

Bringing Ideas to Life: My Rapid Prototyping Journey

In our last blog, I shared the concept solution and concept video for our product. This new phase, **Rapid Prototyping**, was about turning our ideas into something real and testable. A prototype, even a rough one, allows us to explore the user experience (UX), identify pain points, and refine our design thinking. For me, this stage was both exciting and challenging because it brought our concept closer to an actual product.

1. The First Attempt: Bringing the Idea to Life

At the beginning, my team and I didn't know exactly where to start. We decided to use an iPhone template shared by our professor as the foundation for our design. Before sketching, we discussed which features were most important for our users. Since our concept video already highlighted the main functions, we listed those features on paper, like the **AI course advisor, Smart Planner, and Transfer**, and began sketching our first paper prototype.

Our first prototype was honestly a bit messy. The sketches were rough, and some screens didn't fully connect in flow. However, even without full functionality, this stage was eye-opening. We could see how the basic layout would look and whether the user's journey made sense. The paper prototype helped us visualize transitions, spot friction points, and discuss usability before spending time on digital tools.

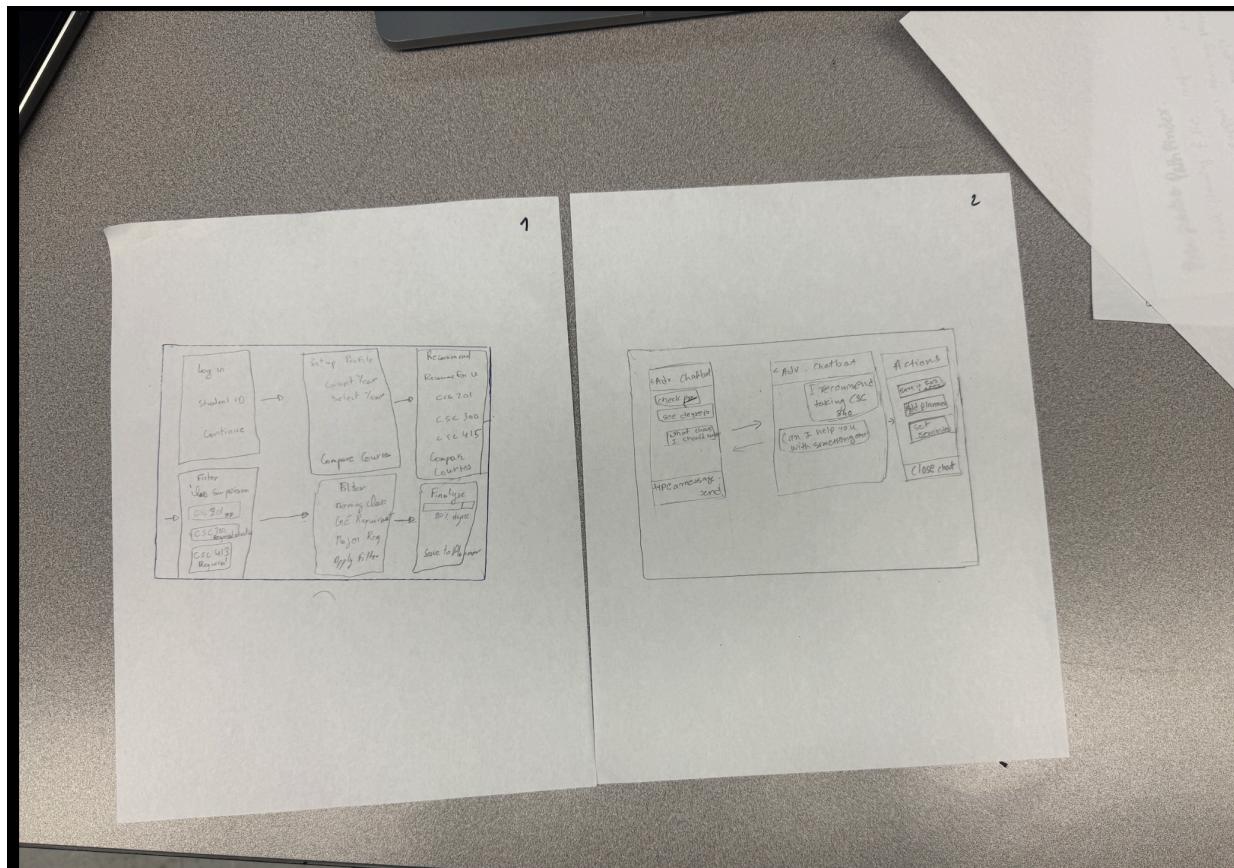


Figure 1: Paper Prototype Sketch

2. Testing & Learning: Gathering Early Feedback

We wanted to understand how real users would interact with our design, so we conducted usability testing with **two students from SFSU**, a freshman, and junior transfer student. Each participant tested our **Pathfinder** prototype by completing two main tasks:

1. Use the Smart Planner to find and compare courses.
2. Ask the AI chatbot for course prerequisite advice.

Our early digital prototype had basic navigation and limited interactivity. Some features, such as filters and chatbot responses, were incomplete. Course details and confirmation messages were handwritten placeholders, and mobile input boxes were too small. Users also noticed that there wasn't clear visual feedback after saving or comparing courses.

Despite these rough edges, the tests were incredibly valuable. Users appreciated the concept and said the design felt practical for students planning their degrees. However, they struggled with unclear navigation and inconsistent spacing between elements. My roommate, who also tested the prototype, said it was “a great idea but confusing at first glance” because there weren’t clear tabs to guide users between sections.

Hearing this feedback was humbling but helpful, it reminded me that what seems obvious to a designer isn’t always obvious to a user.

3. Iteration & Improvement: Refining the Prototype

After reviewing the feedback, I led our team in updating the prototype in **Figma**. Since I had prior experience with Figma, I took the initiative to create a low-fidelity digital wireframe that was easy to navigate even without instructions. We made several key improvements:

- **Clear Navigation:** Added structured tabs (Home, Planner, Transfer, Research, Settings) to make movement between sections smoother.
- **Dashboard Overview:** Introduced progress bars and degree summaries to make completion tracking more intuitive.
- **Enhanced Planner:** Included AI assistant suggestions, prerequisite alerts, and a “Save Plan” confirmation message.
- **Transfer Credits:** Added search filters and clearer articulation layouts for transfer students.
- **Research & Career Alignment:** Integrated AI match percentages and elective descriptions for better context.
- **Responsive Design:** Adjusted input fields and text areas for better mobile usability.

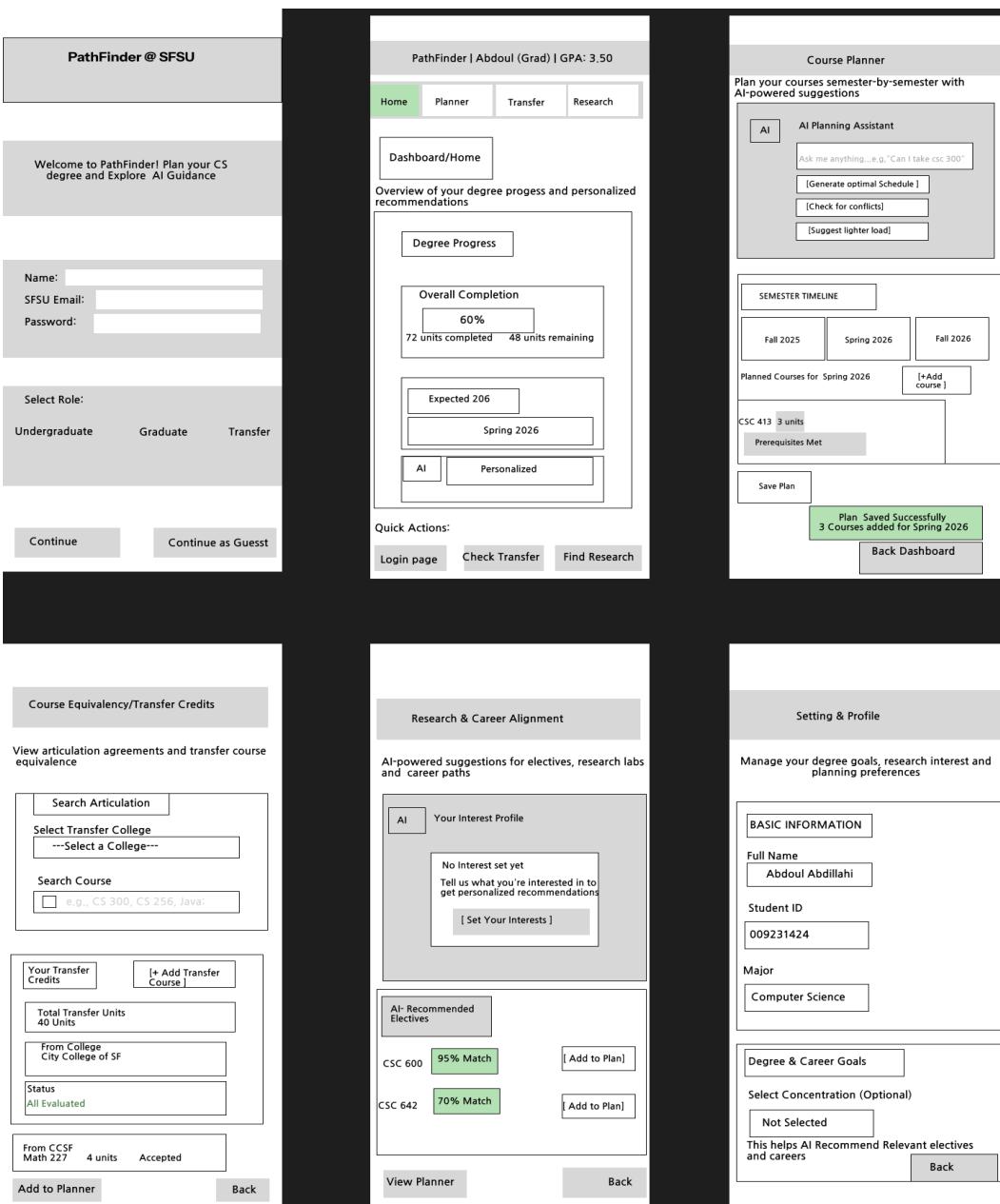


Figure 2: Digital wireframe

This iteration phase was where the prototype really came to life. Seeing our static paper sketches evolve into a clickable, interactive design was rewarding. Each new version felt closer to a real product.

4. Personal Reflection: The Rapid Prototyping Experience

The most challenging part of rapid prototyping was **balancing design clarity and simplicity**. I wanted the prototype to feel intuitive, but sometimes I overcomplicated features or layouts. It took several revisions to realize that good design often means doing less, not more. Another challenge was aligning everyone's ideas in the team, each of us imagined the user flow differently at first.

What I enjoyed most was seeing how quickly ideas could evolve through feedback. Every test, even small ones, helped us make better decisions. I also gained confidence using Figma and learned how to translate user comments into concrete design improvements.

If I could give advice to someone doing rapid prototyping for the first time, I'd say: **don't aim for perfection**. The goal isn't to create a flawless product, it's to learn fast, fail early, and improve continuously. Your first draft will always feel imperfect, but that's part of the process. The real magic happens when you let users show you what works and what doesn't.



Figure 3: Final Outputs

Final Thoughts

Rapid prototyping helped me understand that UX design is less about tools and more about empathy. The process taught me how to listen to users, adapt quickly, and collaborate creatively. Most importantly, it made me realize that even a simple sketch can spark big improvements when guided by real feedback.