reassurance
 - Simple navigation
 - Visual summaries and clear next steps

(Persona source:)

5. User Journey (Summarized)

(Condensed from the three detailed journey maps)

Stages

1. **Trigger / Motivation:** Wants clarity about skills or next steps.
2. **Exploration:** Uploads résumé, browses mentors, or checks learning modules.
3. **Action:** Engages with assessments, roadmaps, portfolio tools, or mentors.
4. **Reflection:** Evaluates usefulness, clarity, and confidence.
5. **Outcome / Next Steps:** Continues learning, joins peers, schedules mentorship, or saves portfolio.

Pain Points

- Unclear scoring, lack of rationale in AI decisions
- Navigation confusion (tabs, breadcrumbs, labels)
- External redirects breaking flow
- Lack of immediate feedback in mentorship flow
- Dense dashboards requiring extra effort

Emotions

😊 Curiosity → Motivation → Relief

😐 Uncertainty during loading or unclear steps

😢 Frustration when context or explanation is missing

Opportunities

- Visual clarity (tooltips, legends, examples)

- Fewer steps per task
- Unified navigation
- Real-time mentorship availability
- Progressive disclosure in complex flows

(Journey map source: [https://www.nngroup.com/journey-maps/](#))

6. Design Goals

1. **Reduce cognitive load** by simplifying workflows and using progressive disclosure.
2. **Enhance explainability** so users trust AI-generated insights and paths.
3. **Unify the experience** between assessment, learning, portfolio, and mentorship.
4. **Create motivational structures** through streaks, milestones, and clear tracking.
5. **Ensure accessibility and consistency** across terminology, layout, and interaction patterns.

(Requirements + themes from PRD and research synthesis [https://www.semanticscience.org/research/ai-for-learning-and-assessment](#))

7. Design Process

A. Ideation & Concept Development

- Task analysis generated future-state flows for all five tasks, clarifying mental models and constraints.
- Cognitive walkthrough scripts refined task expectations and evaluator prompts.
- AI-simulated feedback revealed predictable pain points before real testing.

B. Wireframes (Low Fidelity)

- Figma Make generated monochrome wireframes emphasizing hierarchy and clean IA.
- Five core tasks visualized in 10–12 frames with arrows and placeholders.
(Lo-fi prompt & wireframes: [https://www.semanticscience.org/research/ai-for-learning-and-assessment](#))

C. Information Architecture

- Navigation simplified to **Home**, **My Learning**, **Portfolio**, **Mentors**, **Profile** based on cognitive load data and user expectations.
- Dashboard merged under Profile to reduce redundancy. (IA adjustments: [https://www.semanticscience.org/research/ai-for-learning-and-assessment](#))

D. High-Fidelity Prototyping

- Addressed issues from walkthroughs:

- Resume/LinkedIn above the fold
 - Target-role selection before skill gaps
 - Clearer Overview vs Customize
 - Certificates section heading
 - Mentor availability and profile depth
- (Design changes list:)

E. Interaction Decisions

- Added tooltips ("How this is calculated"), success confirmations, and breadcrumb states.
- Integrated customizable modules for learning paths.
- Added drag-and-drop portfolio interactions with real-time verification.

F. Visual Design Decisions

- Color palette supporting trust, clarity, and motivation (Indigo, Royal Blue, Emerald).
 - Typography (Inter/Roboto) for scannability and digital clarity.
- (Visual design justifications:)
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8. Final Solution

The final product is an integrated, AI-enabled platform that unifies the entire career progression journey.

Key Features

1. Skill Gap Assessment

- Resume/LinkedIn upload
 - Editable detected skills
 - Radar visualization with tooltips
- [insert Skill Assessment screen here]**

2. Personalized Learning Path

- AI roadmap with transparent rationale
 - Weekly timeline with customizable modules
 - Save, reorder, replace courses
- [insert Learning Path screen here]**

3. Portfolio Builder

- Drag-and-drop uploads
- Issuer verification

- Real-time preview and export
[insert Portfolio screen here]

4. Mentorship & Peer Community

- Mentor cards with profiles + availability
- Peer groups with topic filters
- Lightweight discussion interface
[insert Mentorship screen here]

5. Progress Dashboard

- Streaks, milestones, radar benchmarks
- AI-suggested goals
[insert Dashboard screen here]

How It Solves the Problem

- Reduces fragmentation by centralizing all core tasks.
 - Builds trust using explainable AI.
 - Simplifies complex decisions into clear, stepwise flows.
 - Motivates users through visual progress and community support.
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9. Outcomes & Reflection

What the Solution Accomplished

- Addressed 18+ usability issues identified during walkthroughs and testing.
- Reduced confusion around navigation, portfolio structure, learning path rationale, and mentor booking.
(Usability issues log:)

What Worked Well

- AI-assisted workflows accelerated ideation and iteration.
- High-fidelity designs reflected real user expectations and mental models.
- Research synthesis (Dovetail) created a strong foundation for requirements.

What I Would Improve Next

- More robust onboarding to explain AI scoring and data privacy.
- Embedded learning content to eliminate cross-platform friction.
- Real-time mentor availability and instant booking.

Key Lessons Learned

- **Explainability builds trust**—opaque AI creates anxiety.
 - **Reducing cognitive load** is as impactful as adding new functionality.
 - **AI + Human research** creates the strongest design outcomes—AI accelerates, humans validate.
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