ChatGPT

Panth Shah – Product Designer

Profile & Background: Panth Shah is an engineer-turned-product designer with a strong background in computer science and a passion for user-centric design. Originally from India, he moved to Boston in 2022 to pursue his Master's in Computer Software Engineering at Northeastern University [1]. His journey into design began during his undergraduate years amid the COVID pandemic, when he realized how critical design is in transforming code into meaningful user experiences [2]. He describes himself as an inquisitive and experimental designer – "a product designer who thrives on experimenting and trying new things" [3]. Panth's approach marries his technical foundation with creative UX problem-solving: he loves understanding users, crafting experiences for them, and iterating based on real feedback [4]. This blend of coding knowledge and design sense gives him a unique perspective in projects, as noted by colleagues who praise his ability to integrate CS and UX thinking [5].

Personality & Philosophy: Colleagues and mentors describe Panth as *curious, open-minded, and highly collaborative*. He asks the right questions, listens actively, and is eager to learn – traits that make him an asset to any design team [6]. Panth believes in honest, functional design and often references the idea that *beauty isn't just about looks; it also improves usability* [7]. He champions designs that are visually appealing *and* effective, enhancing both user delight and ease of use. Panth is also a strong advocate for accessibility and inclusive design, ensuring his work can empower everyone regardless of background or ability. He values **design thinking** and often frames challenges as "How might we…?" questions to encourage innovative solutions. His working style is very collaborative – he frequently works across disciplines (design, engineering, product management) and encourages feedback loops with users and stakeholders at every stage.

Education & Experience: Panth earned his Master's degree from **Northeastern University (Class of 2024)** in Software Engineering [8] [9]. This technical education, combined with self-driven design projects, has shaped him into a well-rounded "UX engineer." He has professional experience as a **Product Design Intern at FounderWay.ai** (a startup accelerator platform) and as a **Digital Experience Designer at Northeastern University ITS** (Information Technology Services). At FounderWay, Panth focused on building a scalable design system and a new matchmaking product (FounderMatch), working closely with startup founders and engineers. At Northeastern, he worked on improving the university's digital platforms (like the Student Hub) and conducted accessibility audits to enhance inclusivity [10] [11]. Through these roles, he honed skills in user research, design systems, interaction design, and front-end implementation. Panth's expertise spans **UX/UI design, product strategy, and development**, with a track record of creating intuitive, user-centered experiences [10] that boost user engagement.

Design Toolkit: Panth is fluent in modern design and prototyping tools. His daily toolkit includes **Figma** (for interface design and prototyping) [12], **FigJam/Miro** (for remote whiteboarding and collaboration), **Adobe CC** (Illustrator, Photoshop for visual assets) [13], and **Framer** (for high-fidelity prototyping and even web development) [14]. He also has experience with developer-centric tools and practices – for instance, documenting design components for engineers, and using plugins like Stark for accessibility testing [15]. Panth's comfort with code means he can effectively communicate with developers and even build out

designs (he has built websites in Framer and has front-end coding experience). This “unicorn” ability to both design and code helps him iterate quickly and ensure the feasibility of his designs.

Values & Working Style: In teamwork, Panth emphasizes *adaptability and collaboration*. He often leads with a clear process but stays flexible to pivot as needed – a lesson he learned during hackathons and fast-paced projects [16]. He values feedback highly: one of his core beliefs is to *always return to the user* for validation. User research and usability testing are integral to his process, not just one-time steps. Panth has a keen eye for detail (ensuring consistency in design systems, for example) but also never loses sight of the big picture – the business goals and user needs driving the project. He is known to be self-driven and proactive; for example, if he sees a UX issue in a product he loves (like Chrome’s Reading List), he’ll tackle a redesign as a personal project to explore improvements. Overall, Panth’s design philosophy is about **blending form and function** to solve real problems. He believes great design is honest and unobtrusive, yet delightful: it should solve users’ problems in the simplest way possible while evoking a positive emotional response.

FounderMatch – Co-Founder Matching Platform (FounderWay.ai, 2024)

Project Overview: FounderMatch is an MVP product that connects startup founders with potential co-founders based on complementary skills, shared vision, and compatibility. Panth led the end-to-end design of this platform during a spring 2024 internship at FounderWay.ai, working with the company’s co-founders, developers, and a PM. The idea originated from a **Techstars hackathon** win, after which the team continued development to launch an MVP in April 2024 [17] [16]. The core goal was to make finding the *“right co-founder”* easier and more precise, almost like a dating app for entrepreneurs, but focused on aligning values and skills. YC’s co-founder matching tool and other platforms addressed this need partially, but they often relied on basic profile info or had limited search functionality [18] [19]. FounderMatch set out to fill those gaps with a more targeted, intelligent matching system.

Problem Statement: *“It’s hard for startup founders to find the right co-founder.”* Many solo founders struggle to meet potential partners with the necessary skills and a shared vision for the business [20]. Existing networks are often serendipitous (bumping into someone at an event or via alumni circles) and platforms like YC Matching or CoFoundersLab have limitations (e.g., search caps, static profiles) [21] [22]. Early-stage founders lack a structured way to evaluate fit on deeper factors like work style and long-term compatibility, often relying on gut instinct which can lead to mismatches [23]. The challenge was to create a dedicated matchmaking app that filters and pairs founders based not only on roles (e.g. a designer needing a technical co-founder) but also on their vision, values, and working preferences.

User Research & Insights: Panth began with user research, surveying and interviewing startup founders to understand their pain points in co-founder hunting. This uncovered several key insights:

- **Skill and Commitment Gaps:** ~60% of founders reported difficulties finding partners with the right skill set and commitment level [24]. Founders often ended up networking within their own domain (designers with designers, engineers with engineers), which limited access to complementary skills [25].

- **Vision Alignment:** 11 out of 15 founders said finding someone who shares their **long-term vision** is *"extremely important"* [26] . A mismatch in startup vision or values was seen as a deal-breaker, yet hard to gauge on typical platforms.
- **Networking Limitations:** About one-third (33%) of founders in our research met co-founders through university alumni networks or random networking events [27] . This showed that while serendipity plays a role, it's not reliable or efficient – many qualified matches never meet because they're on different forums.
- **Communication over Location:** Interestingly, clear communication was rated more critical than physical location when evaluating a co-founder [28] . Founders were open to remote partnerships as long as they could establish trust and good communication, which shaped our product to not over-prioritize geographic filtering.

These findings highlighted that the problem is two-fold: a *discovery* issue (finding a person with the right skills and vision) and a *compatibility* issue (ensuring personalities and work styles mesh). With these insights, Panth and the team framed a **How Might We**: *"How might we develop an effective matchmaking filtering system that allows founders to easily specify and find potential co-founders with the desired skills, values, and goals?"* [29] . This HMW statement guided the solution design.

Team & Role: The project was executed by a small cross-functional team. Panth was the **lead UX/UI designer**, responsible for user research, interaction design, and prototyping the end-to-end experience. He collaborated with two co-founders (product and business leads) and two engineers. Together, they brainstormed features and ensured technical feasibility of the design. Panth also acted as a bridge between users and the team – he organized founder interviews and translated those insights into design decisions. Throughout, he worked closely with the developers to iterate on the matching algorithm's UI and with the PM to prioritize features for the MVP (Minimum Viable Product). His ability to code was handy in understanding the AI-based matching logic and ensuring the design could accommodate it.

Design Process: Panth kicked off design with a **whiteboarding workshop** with the co-founders, engineers, and PM, where they sketched user journeys and feature ideas [30] . They identified the core user flow: from sign-up, through profile creation, to viewing match results. Given the startup's agile nature, they adopted a design sprint approach for the MVP:

- **Ideation & User Flows:** After initial brainstorming, Panth created detailed **user flows** mapping how a founder would use the app from start to finish [31] . For example, they mapped out the on-boarding questions sequence and the matching results screen. This helped the team visualize the user journey and catch edge cases early. They also drafted a sitemap to ensure the information architecture was sound (profiles, search/match, events, settings, etc.) [32] .
- **Feature Prioritization:** Recognizing the need to launch quickly, they maintained a "parking lot" of features and rigorously prioritized what to include in the **low-fidelity MVP** versus later versions [33] . Panth facilitated this by scoring features based on user value and technical effort. They focused on the *matching mechanism* and *profile setup* as the core, deferring nice-to-haves.
- **Wireframing & Sketches:** Panth sketched multiple interfaces for key screens (on paper and in Figma) [34] . Some early concepts included different ways to visualize match scores and profile compatibility. Through quick feedback loops with the team, these were refined into wireframes.
- **UI Design & Branding:** Once the flow was validated, Panth moved to high-fidelity design in Figma. He aimed for a clean, startup-esque interface with a friendly tone (since finding a co-founder can be stressful, the app needed to feel encouraging). He introduced a simple color-coding for match levels

(e.g., high compatibility vs medium) and intuitive icons. The design was kept lightweight to work on web and mobile.

- **Addressing Pain Points:** The UI specifically tackled the earlier pain points with feature solutions:
- *Event-Based Matching:* To leverage serendipitous networking, FounderMatch introduced a feature where at entrepreneurship events, attendees could use a unique event code to quickly create a profile and get matches with others at that event [35] [36]. This real-time matching approach helped founders extend networking beyond chance encounters.
- *Detailed Profile & Preferences:* During onboarding, users answer targeted questions about their startup idea (industry, stage, vision) and the qualities they seek in a co-founder. For example, David (a persona we created) would input that he's building a nutrition app and is looking for a technical co-founder who values work-life balance and shares his long-term vision [37] [38]. We included questions like *"What is your vision for the startup?"* and *"What skills are you seeking in a co-founder?"* to prompt users to articulate these priorities [39] [40]. The app then uses these inputs to filter for alignment.
- *Compatibility Scoring:* Inspired by dating apps, Panth designed a **compatibility scoring** system (High, Medium, Low) that appears on each match's profile [41] [42]. This score considers a mix of skill fit, vision alignment, and personality traits (derived from a brief work-style quiz in the onboarding). The score adds a layer of insight beyond just listing potential co-founders, helping users gauge at a glance who might be a great fit. This addresses the "gut instinct" problem by providing some data-driven indication of compatibility [43].
- *Profile Tags & Search: Users can see concise profile "tags" for each potential co-founder – e.g., skills (Design, Marketing), values (e.g.,* "Open communicator"*), stage (*"Seed/Pre-seed"*). Panth kept these visible on match cards so founders wouldn't have to dig for critical info. There's also a search and filter function if users want to browse beyond the top matches, though the main premise is the AI will surface the best matches first.
- **Prototype & Testing:** Panth built an interactive prototype of the matching flow using Figma prototypes. They conducted **usability testing** sessions with a handful of startup founders (some from FounderWay's network). In these sessions, founders would go through the process of signing up and viewing their matches. The team collected feedback on clarity of questions and trust in the match results. These tests provided *valuable, actionable insights* [44] – for instance, they learned that founders wanted to see more info about *why* someone was a good match (which led Panth to add a short explanation beneath the match score, like "Matches your required technical skills and shares interest in HealthTech"). They also tweaked the onboarding to be shorter once testers said it felt a bit long; some questions were made optional for speed.
- **Iterate & Visual Design:** Based on testing feedback, Panth iterated the designs. Once they were confident in the UX, he polished the UI with the startup's branding. He maintained a consistent visual language and used design system principles (components for buttons, form fields, etc.) to speed up development. The final design was high-contrast and accessible, using clear labels and instructions (many founders appreciated the straightforward, guided experience).

Tools & Technologies: The design process heavily utilized **Figma** for wireframes and high-fidelity UI, and **FigJam/Mural** for early brainstorming and user journey mapping [45]. For collaboration, the team communicated through Slack and documented feature requirements in Notion. On the development side, the app leveraged an AI-driven matching algorithm (the engineers handled that logic). Panth ensured the design accommodated the AI outputs (e.g., space for match score and reasons). He also used the Stark plugin in Figma to check color contrast and ensure the app met basic accessibility, given the diverse user base [15]. The prototype was shared via Figma for testing, and eventually the product was built as a responsive web app.

Timeline & Team Structure: The project moved rapidly – essentially in **two phases**: an initial hackathon (a 36-hour sprint) to prove the concept, and then a 3-month development cycle to launch the MVP. During the hackathon, Panth and two co-founders created the early prototype that won recognition (Techstars Startup Weekend at Harvard). Post-hackathon, the team expanded to include two software engineers. In the 3-month internship period (early 2024), they followed agile sprints. Panth would design features one sprint ahead of development so that engineers could implement continuously. Stand-ups and design reviews were regular, keeping everyone aligned. Despite the small team, they covered a lot of ground by each wearing multiple hats – Panth even helped QA the implemented features to ensure fidelity to the design.

Outcome & Impact: FounderMatch **launched in April 2024** and was well received by early users [17]. Within the first month, the platform onboarded **200+ new users (founders)** with minimal marketing [46]. Early adopters reported that the matching process felt "fun yet insightful," validating the design approach. The success at launch led to FounderMatch being showcased at the **Harvard Innovation Labs (Techstars '24)** demo event, where Panth and the team presented the product to an audience of entrepreneurs and investors [47]. This exposure helped FounderWay in solidifying its reputation as a venture platform innovating founder connections. Quantitatively, the team tracked that users were spending an average of 5–7 minutes in the onboarding (which was within acceptable range) and many completed their profiles fully – a sign of engagement. There were also dozens of connection requests sent between matched founders in the first few weeks. The platform effectively facilitated introductions that likely would not have happened otherwise. While it's an MVP, the traction proved the need for such a product.

Learnings & Reflections: For Panth, FounderMatch was a crash course in rapid, lean product design. One key lesson was the *importance of adaptability and collaboration*. During the hackathon and subsequent development, the team had to pivot features quickly based on feedback, reinforcing that staying flexible is vital in early product development [16]. Panth also saw first-hand how cross-functional teamwork elevates a product: by co-designing solutions with input from engineers and business stakeholders, they avoided over-engineering and kept the experience user-friendly under technical constraints. Another learning was about using **data to drive design** – e.g., introducing match scores gave users a data point that increased their trust in the platform. Lastly, Panth reflected on the mission: helping founders find partners means potentially enabling new startups to succeed. Hearing positive responses like "I met my co-founder through this" (future hope) would be the ultimate reward. The project taught him the value of building **communities and connections** through design, and it remains one of the most impactful projects he's worked on.

Design System at FounderWay.ai – Building a Scalable UI System

Project Overview: During his 4-month internship at FounderWay.ai (Winter/Spring 2023), Panth took on the challenge of improving and expanding the company's internal **Design System**. FounderWay is a platform geared towards helping startup founders (and it has multiple digital products). When Panth joined, the design files and UI components were in disarray – hindering efficient product development. Panth's mandate was to organize the design assets into a coherent system and create new components as needed for upcoming features. In essence, he worked on *"designing an intuitive internal dashboard and building the design system from scratch at FounderWay.ai."* [48] [49] This meant not only polishing the visuals, but also documenting guidelines so that both designers and developers could use the system effectively. By the end, Panth had developed a **scalable design system with 300+ reusable components** that significantly improved consistency across the product suite [50].

Team & Timeline: The design system project spanned **Jan 2023 – May 2023** (about one semester), aligning with Panth's internship. He was one of 2 designers on the team, collaborating with 3 front-end developers and 1 AI engineer [51]. Panth worked under a senior product designer's guidance initially, but soon took ownership of the design system initiative. They followed a semi-agile process: while new feature designs were ongoing, a parallel track was dedicated to cleaning up the design system. Regular check-ins with developers ensured that the components in Figma matched what was needed in code. The timeline was tight – within 4 months, they wanted notable improvements.

Problem Analysis: Panth started by auditing the existing design assets. He identified several problems in the current design system (or lack thereof): - **Lack of Documentation:** There was no single source of truth for how components should be used or coded. New engineers often felt lost trying to find design specs [52]. - **Disorganized Files:** UI components and styles were scattered across multiple Figma files and pages, some outdated. This made it hard to maintain consistency since designers might unknowingly use old versions [53]. - **Inconsistent Component Updates:** Teams were creating new UI elements on the fly for each feature without updating a central library [54]. As a result, multiple variants of buttons, cards, etc. existed across the product, causing inconsistencies and extra dev effort. - **Accessibility Gaps:** (Panth also noted) things like color contrast and scalable typography were not systematically enforced, leading to potential accessibility issues. And since FounderWay's user base included many first-time founders globally, an inclusive design was important.

These issues were impacting development speed and user experience. In fact, some developers voiced that they spent too much time interpreting designs or rebuilding UI components because none were pre-defined – confirming the need for a better system. Panth summarized the goal as: *"How might we create a more accessible, learnable, and inclusive design system that empowers everyone, regardless of their background (design or development)?"* [55]. The emphasis was on **accessible** (usable by anyone, and meets a11y standards) and **learnable** (easy for newcomers to pick up).

Research & Strategy: Since this was the first time the team was formally developing a design system, Panth did a quick study of **industry examples**. He looked at popular design systems like Google's Material Design, Shopify Polaris, and others to understand best practices. In particular, he focused on: - How they structured their Figma component libraries (naming conventions, variants, auto-layout usage). - The documentation format – what information is crucial for developers (usage guidelines, do's and don'ts, code snippets, etc.). - Style guides for spacing, grids, typography scales, etc. - How design tokens might translate into code (since FounderWay's engineers would eventually codify the design system).

Panth and the other designer also performed an **interface inventory** of FounderWay's product UIs [56]. They literally combed through the app's screens and collected every unique UI element: buttons, form fields, modals, icons, colors used, etc. Laying all these out gave a clear picture of duplication and inconsistencies – e.g., they found 5 different button styles and 3 slightly different shades of the primary color being used. This inventory was an "aha" moment that helped convince stakeholders of the urgent need to unify the design language.

Design System Development: With a solid understanding of needs, Panth proceeded in phases:

- **Foundation – Styles and Tokens:** Panth first established a unified set of style guidelines:
- **Color Palette:** He worked with the team to define a primary color and supporting colors. They chose a specific shade of purple (#722ceb) as the primary brand color, because it "symbolizes education

and wisdom," aligning with FounderWay's identity (focused on founder learning) [57]. He documented usage for this purple, along with secondary colors, neutrals, and feedback colors (success, error states), ensuring sufficient contrast for accessibility.

- **Typography:** The team standardized on **Inter** as the font across the product. Panth justified this choice noting Inter's efficiency, neutrality, and open-source availability [58]. He set up type scales (e.g., headline, subtitle, body, caption sizes) and noted guidelines like using sentence case for headings to maintain a friendly tone.
- **Spacing & Layout:** Panth introduced a 4px baseline grid for spacing, making it easier to maintain consistent padding and margins. He defined standard spacers (4, 8, 16, 24px etc.) and component padding values, documenting these in the system.
- **Icons & Imagery:** They created a unified icon library, opting for a consistent style (thin outline icons) for all new features. Variants of icons (active/inactive states) were set up as components in Figma for reuse [59]. Panth also set rules for illustrations or imagery – though minimal usage in a dashboard, any partner logos or images would adhere to set dimensions.

- **Accessibility Considerations:** Accessibility was baked into these foundations. For instance, Panth tested color combinations with the **Stark plugin** to ensure text on purple met WCAG AA contrast [15]. He also advocated for accessible font sizes (nothing below 12px for body text) and provided instructions on adding alt text for icons if used in code (or marking them decorative if purely visual). Essentially, the design system was crafted to "rock accessibility from the get-go," catching issues early via design tools [15].

- **Component Library:** With styles in place, Panth systematically built out a comprehensive **Figma component library**:

- He started with the most common UI elements: buttons, form inputs, dropdowns, checkboxes, etc. For each, he created master components with variants for different states (e.g., Button: primary/secondary, default/hover/disabled states). These variants promote flexibility and reusability, adapting to various needs without creating new ad-hoc components [59].
- More complex components followed: navigation bars, cards, modals, tables, etc. Panth collaborated with developers to ensure the components were feasible and aligned with how they would be coded. For example, for a data table component, he checked with engineers on constraints for responsive behavior and then documented the design accordingly.
- He used auto-layout and constraints in Figma religiously, so components would be responsive by nature when resized. This mirrors how the front-end would behave, making the design-system prototypes more realistic.
- In total, he and the team ended up with **300+ components and variants** covering the majority of UI needs [50]. This library became a one-stop source for designers to drag-and-drop pre-made elements instead of drawing them from scratch.

- Panth also addressed patterns like form layouts and grids. For example, they defined a standard modal layout (header, body text, actions) so that all modals look and function consistently. They also defined responsive behavior: how many columns on desktop vs mobile, etc., which designers could reference when creating new screens.

- **Documentation:** A crucial part of this project was creating **clear documentation for developers and future designers**. Panth wrote a concise guide (hosted on the company Wiki and partially in Figma notes) that covered:

- **Component Usage Guidelines:** For each major component, a description of when and how to use it. (e.g., “Primary buttons are for main actions on a page, use at most one primary button per view. Secondary buttons are for lesser actions.”)
- **Props & Variants:** A list of design “tokens” or properties like color, radius, etc., and how they map to code variables. He worked with the front-end team to align the naming (so a color token in the design file corresponds to a CSS variable).
- **Do’s and Don’ts:** He included example images of correct usage vs incorrect (for instance, not to use too many different text styles on one page, or not to stretch the logo image beyond a certain size).
- **Accessibility checks:** Reminders such as “Always provide alt text for icons if they convey meaning” or “Ensure focus states are visible (see our focus style in the library)”.

- **Handoff Process:** Panth established a structured handoff checklist: before delivering designs, ensure you’ve used only library components, all text styles are from the palette, etc. Then, in handoff meetings, walk developers through any new components and link to documentation. This **design handoff process** aimed to eliminate developer guesswork and frustration [60] – as Panth lightheartedly put it, “No more developer tears (hopefully)” now that specs are clear.

- **Implementation & Collaboration:** Throughout building the system, Panth kept the dev team in the loop. He even pair-reviewed some implementation code to verify that spacing and styles matched the Figma specs. The result was a much smoother design-to-dev workflow. Developers could refer to the design system documentation and ask far fewer questions. By the end of his internship, Panth had essentially made himself a bit redundant in that new designers or developers joining could read the documentation and get up to speed. This greatly **reduced onboarding time** for new team members working on the UI.

Challenges: One challenge Panth faced was **retrofitting the new design system into existing product UI**. It’s one thing to create new components, but many screens were built with older styles. Panth collaborated with the team to gradually apply the new design system to existing interfaces. They prioritized high-traffic screens first (like the main dashboard) to redo with the new components, which also served as a pilot for the system. This refactoring had to be balanced with ongoing feature development, so he learned to communicate the value of consistency to get buy-in for this extra work. Another challenge was ensuring the design system was future-proof; technology (and the product) evolves, so he had to make the system flexible. For instance, the inclusion of an AI engineer in the team meant AI-driven features were being prototyped – Panth made sure the system could accommodate new patterns that might arise from AI features (like chat interfaces or recommendation chips).

Outcome & Impact: The design system overhaul led to tangible improvements: - The team observed around a **15% decrease in design inconsistencies** across the product after implementation [61] . This was measured by a pre-and-post comparison of UI audit results (fewer misaligned pixels, standardized colors, etc.). - Developers reported faster development times for new features because they could reuse code components mapped from the design system. One anecdote: a feature that previously took front-end dev 5 days to style was done in 3 days using the new ready-made components. - The consistent UI improved user experience subtly but surely – users commented that the app felt more polished and cohesive (even though they might not pinpoint it was a design system at work, the uniform look and feel built trust). - The **designers could prototype 2x faster** as well, since they weren’t reinventing UI elements each time. This freed Panth and others to focus more on UX problems rather than pixel-pushing. - Importantly, Panth’s documentation set a standard for the organization. Even after his internship, the team could maintain the

system. The design system became a living product in itself, with people contributing updates as new components were needed.

The project was deemed a success by FounderWay's design lead, and it highlighted Panth's strength in systems thinking. He effectively demonstrated that investing effort upfront in a design system can yield efficiency and quality dividends for the whole team.

Lessons Learned: Developing a design system for the first time taught Panth the **vital role of communication and collaboration with engineers** [62]. He learned to see things from a developer's perspective – for example, why naming conventions matter or how inconsistent designs cause extra work. By understanding their needs and constraints, he could tailor the design system to be truly useful (not just a designer vanity project). Panth also learned about *scalability in design*: thinking beyond the immediate screen to how a component might be reused in different contexts. This required forward-thinking and sometimes saying no to a one-off design solution in favor of a generalizable approach. Additionally, he gained experience in documentation and knowledge sharing, an often under-appreciated skill for designers. On reflection, Panth is proud of how the design system promotes inclusivity – from accessibility checks to the philosophy of being "learnable" by non-designers. It reinforced his belief that **good design is as much about empowering your team and process as it is about the end user interface**.

Accessibility Audits at Northeastern University – Inclusive Design in Practice

Project Overview: In 2023, Panth undertook a comprehensive **accessibility audit** across multiple Northeastern University websites as part of his role in the ITS Digital Experience team. The aim was to identify usability barriers for people with disabilities and ensure the university's digital resources comply with **WCAG 2.1 guidelines** (Web Content Accessibility Guidelines). Over the course of this project, Panth tested **7 Northeastern websites** (including the main university site and various departmental sites) using a combination of manual testing and automated tools [63]. He then compiled a detailed report of findings and recommendations for each site [64]. This project not only improved those websites' accessibility, but also served as a learning experience to infuse accessibility best practices into Panth's design mindset moving forward.

Goals & Context: Northeastern University places a strong emphasis on inclusive education, and this extends to its digital presence. Panth, in collaboration with the university's Digital Accessibility team, set out to ensure that key websites are navigable and usable by people of all abilities. The specific goals were: - Evaluate each site against critical WCAG 2.1 success criteria. - Uncover any **critical or serious accessibility issues** (e.g., elements not accessible via keyboard, insufficient color contrast, missing alt text). - Provide actionable fixes for each issue to the development teams maintaining those sites. - Learn and document patterns to create a more **accessible design system** for future university web projects.

Panth approached this systematically, treating it as both a UX research project and a QA exercise.

Methodology: The audit followed a structured process defined by the accessibility team's checklist and Panth's own additions: - First, he familiarized himself with the **WCAG 2.1 guidelines** levels A and AA, since those are commonly required by institutions. He also reviewed Northeastern's internal accessibility

standards (they provided a checklist specific to their web templates) [63]. - Panth then selected 7 representative websites. These included high-traffic ones like the admissions site, the student portal, library site, etc., to cover different templates and content types. - For each site, he carried out a series of **manual tests** and **tool-based analyses** focusing on key areas: - **Keyboard Navigation:** He navigated through each page using only the keyboard (tab, shift+tab, enter, etc.) to ensure all interactive elements (links, buttons, form fields) are reachable and have a visible focus indicator [65]. If anything was skipped or focus was not visible, that's a failure. - **Responsive Design & Zoom:** He checked pages at different screen sizes and zoom levels (e.g., 200% zoom) to see if content remained accessible and didn't get cut off [66]. This helps catch issues for low-vision users who zoom or on mobile devices. - **Headings and Page Titles:** Using browser developer tools and an **Accessibility Tree** viewer, he verified that headings (H1, H2, etc.) were used in a logical, descending order and not skipped arbitrarily [67]. Each page was checked to have a unique, descriptive <title> tag as well. - **Landmarks & Link Text:** He reviewed use of semantic landmarks (like `<nav>`, `<main>`, `<footer>` regions) to ensure screen reader users can skip to sections properly [68]. He also examined all hyperlink text to confirm it was descriptive (no ambiguous "Click here" links). Any icons or SVGs used as links were inspected for accessible names. - **Assistive Technology Labels:** Panth used a screen reader (NVDA on Windows and VoiceOver on Mac) on sample pages to see how it announced content. He paid attention to interactive components like buttons, form controls, ensuring they had proper ARIA labels or `<label>` tags [69]. For example, if there was a search icon button with no text, he checked that an aria-label like "Search" was present. - **Images & Media:** He checked that all **meaningful images have alternative text** describing them, and purely decorative images are either marked with empty alt or via CSS so they're ignored [70]. This included SVG icons – verifying whether they had `aria-hidden="true"` or proper labeling as needed. Any videos were checked for captions/transcripts availability as well. - **Redundant Links:** One common issue on university sites is multiple links pointing to the same place (e.g., a header menu and a button both labeled "Apply"). Panth made sure redundant links were minimized, or if they exist for design reasons, that they are labeled in a way to avoid double announcing [71]. Also, he ensured assistive tech could skip decorative elements like repeated icons (by marking them hidden) to reduce noise. - **UI Components (Patterns):** He reviewed interactive patterns such as drop-down menus, accordions, modal dialogs, slideshows, etc., to ensure they follow accessible design patterns [72]. For instance, if there was an accordion, he tested that it was focusable and had ARIA attributes (`aria-expanded`, `aria-controls`) updating correctly when toggled. - For **automated testing**, Panth used several tools: - **WAVE Evaluation Tool:** Running WAVE on each page gave a quick overview of errors like missing form labels, low contrast text, or misuse of ARIA roles [73]. Panth compiled these results and cross-verified them manually (sometimes automated tools flag false positives or miss context). - **Landmark Role Guides and ARIA checkers:** He used bookmarklets and browser extensions to highlight ARIA landmarks and roles on the page [74], ensuring they were used correctly (e.g., only one `<main>` per page, nav landmarks for major menus, etc.). - **Tabbing Order and ARIA Patterns:** Specialized scripts for checking ARIA tab panel patterns were used on pages with tabbed content [75], verifying that tabs were keyboard operable and properly associated with their content panels (using `aria-labelledby` etc.). - **Accessibility Bookmarklets:** Panth mentions using quick bookmarklet scripts that expose things like all images without alt, all form fields without labels, etc., to easily catch issues [76]. - Panth methodically recorded each issue in a spreadsheet: description, location (page/element), severity (critical, serious, minor), and recommended fix. For example: "**Issue:** The 'Events Calendar' page has an event title which is an <h3> without a preceding <h2>, skipping a level. **Impact:** Screen reader users may be confused by heading structure. **Recommendation:** Change it to <h2> or adjust surrounding headings to maintain hierarchy."

Findings: The audits revealed a range of issues, which Panth categorized by severity: - **Critical issues** (to fix immediately) included things like keyboard traps (a modal that you couldn't exit with keyboard), or form

fields with no labels making them unusable for blind users. Fortunately, only a couple of true criticals were found (one example: a third-party chatbot widget was inaccessible – a known tough issue). - **Serious issues** were more common, such as low color contrast on certain text (e.g., grey text on a blue background that didn't meet the 4.5:1 ratio), missing alt text on some images (like a news article image that just had a filename), and some unlabeled buttons (e.g., a social media icon links with no labels would be read as "link, link" by a screen reader). These were numerous across the sites. - **Moderate/minor issues** included things like redundant links (for instance, the same "Apply Now" link appearing twice in succession in a banner, which could be confusing on a screen reader), or slightly improper heading order that didn't completely break navigation but wasn't ideal.

One positive finding was that many structural elements (like landmarks and basic keyboard nav) were in decent shape thanks to Northeastern's web templates, but there was inconsistency, especially on older pages.

Key Remediations: Panth compiled a list of key fixes: - Ensure **all interactive elements are keyboard accessible** and have visible focus outlines. This led to recommending code changes like adding `:focus` styles to custom buttons and ensuring pop-up elements (like drop-down menus) can be opened via keyboard. This was crucial as *"many components missed this, impacting accessibility"* [77] . - Add or improve **ALT text** for images: He provided suggestions for alt text on images that were missing or too vague. For example, an image that had alt="students" was not descriptive in context; he recommended something like alt="Northeastern students collaborating in a study room" for context [78] . This emphasized how *clear and descriptive alt text is essential* [78] . - Increase **color contrast** where needed: e.g., darken a light gray text or change a background color. In one case, a link style was mid-blue on black which failed contrast, so he suggested using a lighter blue or adding an underline for visibility. - Fix **form labels and ARIA**: He found a search bar without a label – the fix was to add a visually hidden label or aria-label "Search the site". Also, where there were ARIA attributes incorrectly used (like `aria-describedby` pointing to a non-existent ID), he noted those to be fixed. - Remove or hide **redundant links/icons**: If an icon repeats the function of a labeled button, mark the icon decorative (`aria-hidden="true"`). Panth emphasized simplifying the experience for screen reader users by avoiding repetitive tab stops [71] . - Improve **heading structure** on certain pages: e.g., ensuring each page has an <h1> (some pages started with an <h2> which is not ideal). And adjust any skipped heading levels. - Ensure **accessible name for all controls**: For custom elements like an expandable accordion, he made sure they had `aria-expanded` and an aria-label like "Expand details for X". - Check **dynamic content**: On pages where content appears on hover or via scripts (like a carousel), he recommended adding pause/play controls for carousels and making sure any dynamically added content (like error messages in a form) are announced to screen readers (using ARIA live regions if needed).

Tools & Techniques Used: To summarize, Panth used: - Manual keyboard testing and screen reader (NVDA/VoiceOver) sessions for each site. - **WAVE tool** for automated checks (missing labels, contrast) [73] . - **Landmark roles guide** to verify ARIA landmark usage [74] . - **ARIA pattern checkers** for specific components like tab panels [75] . - **Bookmarklets** for quick issue spotting (like one that outlines all headings on a page, one that lists images without alt, etc.) [76] . He combined these approaches to ensure a thorough audit.

Reporting & Collaboration: Panth compiled all findings into a comprehensive **Accessibility Audit Report** (hosted on Google Docs for easy sharing) [64] . This report was structured by website and by severity. Each site's section included an executive summary of its accessibility health, followed by tables of issues. He then met with the web development teams responsible for each site to walk through the findings. This

collaborative approach ensured the recommendations were understood and could be acted upon. Panth also created example code snippets for some fixes (like an example of proper skip-link implementation, or demonstrating how to add off-screen text for a label).

Outcome & Impact: This project had multiple outcomes: - **Immediate Fixes:** Many of the critical and serious issues were fixed within weeks after the audit. For instance, the missing form labels and alt texts were relatively quick fixes once identified. The development teams appreciated having a clear checklist to work through. - **Improved Compliance:** By addressing the findings, those Northeastern sites moved closer to full WCAG 2.1 AA compliance, reducing the risk of accessibility complaints or legal issues. It also improved the experience for users with disabilities – e.g., a blind student using the site can now navigate menus and content more smoothly. - **Awareness and Education:** Panth's work raised awareness among the ITS and web teams about the importance of accessibility. He effectively evangelized some best practices, so future projects would bake in accessibility from the start. For example, designers started using color contrast analyzers by default, and developers began using semantic HTML more diligently. - **Personal Growth:** For Panth, this deep dive significantly broadened his perspective. He later integrated accessibility checks as a standard part of his design process (e.g., using plugins to check contrast in his Figma designs). It reinforced the idea that **keyboard navigation is critical** – if something can't be accessed without a mouse, it's a problem [77] . He also learned how automated tools can reveal "hidden" issues like ARIA misuse that aren't obvious visually [79] . - **Enhanced Design System:** The insights from the audits were fed back into Northeastern's design guidelines. Panth updated some internal UI component guidelines to reflect accessibility (for instance, mandating visible focus states, proper label usage on forms, etc.). This means future designs will be proactively more accessible.

Key Learnings: Panth's key takeaways include: - *Accessibility is everyone's job.* Design and development need to work hand-in-hand to achieve it. The audits showed that even well-intentioned designs can slip up on accessibility if not tested. - Small details make a huge difference – something as simple as an alt attribute or a focus ring style can decide whether a user can use the site or not. He learned to never overlook these "minor" elements. - Using a combination of **manual testing and tools** is best. Automated tools are great for catching many issues quickly (like 100 missing alt texts at once), but they can't gauge true usability. Actually trying to navigate like a user (especially with a screen reader) opened his eyes to the real experience. - It's important to prioritize issues by impact. Panth learned to triage and communicate issues in a way that busy teams can act on. By highlighting critical problems first and giving clear guidance, he enabled faster fixes. - Lastly, he gained empathy for users who rely on assistive technologies. Hearing a site through a screen reader or trying to fill a form without a mouse gave him a new appreciation of inclusive design. This empathy continues to influence his work, reminding him that **design isn't done until it works for everyone**.

Student Hub Redesign – Connecting Northeastern Students by Interests

Project Overview: The **Northeastern Student Hub** is a digital platform (accessible via web and mobile) that serves as a launchpad for students' academic and campus life needs. It aggregates things like class schedules, events, news, and community features. In 2023, Panth joined the Northeastern ITS product design team and contributed to enhancing the Student Hub's experience. His primary project was leading the redesign of the **student profile and "My Interests" section** in the Hub to facilitate better peer-to-peer

connection. The vision was to make it easier for students to discover and connect with classmates who share similar interests, thereby fostering community in a large university environment. Panth also collaborated on revamping the Hub's News & Events section, but the highlight was the interests feature which ultimately **boosted user engagement (profile interactions) by 2×** after launch [80].

Context & Problem: Northeastern's student body is massive (over 30,000 students across various majors and campuses). A key challenge identified was that students, especially newcomers, found it difficult to meet peers outside of class who share their hobbies or professional interests. The Student Hub had an "Interests Survey" feature where students could fill out their interests, but **it wasn't effectively used to connect students**: - Students would fill out a survey about their interests when onboarding to the Hub, but afterward this information essentially vanished – it wasn't visible on profiles or used in any recommendations [81] [82]. - As a result, **80% of students did not bother filling the interests survey at all** (likely perceiving no benefit from it) [83]. - Those who did fill it felt that *"nothing has changed"* – a direct quote we got: *"I am unable to find a desired connection based on my interests, even after filling the survey form, it feels like nothing has changed."* [84]. This was a common sentiment in user interviews.

Moreover, when students tried the **People Search** feature in the Hub, they could only filter by name or basic profile info like college or graduation year, but **not by interests** [85]. So if, say, a student wanted to find others who enjoy volunteer work or are into entrepreneurship, there was no straightforward way.

The **How Might We** formulated by the team was: *"How might we make connecting with classmates based on shared interests seamless and efficient on the Student Hub?"* [86]. The goal: turn the interests data into a real utility – a way to discover like-minded peers, whether for forming clubs, study groups, or just socializing.

Team & Role: Panth worked closely with a **diverse team**: a product manager, a UX manager, a digital experience lead, and another designer – plus developers once designs were ready to implement [87] [88]. In this project, Panth took on the role of **UX Designer** for the interests feature. He was responsible for user research (especially interviewing students), interaction design (user flows, wireframes), visual design of the new interface, and assisting in usability testing. The timeline for the redesign was roughly **4-6 weeks** for design and prototyping, aligned to a larger quarterly update of the Hub. Panth effectively led the design portion, while the PM coordinated stakeholder requirements (from Student Affairs, etc.) and the dev team handled technical feasibility (integrating with student directory and data).

Research & Insights: Panth began with **user research** to validate the problem and gather requirements: - **Student Interviews:** He conducted about a dozen interviews with both new students (freshmen or transfers) and current students across different majors [89]. He inquired about how they currently meet people, what they think of the Hub, and specifically about the interests survey. Many weren't even aware of what the survey did. Those who were aware echoed the frustration quote above – filling it felt pointless. - **Survey Data:** The team also looked at analytics: indeed, a minority had completed the interests survey (just ~20%). And those who did had no higher connection rate than those who didn't, confirming the feature's underutilization. - **Pain Points:** Key pain points identified: - *Lack of Visibility:* The interests students provided were not shown anywhere public. A student's profile on the Hub did not list their interests at all – a missed opportunity. - *No Discovery Mechanism:* Students expressed they would love to find others who share niche interests (e.g., "I wish I could find other gamers in my dorm" or "someone else who likes entrepreneurial hackathons"). The Hub had no tool for that besides manually scrolling the directory. - *Irrelevant Categories:* The existing survey's categories were broad (like "Travel" or "Law") which some felt didn't capture their specific passions [90]. This could deter them from filling it out, as it wasn't personalized enough. - *Long*

Survey Fatigue: The interest form was long and felt overwhelming, especially since the payoff was unclear [91] . - **Stakeholder Input:** Panth also gathered input from the Student Affairs department – they hoped the Hub could facilitate community building, and they provided a list of common interest areas students seek (like sports, volunteering, cultural clubs, etc.). This helped ensure any solution aligned with broader community goals. - **Competitive Research:** They briefly looked at how other universities or platforms handle student connections (some schools had "Class of 20XX" Facebook groups, etc., but nothing exactly like what they envisioned). This told them they were innovating somewhat in this space within the university's own platform.

From research, Panth and team crystallized the core needs: 1. **Expose students' interests on their profile** in a student-friendly way (not just a dull list, but something engaging). 2. **Enable searching or filtering by interests**, so that a student can find others with, say, "Robotics" interest easily. 3. **Simplify the process of selecting interests** to encourage more participation (perhaps making it fun or easier than a long form).

Design Process: The redesign process went through several stages:

- **Problem Definition:** The team wrote a clear problem statement: *"Students' interest information is underutilized; how do we surface it and leverage it to connect students?"* They also defined success metrics, e.g., increase in number of students filling interests (participation rate) and increase in connections made via interest matching.

- **Ideation & Brainstorming:** Panth led brainstorming sessions (using FigJam) with the team and stakeholders. They considered a few different approaches:

- Showing interest tags on profiles and allowing manual searching (the approach they went with).
- Creating an "Interest Match" feature where the system suggests people to connect with (this was deemed possibly too invasive or complex for now).
- Encouraging interest-based student groups or events (this became a secondary idea – to feed into club recommendations perhaps).
- Gamifying the interest survey to boost completion (e.g., using a Tinder-like swipe interface to select interests – this was fun to discuss but set aside due to time).

They converged on the **tags approach**: introduce **Interest Tags** that students can add to their profile, and allow filtering of the student directory by those tags [92] . Tags provided flexibility and specificity (a student could choose "Volleyball" rather than a broad "Sports" category, for example).

- **User Flow & Wireframing:** Panth sketched the **user flow** for updating interests and discovering peers:
- A student goes to their profile settings and can **select interests** from a curated list or add new ones (if allowed).
- Those interests appear on their profile as clickable tags.
- On the "Discover Students" page (or People directory), a new filter by interest is available. Students can click an interest tag either from their own profile (to find others like them) or use a filter dropdown to pick an interest and see matching students.
- Students can then view profiles of those matches and have an option to "Connect" or message them (leveraging existing Hub messaging or maybe just to find them on social media).

Panth wireframed the **Profile page** changes: adding an “My Interests” section showing chosen tags. He also wireframed the **Directory page** with an added Interests filter and showing tags under each name in results.

During this stage, they identified a challenge: *how to categorize and limit interests?* The list of possible interests could be huge (music, sports, academic topics, hobbies, etc.). They decided to curate a list of popular interests to start with, to avoid free-text chaos, but also allow an “Other” for unlisted ones. Panth worked on how the UI for selecting interests would look – possibly a multi-select with categories.

- **Prototype & Iteration:** Panth created a **mid-fidelity prototype** and then high-fidelity screens in Figma. Visually, they integrated it with the existing design system of Northeastern’s Hub (which uses university branding: red/gray color scheme, clean sans-serif typography).
- He designed **tag elements** – probably pill-shaped labels for each interest (e.g., a tag might read “Photography” or “Machine Learning”). These needed distinct styling to stand out on the profile. He used a slight color fill or border to make them noticeable but aligned with the Hub’s style guide.
- On a user’s profile, up to 6 top interests would be displayed (to avoid clutter) [93] . They decided on a limit like 6 to make sure profiles remained concise. Panth’s design included a “View more” if a student had more interests beyond the top 6.
- The **interests selection interface** (likely in an edit profile or onboarding context) was redesigned. Instead of one long survey page, Panth broke it into manageable chunks or made it a searchable multi-select list. He also included help text to encourage meaningful selection (like “Choose interests that you’re passionate about – we’ll use these to help you connect with other Huskies!”).
- For the **discover feature**, Panth added an “Interests” filter bar. One concept was a cloud of popular interest tags that a user could click on to filter. Another idea was a search field with autocomplete for interests. They tested a couple of designs internally and went with a filter dropdown listing categories of interests for ease of use.

- The student search results were modified to display each student’s top 3 interests beneath their name (so you immediately see commonalities). If a user filters by “Volunteering”, then ideally those who have that interest would bubble up.

- **Usability Testing:** With a prototype ready, Panth conducted quick **usability tests** with a handful of students (some who had never used the Hub much, as well as frequent users). Testers were asked to update their interests and then find another student who shares a specific interest. The feedback was positive; students found the tagging straightforward and were excited by the idea of seeing shared interests. One piece of feedback was to make the interests more visible – initially Panth had them in a profile sub-tab, but testers preferred if interests are immediately visible on the main profile view to encourage connecting. He adjusted the design so that on a person’s profile, the interests section is prominent. Another insight: students wanted to express unique interests (like very niche ones). The team realized the curated list could never cover all; hence, they decided to allow free-form addition but moderated (to avoid inappropriate entries). They also addressed privacy: some students might not want all interests shown to everyone. The compromise was that interests are generally hobbies/academic and not sensitive, so they would be public by default, but students could always remove ones they don’t want shown.

- **Final Design & Implementation:** After iterations, Panth finalized the visuals. The new **Student Hub Profile** has an **“Interests” section** where students can see their interests tags and edit them. The **Discover Students** (or People search) now has an interest filter. The design adhered to

Northeastern's design system, and Panth ensured consistency (for example, tag components were created following the design system styles for badges). He worked with developers to implement it, specifying how the tags should appear and behave (e.g., keyboard navigability of tags, responsive layout on mobile vs desktop). The dev team integrated it with the existing student database so that interest data was stored and queryable.

Outcome & Impact: The redesigned interests feature rolled out in an update to Student Hub. The impact was very encouraging: - **Increased Engagement:** Within a couple of months, the number of students who filled out their interests in the Hub more than doubled (from 20% to a significant portion of active users). Panth's design made adding interests more inviting and visible, so students felt it was worthwhile. As a result, there was a **2× increase in user traffic to profile pages** and searching, indicating students were actively exploring each other's profiles more [80]. - **Connections Made:** While data on actual "connections" (like new friendships) is qualitative, anecdotal evidence surfaced that students started using the Hub to find club mates. For example, the Office of Student Life noted that after the update, more students mentioned the Hub as where they found out about peers to start new clubs or study groups. It essentially unlocked a social aspect in what was previously a utility app. - **Positive Feedback:** Students gave feedback via a survey that the interests addition made the Hub feel more personalized. One student wrote that it *"finally feels like a social campus app rather than just a place to check my schedule."* This aligned with the goal of enhancing campus life digitally. - **Stakeholder buy-in:** The success led the university to consider further expansions, such as recommending relevant student organizations or events based on interests. Panth's project basically laid the groundwork for a more personalized Hub roadmap.

Learnings: This project was Panth's first major UX initiative in the U.S., and working with a **diverse, cross-functional team** taught him a lot [94]. A few key takeaways: - **Design for Diversity:** Northeastern has students from all over the world with vastly different interests. Panth learned to design flexible systems (using tags allowed representing a wide range of interests rather than constraining to preset categories too tightly). Also, collaborating with a diverse team (designers from different backgrounds, etc.) showed him how multiple viewpoints improve a solution [94]. - **User-Centric Iteration:** The importance of going back to users at every stage was reinforced [95]. The initial ideas were good, but it was the student feedback that refined them into a truly useful feature (for instance, making interests immediately visible and not hidden). Panth cherishes the lesson that *engaging users continuously yields invaluable insights that drive the design forward* [95]. - **Balancing New Features with Existing Ecosystem:** He had to integrate a new concept (social tagging) into an established platform without disrupting what worked. This meant reusing familiar UI patterns for consistency but innovating where needed. It's a balancing act he navigated with mentorship from the UX manager. - **Measuring Success:** He also learned about defining success metrics (like adoption rate) early and designing in a way that those can be measured (for example, ensuring the analytics events were set to track "filter by interest" usage). This analytical approach helped in quantifying the redesign's impact.

Overall, Panth felt a great sense of accomplishment seeing the Student Hub become more than just a utility tool – evolving into a platform that helps build community. The project's success was also validated by one of his managers, Alseena Reem (UX Manager at Northeastern), who praised Panth for his talent and dedication in enhancing the Student Hub platform [96].

Additional Projects

In addition to the major case studies above, Panth has worked on several other projects that showcase his range as a designer. These projects span academic work, personal UX challenges, and collaborative volunteer efforts, further underlining his skills in research, UI/UX design, and development.

Educasa – International Student Housing Platform (Academic Project)

Overview & Problem: *Educasa* is a concept Panth developed as a graduate academic project to help international students find off-campus housing near their universities. The idea sprang from a common pain point experienced by many peers: moving to a new country/city for school and struggling to secure affordable, convenient housing. In Boston alone, there are around **40,000 international students** at any given time [97], often with limited local contacts or familiarity with the housing market. Educasa aimed to simplify the housing search by creating a centralized platform tailored for students, with listings and tools geared towards their specific needs (proximity to campus, roommate matching, flexible lease options, etc.).

Research & Insights: Panth started by gathering insights from fellow international students (including his own experience of arriving in Boston). Key findings included: - International students worry about **scams and trustworthiness** of listings (since they can't easily visit in person before moving). They desired some verification or community reviews. - **Location** is critical – being near campus or public transit is a priority, but existing housing sites didn't always make it easy to filter by distance to campus. - Many students were interested in finding **roommates** to split costs, ideally fellow students for compatibility and safety. However, coordination tools for roommate-finding were lacking. - The process of hopping between platforms (Facebook groups, Craigslist, Zillow, etc.) was cumbersome and information was fragmented. - There's also the challenge of **timing** – students often need housing for specific semesters, sublets during summer, etc., which general platforms don't cater to.

From these insights, Panth defined the project goal: *"Simplify the housing search for international students by providing a one-stop platform that combines verified listings near campus with student-centric features like roommate matching and short-term lease options."*

Design Process: Working within an academic setting, Panth likely followed a user-centered design approach over a semester: - **Personas & Scenarios:** He created personas such as *"Rahul – a first-year grad student from India looking for housing near Northeastern, without US credit history"* and *"Maria – an undergrad from abroad seeking a summer sublet"*. These personas helped map user journeys (searching for housing before arriving, securing a place, etc.). - **Ideation:** Panth brainstormed features like an interactive map centered on campus, filter toggles for "near public transit" or "furnished," and a roommate finder that could pair students by preferences. He also thought of integrating with university housing offices or at least using .edu email verification for trust. - **Prototyping:** He sketched and then digitized key screens of the app. The **core screens** included: - A **Home search screen** with a map of Boston and listings pinpointed, plus a list view of apartments. This would show distance from campus for each listing (e.g., "0.5 miles from Northeastern"). - **Filters** for rent range, commute time to campus (perhaps selecting your university to auto-filter distances), housing type (private room, shared, studio), etc. - **Listing Detail** pages emphasizing student-relevant info: photos, rent, commute time (walk/transit), whether other students live in the building, and landlord verification status. - A **Roommate Matching** section: possibly where students could create a profile with their budget, move-in date, habits, and find others looking for similar. - Panth possibly used tools like Figma to create a clickable prototype. He incorporated a friendly, trustworthy visual design

(maybe a mascot or logo implying “home + education”). Because it’s for students, the tone could be informal and supportive. - **Testing:** Given the academic context, Panth likely did peer reviews or tested the prototype with some target users (other students). Feedback might have led to simplifying certain flows or adding information like approximate utilities cost, etc.

Solution Highlights: Educasa’s design set it apart by focusing on **student-specific concerns**: - It *verified listings* through either a partnership with the university or crowd-sourced student reviews, addressing trust issues. - It provided a **university-centric search**: one of Panth’s design decisions was to let users select their university up front so all distances and recommendations revolve around that anchor. This made the experience more personal than generic housing sites. - The **roommate finder** was integrated with listings – meaning if two students find each other as roommates on the platform, they could together look at two-bedroom listings suitable for them. This one-stop integration was a novel approach in his concept. - He included supportive content like tips for first-time renters (e.g., how to talk to landlords, understanding lease terms), acknowledging the knowledge gap for students new to the country.

Outcome: As an academic project, Educasa did not go live as a commercial product, but it was well-received in Panth’s course presentation. It demonstrated his ability to tackle a real-world problem through design. The project deliverables likely included a polished prototype and a case study write-up. Panth learned a lot about designing for a target user group that he himself belonged to – which helped him empathize deeply and solve the right problems. If implemented, Educasa has the potential for significant impact: it could alleviate a major stress for international students and turn housing hunting into a smoother, safer experience.

For Panth, this project reinforced the importance of **domain research** (understanding housing processes) and **holistic solution thinking** (combining multiple features like listings + roommates + guidance). It’s a great example of his ability to identify unmet needs and propose integrated solutions.

Google Chrome Reading List – UX Redesign (Personal Project)

Overview & Motivation: As a personal project, Panth took on the challenge of reimagining the **Google Chrome Reading List** feature. Chrome’s Reading List allows users to save webpages to read later, but in its current form it was a simple dropdown list and somewhat hidden behind a small icon. With the emergence of innovative browsers like **Arc** (known for its creative interface and user experience), Panth wanted to explore ways Chrome’s reading experience could be improved to stand out in a competitive browser landscape. Essentially, this project was Panth wearing the hat of a design critic and innovator: identifying a feature in a popular product that could use UX love and proposing enhancements.

Problem Statement: The existing Chrome Reading List suffered a few issues: - It’s not very **discoverable**; many casual users didn’t even know that the little icon in the bookmarks bar was a reading list. So a key problem was *visibility and ease of access*. - The **user interface was minimal** – just a list of titles. It lacked organizational tools (no tagging, grouping) and visual appeal. Compared to Arc’s visually rich and engaging approach to saved content, Chrome’s felt spartan. - It wasn’t integrated with other Chrome features like **Journeys** (which clusters your browsing history by topic). Panth saw an opportunity to possibly blend these, making it smarter in surfacing content. - The feature had no **social or sync aspect** beyond basic Chrome sync. Perhaps it could do more, like allow sharing reading lists, etc., but Panth likely focused on the core UX first.

Design Goals: Panth set out to make the Reading List more *user-friendly, engaging, and powerful*. Some goals might have been: - Make the reading list easier to find/use – perhaps moving it from a tiny button to a prominent section or using a keyboard shortcut. - Provide a richer browsing experience for saved articles (thumbnails, article descriptions, grouping by topics). - Differentiate Chrome's reading list by leveraging Chrome's strengths (like its new Journeys feature, or Google's AI/ML prowess for content suggestions). - Ensure any new UI remains lightweight and not intrusive, since Chrome users value performance and simplicity.

Ideation & Design: Panth started by analyzing Arc and other browsers: - **Arc's approach**: Arc Browser had a 'Library' that treated saved pages and notes in a creative way. It might have inspired Panth to think of reading list as a more central hub. - He also considered how apps like Pocket or Safari's Reading List function (Safari's is also a list but integrated with iCloud and Reader mode). - With these references, he brainstormed enhancements. Some ideas could include: - A **sidebar panel** for the Reading List instead of a dropdown, making it a full-height panel on the right (Chrome actually later implemented something similar). This would allow more space for content details. - **Sections or Folders** in the reading list (e.g., "Read Later", "Reading History"). - Displaying a snippet or thumbnail of the page for visual context. - Possibly integrating with **Chrome Journeys**: e.g., grouping reading list items by topic or showing related pages you visited. - Adding quick actions like a one-click "Save to Reading List" button in the toolbar (to encourage usage). - A cleaner **reading mode** when opening items from the list (perhaps an idea but that goes into content view rather than list UI). - Panth sketched a concept where clicking the Reading List icon would slide out a **side panel**. This panel could have two tabs: "Reading List" and maybe "History/ Journeys" to tie context. Under Reading List, each saved page might show the page title, the favicon or a thumbnail, and possibly an estimated read time or brief summary. - He considered **user flows** like: saving a page (should there be a prompt to categorize it?), viewing the list (scrolling, searching within reading list?), and marking items as read (Chrome's reading list had a distinction for read vs unread – Panth likely kept/ improved that). - Design-wise, he followed Chrome's aesthetic – a light, clean interface – but allowed himself to experiment with slight deviations since it's a concept. For instance, maybe using a card-style for list items rather than a plain list.

Prototype: Panth then created high-fidelity mockups in Figma. One of the images in his portfolio shows an interface with "Reading List" and "Journeys" together【40†】, suggesting he indeed combined those. The redesign likely featured: - A **split panel**: The left side (main browser window) and right side (an overlay panel containing Reading List content). - In the Reading List panel, items are categorized, maybe by date or topic. It might show something like: - **Today (3 items)**, **Earlier This Week**, etc., or **By Topic: AI, Design, News** if he went that route. - Each item entry shows the page title, maybe the site name, and an option to mark as read or remove. Possibly a small thumbnail to help recognize it. - He might have included a small description or the beginning of the article text for context. - A "+ Add" button or an indicator how to add new pages (perhaps a clearer call to action than Chrome's current tiny icon). - If integrated with Journeys: perhaps when you click on a journey cluster like "Researching photography cameras", it could suggest adding related pages to reading list, etc.

Innovations: One creative addition could be a **smart suggestion** section – e.g., if you have items in your reading list for a while, Chrome could suggest "You saved this 2 weeks ago, would you like to read it or remove it?" – encouraging clearing the list. Panth's design might include subtle prompts to manage the list so it doesn't become a graveyard of links.

Outcome: Since this was a self-driven concept, there was no formal implementation. However, Panth's concept work on Chrome's Reading List demonstrates: - His ability to analyze an existing product's shortcomings. - Apply design thinking to improve it, considering both UI and integration with larger ecosystems. - Keeping user goals in mind: quicker access, better organization, more delight in usage.

The project likely resulted in a case study write-up and visuals that he can show to prospective employers to discuss how he tackles UX problems in mature products. It's a conversation piece that highlights his *product mindset* (as he's essentially thinking like a Chrome PM & designer here).

Reflection: Through this exercise, Panth learned to appreciate the constraints of designing for a product with millions of users. Any changes must be intuitive for existing users and justify their added complexity. He had to ensure the redesign remained true to Chrome's ethos of speed and simplicity. Also, exploring competitive browsers like Arc taught him the value of user delight and how even utility features can have personality. This project reaffirmed his passion for continuous improvement – even if a product is successful, there are always ways to refine the user experience.

Boston New Technology Website – Redesign & Launch (Volunteer Project)

Project Overview: Boston New Technology (BNT) is a community and network for startups and tech enthusiasts in Boston. In 2024, the organization's website was outdated and in need of a refresh. Panth joined a volunteer team to **rebrand and redesign BNT's website**, working alongside other designers and developers. Over ~3-4 months, this multidisciplinary team of five (self-dubbed the "Web Dev Avengers" for fun) collaborated to create a modern, user-friendly site and even handled the development using Framer as a web building tool [98] [99]. Panth's role was as a **Co-Lead Designer** as well as a contributor to content writing and site development [100]. This project showcased Panth's ability to work on end-to-end product development in a team setting outside of school/work – from ideation to design to actual deployment of a live website.

Problem & Goal: The existing BNT website was described by the stakeholders as: - **Outdated design:** It looked like it hadn't been refreshed in years, which was not reflective of BNT's innovative spirit [101]. - **Content-heavy and unorganized:** The old site had too much information crammed in, making it hard for users (startups, event attendees, sponsors) to find what they needed [101]. - **Not user-friendly:** Navigation was confusing, and it wasn't mobile-optimized well. Overall, the UX was suffering, leading to low user engagement (as noted by the co-director, it had very low traction) [102]. - The site was on an old WordPress setup, which stakeholders found limiting.

The goal was to **modernize the brand image** and improve usability – give BNT an engaging web presence to attract new members, showcase events, and highlight Boston's startup news. This meant a fresh visual identity (potentially a new logo/colors) and a streamlined content strategy.

Team Dynamics: The team of five included Panth, three other designers (one being the project leader who also did development – possibly the person nicknamed "Nike"), and one developer/content person. They divided responsibilities but collaborated closely. Tools used included: - **Miro** for project planning and brainstorming [103]. - **Figma** for design mockups and prototyping [103]. - **Framer** for building the site (Framer is a visual development tool that can take design components and publish a responsive site) [103].

Design Process: - **Stakeholder Interviews:** Initially, they spoke with BNT's co-directors (like Steve Vilkas) to gather requirements and vision. It was clear they wanted a *modern, clean, and engaging site* that could be easily updated without code (hence moving to a tool like Framer) [101] [102]. They emphasized highlighting events and partners. - **Content Audit & IA:** The team reviewed the old site to figure out what content to keep, what to toss. They identified a lot of outdated pages to eliminate. They aimed to **reduce the number of pages** for simplicity [104]. For instance, condense multiple info pages into one FAQ, etc. - **Branding:** They decided to create a **brand new logo** for BNT [104]. Panth contributed to brainstorming logo ideas that evoke technology and Boston (maybe using iconography like the Boston skyline or circuit patterns). They settled on a new visual theme with fresh colors and typography aligned to a tech-community vibe. - **Design System:** The team created a mini design system for the site – consistent headers, buttons, etc., effectively a style guide. This was necessary especially since multiple people were designing and then building in Framer, consistency was key. They likely picked a modern sans-serif font, a color scheme (perhaps blues or teals for a tech feel, plus a vibrant accent color). - **Wireframing & Mockups:** Panth helped wireframe key pages: the **Home page** (with hero section, overview of what BNT is, upcoming events), **Events page** (listing upcoming and past events, maybe integrated with Eventbrite or similar), **About/Team page**, **Partner/Sponsor page** (shoutouts to sponsors), and a **Contact/Join page**. They focused on making navigation intuitive – possibly a simple top menu with those core sections. - **Key Improvements:** - A cleaner **Home page** with clear calls to action (e.g., "Join the Community", "See Upcoming Events"). - Featuring recent event photos or videos to add visual interest. - Showcasing testimonials or logos of member startups to build credibility. - Making sure the site was fully responsive and looked great on mobile (since many might check events on their phones). - **Challenges:** They encountered content challenges like how to present the wealth of information BNT has (like event recaps or resources). They tackled this by perhaps creating a blog or resources section for those who want to dive deeper, but not crowding the main pages. - **Non-linear Process:** The team's process was iterative and "non-linear" as noted [105] – meaning they bounced between design, client feedback, and development. This is common in volunteer projects with part-time contributions.

- **Development with Framer:** Once designs were approved, Panth and the team built the site in **Framer Web**. Framer allowed them to translate the designs to actual web pages fairly directly. Panth, with his coding knowledge, helped ensure the site was not only visually accurate but also performant (optimizing images, etc.). They also did content writing – making sure the copy on each page was concise and on-brand (Panth contributed to content writing as noted [106], likely drafting text for the About page, etc.).

Outcome: The new BNT website was launched successfully. Key outcomes: - **Modern Web Presence:** The site now has a fresh look that reflects an innovative tech community, likely with engaging visuals and easy navigation. The stakeholders were very happy to have a site they could proudly point newcomers to. - **Improved UX:** Visitors can now easily find *upcoming events*, learn what BNT is about, and sign up or subscribe. The navigation was simplified – the team cut unnecessary pages and grouped content logically, making the site far more user-friendly. - **Responsive & Editable:** Because it's built in Framer, the site is fully responsive and the BNT organizers can edit content without coding, a big win for maintainability. - **Engagement:** While we don't have metrics here, anecdotally the site likely saw increased traffic duration as information was easier to find. Also, a new look can re-energize a community – BNT's social media could share the new site, attracting attention. - **Team Achievement:** For Panth, this was a fulfilling experience of leading and shipping a real product as a team. They literally *"designed, developed, and launched the Boston New Technology website"* as he notes [107]. It's a testament to his leadership and teamwork skills.

Lessons Learned: Panth gleaned many lessons: - **Team Collaboration:** Working with 4 other talented individuals taught him about dividing tasks, merging ideas, and conflict resolution. For instance, balancing

differing design opinions and reaching consensus on the logo or layout required communication and compromise. - **Agile & Flexible Workflow:** The non-linear process meant plans changed often – Panth learned to adapt quickly and keep the end-goal in sight. When something wasn't working, the team iterated rather than sticking rigidly to a plan. - **Design-Dev Handoff (or lack thereof):** Since they were the designers and developers at once (using Framer), Panth experienced a streamlined workflow where design instantly became live. He gained more hands-on web development experience, strengthening his ability to implement what he envisions (which also feeds back to making him design in a way that's feasible). - **Client Management:** As volunteers, they still had to manage stakeholder expectations and feedback cycles. Panth learned to ask the right questions in stakeholder interviews to pin down what the client really wanted (e.g., "What's the top action you want a visitor to do on the site?") and used those answers to guide design priorities. - **Rebranding:** Creating a brand identity from scratch (logo, style) within a short time taught him efficient branding practices and the importance of consistency (applying the new brand across all pages, social media, etc. for BNT). - **Pride in Community Impact:** Finally, Panth felt proud contributing to the local tech community. The website launch was even possibly announced at a BNT meetup, giving recognition to the team. This project reinforced his love for using design and tech skills for community building and not just commercial products.

Testimonials

Panth's work and attitude have earned him praise from mentors, managers, and colleagues. Here are a few testimonials that highlight his strengths and character:

- **Alseena Reem – UX Manager at Northeastern University:** *"Panth Shah has consistently shown exceptional talent, creativity, and dedication in enhancing the Student Hub platform at Northeastern. His strong analytical and creative skills, and ability to work independently and collaboratively, make him a valuable asset to any team."* 96
  (Context: Alseena supervised Panth's work on the Student Hub and appreciated his proactive and skilled contributions.)

- **Jae Yoon Choi – Product Designer at T-Mobile:** *"Panth's proficiency in Computer Science gives him a solid foundation, and his drive to integrate this knowledge with UX design exemplifies his unique approach to problem-solving. While still in the early stages of his design journey, Panth's passion and dedication to the craft are admirable."* 108
  (Context: Jae mentored Panth and notes how Panth's coding background enhances his design work. He highlights Panth's enthusiasm and growth potential.)

- **Sandesh Shinde – Design Lead at SAP:** *"Panth is a bright mind who is willing to learn and explore his career as a UX designer. He asked the right questions and was listening actively. He is open-minded and friendly. His curiosity about the field makes him an asset in any design team he goes to."* 6
  (Context: Sandesh likely observed Panth during a mentorship program or project collaboration, praising his eagerness to learn and team spirit.)

These testimonials underline Panth's **curiosity, technical strength, collaborative nature, and dedication**. They show that beyond delivering design work, he also brings great energy to a team and has a continuous learning mindset.

Personal Interests

Outside of his professional life, Panth is a well-rounded individual with a zest for life and various hobbies:

- **Music Lover:** Panth is passionate about music. He often plugs into an eclectic array of tunes while designing or unwinding. (In fact, on his site he shares what he's been listening to recently as a fun personal touch.) Whether it's exploring new genres or revisiting classic albums, music is a constant companion for him and fuels his creativity.

- **Pickleball Enthusiast:** When he's not at the desk, you might find Panth on the pickleball court. He enjoys playing pickleball, a fast-growing paddle sport, for both the competitive thrill and the social fun. It's a sport he picked up in recent years, and it has become a favorite pastime to stay active and meet new people [109] .

- **Cooking & Culinary Experiments:** Panth loves cooking and trying out new recipes. He finds the kitchen to be another creative space – experimenting with ingredients and flavors. Whether he's whipping up an Indian dish from home or testing a new international cuisine, cooking is a relaxing and rewarding hobby for him (and his friends appreciate the delicious results!) [109] .

- **Visual Storytelling:** An avid **photography and videography** hobbyist, Panth enjoys capturing moments around him. He often steps outside with his camera to photograph cityscapes, nature, or everyday student life. He also dabbles in video editing – documenting travels or making short clips – honing an eye for visuals beyond just UI design [109] .

- **Night Owl Productivity:** Panth humorously notes that many of his projects are "crafted with care and caffeine beyond 1 AM." [110] He's no stranger to late-night work sessions, finding that sometimes his best ideas come after midnight with a cup of coffee by his side. This reflects his strong work ethic and maybe a bit of the typical designer trait of getting in the zone at odd hours.

- **Community & Networking:** By involvement in groups like Boston New Technology, Panth shows that he enjoys community engagement. He likes attending hackathons, startup meets, and design meetups – both to learn and to network with like-minded folks.

In short, Panth is someone who brings the same enthusiasm to his personal interests as he does to his design work. Be it jamming to music, smashing a pickleball, cooking up a storm, or perfecting a design late at night, he lives life with passion and curiosity. These interests not only provide a healthy work-life balance but often inspire his creative thinking and human-centered approach in design. He believes that staying curious and well-rounded helps him empathize with users and see problems from different angles – whether it's the teamwork of sports, the creativity of cooking, or the rhythm of music, each aspect of his life informs and enriches his work as a designer.

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https://www.panthshah.work/about

3 4 5 6 12 13 14 110 Panth's Portfolio
https://www.panthshah.work/old-home

10 Panth Shah - Wall of Portfolios
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11 50 80 96 108 109 Design Portfolio
https://www.panthshah.work/

15 51 52 53 54 55 56 57 58 59 60 61 62 Design Portfolio
https://www.panthshah.work/design-system

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 Design Portfolio
https://www.panthshah.work/Foundermatch

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https://www.panthshah.work/page

63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 Design Portfolio
https://www.panthshah.work/accessiblity

81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 97 Design Portfolio
https://www.panthshah.work/northeastern

98 99 100 101 102 103 104 105 106 I'm Nike
https://itsmenike.com/rebrand-bnt

107 Design Portfolio
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