



“You can’t innovate on products without first innovating the way you build them”

- Alex Schaefer, Airbnb

Establishing Cross Functional Alignment in Startups Through Collaborative Kickoff Workshops

I695: THESIS/PROJ IN HCI II - Capstone Thesis

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Background

Preface

The development of this 10-month project has been quite an experience. Throughout, I found myself adjusting the project direction repeatedly as new data and feedback came to light. Broadly, the project unfolded in three main stages.

Stage 1, titled "**Early Discovery**," centered on examining how designers and developers collaborate within companies. This phase highlighted several key themes, prompting me to narrow my focus to startups and investigate how strategic tools like roadmaps could enhance alignment and collaboration.

By Stage 2, "**Collaborative Roadmapping**," I had developed a concept based on this idea. However, during the final presentations, the feedback I received made it clear that my design didn't fully address some critical questions. This realization led me to reconsider my approach as I moved into the next semester.

Ultimately, this reflection sparked the final pivot of my project, leading to Stage 3: "**Collaborative Kickoff Workshop**." This stage represents my final design proposal, shaped significantly by the insights gained from earlier phases.

A Story of Miscommunication and Frustration

During my undergraduate studies, I had the opportunity to intern at a small 3D printing startup. The atmosphere was dynamic, and my role was to contribute as a developer to their Business-to-Consumer (B2C) 3D printing platform.

Throughout my internship, I worked closely with the team's sole designer. Our collaboration mainly involved them sharing designs via Zeplin, which I then implemented in code. Initially, I faced challenges in aligning with the designer's workflow, partly due to remote working arrangements and a lack of thorough onboarding. This disconnect led to misunderstandings and misaligned expectations. For example, there were times when the designer assumed I was aware of essential documentation despite my recent arrival at the company, while at other times, I neglected to use the latest components in our design system. These oversights resulted in a project delay of approximately two weeks—a significant setback in the fast-moving startup environment.

This issue caught our founder's attention, prompting a team meeting to address and resolve our communication barriers. Post-discussion, our collaboration improved significantly, paving the way for smoother project progress.

This experience was a pivotal moment for me, especially when selecting topics for my capstone project. It reinforced the critical importance of clear communication between designers and engineers in software development, particularly in the competitive landscape of startups. This realization is the driving force behind my proposed intervention.

Executive Summary

Effective collaboration and shared objectives between teams are crucial for a company's success. This is particularly vital in startups, where the challenges of gaining users, securing investments, or achieving product-market fit may sometimes overshadow the importance of teamwork across different functions.

This project aims to foster mutual alignment between two critical teams in the product development lifecycle—designers and engineers—in startups with 50 or fewer employees, starting from the foundational project kickoff stage. This is accomplished through a detailed and collaborative kickoff workshop template, led by product managers, team leads, or startup executives - with team members taking part in the workshop. By recognizing the unique strengths and working preferences of each team member, setting clear, achievable goals and expectations for the project, and proactively addressing potential obstacles at the kickoff, we aim to enhance team cohesion. Ultimately, this approach is designed to improve cross-functional relationships, reduce conflicts, and navigate challenges more effectively in the high-stakes startup ecosystem.

Project Outcomes

Enhance Cross-Functional Team Dynamics and Morale: Cultivate stronger working and personal relationships between designers and developers by encouraging mutual respect and understanding. This outcome aims to build a team characterized by seamless collaboration and empathy.

Define Objectives Clearly: Articulate the project's vision, goals, and expectations succinctly. This involves clearly communicating the project's purpose and desired outcomes to ensure all team members share a unified direction.

Engage Team Members in Planning: Involve team members actively in the planning process to harness diverse perspectives and enhance commitment. This seeks to leverage the collective expertise of the team for comprehensive project planning.

Encourage Individual Expression: Create opportunities for team members to openly share their concerns and suggestions regarding the project. This effort is focused on fostering an environment where feedback is valued and used to drive project improvements.

Design Process

The journey of developing this project has been incredibly agile, weaving through iterative changes and pivots guided by insights from research data, feedback, and constant evaluation. I embraced the 'Design Squiggle' philosophy (*Newman, n.d*), allowing myself to dive deep into each aspect of the problem. This exploration was pivotal in deciding whether to push an idea forward or let it go in favor of a fresh direction. This approach champions the idea of being flexible and fluid, stepping away from the confines of strictly defined phases, and instead, building upon the knowledge gathered along the way. This process has been truly liberating, allowing me to discover new points of interest and paths for exploration in a more natural way.

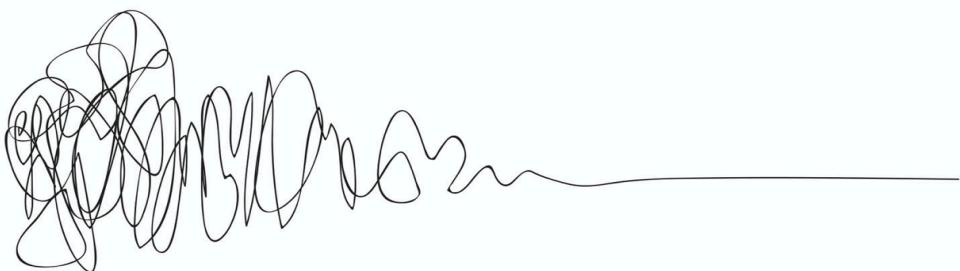


Figure 1: The Design Squiggle (Daniel Newman)

Stage 1 - Early Discovery

After choosing to enhance collaboration between designers and engineers in tech companies, the initial phase of my project was dedicated to understanding the nuances of communication and collaboration within these organizations. At this stage, I wasn't focused on the specifics. Instead, I hoped to identify broad trends and patterns that could inform and drive my subsequent research and design work.

Research Goals

In this stage, I mainly sought to:

- *Document* how designers and developers describe their collaboration experiences with each other.
- *Identify* the primary collaboration challenges reported between UX designers and developers, including key causes.
- *Explore* strategies designers and developers currently use to address collaboration difficulties
- *Pinpoint* the touchpoints with the most conflicts between designers and developers

These goals were realized through a mix of research methods, including extensive secondary research, user interviews, diary studies, and digital ethnography.

Methods

Secondary Research - Understanding Organizational Collaboration

I looked at literature, books, articles and videos to uncover insights to the research goals posed above. Secondary research not only helped in gaining a deeper understanding on the topic, but also helped in formulating questions and materials for my primary research. The key works from this activity included:

- Feng, K. K., Li, T. W., & Zhang, A. X. (2023) in their CHI '23 paper, delve into collaborative practices and tools used by UX practitioners in software organizations. They highlight the rapid growth and increasing importance of UX, along with the evolution of UX tools prioritizing collaboration. However, they note that despite

these advancements, challenges persist, particularly in the handoff from UX practitioners to software engineers. Issues include knowledge gaps, overcommunication of irrelevant details, procedural breakdowns, and a lack of co-creation. The paper suggests that while enhanced communication is crucial, it's not sufficient for smooth transitions. It recommends better linkage between design components and code, and organizational changes to foster closer integration between UX practitioners and engineers.

- Merrill, N. (2020) discusses the role of speculative design in computer security, illustrating how design research methods can aid interdisciplinary collaboration in technical fields. The paper introduces Security Fictions, a speculative role-playing game that helps software developers identify security threats. In the context of my problem space, this paper highlights how similar role-playing methods could be beneficial in addressing friction in design-development teamwork.
- Huang, Y. H. (2018) focuses on the collaboration difficulties between UX designers and developers in Agile environments. The dissertation compares the distinct mindsets of these groups, with designers emphasizing user experience and developers focusing on technical feasibility and feature delivery. It advocates for more cross-disciplinary collaboration experience in education and suggests strategies like collocation, learning complementary skills, and using collaborative tools to bridge mindset gaps. The paper points out that while Agile processes are popular, they often overlook UX concerns, leading to issues in aligning UX and development goals.

Digital Ethnography - Connecting with Professionals

Online communities provide opportunities for designers and engineers to connect with peers, discuss career matters, provide feedback, network, and express workplace frustrations. To gain insider perspectives from these practitioners in an informal, low-pressure setting, I immersed myself in their digital spaces through digital ethnography.

Discord: I observed discussions and interviewed designers and engineers on the Discord server Design Buddies across channels like #uiux-design, #ask-professionals, #venting and #career-questions. This provided an authentic window into candid conversations between Practitioners.

Reddit: I posed questions to designers and engineers on subreddits like r/userexperience, r/frontend, and r/webdev to understand collaboration experiences.

LinkedIn: On LinkedIn, I leveraged my network and groups to connect with relevant professionals. I posted questions in communities like UX Designers Club, posted articles to spark discussion, and directly reached out to connections.

These online platforms provided an invaluable source of qualitative data collection through observation of, and participation in, practitioner conversations. They also serve as a reliable way to recruit participants for further studies. The digital ethnography uncovered real perspectives on collaboration frictions and potential areas for design interventions.

User Interviews - Empathizing with Professionals

The primary goal of these interviews was to obtain crucial qualitative insights directly from professionals who navigate designer-developer dynamics daily. Interviewing both engineering and design practitioners enabled me to figure out key disconnects between their worldviews, shaping a holistic understanding. Organizational factors impacting collaboration like processes, team structures, and incentives were also explored in a nuanced way.

In this initial discovery phase, interviews were conducted with designers and engineers across industries and company sizes to gather perspectives on how organizational processes and values may influence cross-disciplinary collaboration. This provided a wide range of experiences to inform the evolving problem space. The goal was to transition from broader exploratory conversations to more specific, focused dialogues with highly relevant users.

S.No	Role	Industry	Company Size	Experience
P1	Product Designer	Finance	Startup (<500 employees)	2 yrs
P2	Senior Full-Stack Developer	Insurance	Large (5000+ employees)	~5 yrs
P3	Lead Product Designer	Finance	Large (5000+ employees)	7yrs
P4	Senior Product Designer	Cloud Computing	Medium (~1000 employees)	~6yrs
P5	Staff Software Engineer	E-commerce	Multinational Conglomerate (1.6M)	~12 yrs

			employees)	
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Table 1: User Interview Participant Details (Stage 1)

Research Analysis - Synthesizing Initial Themes

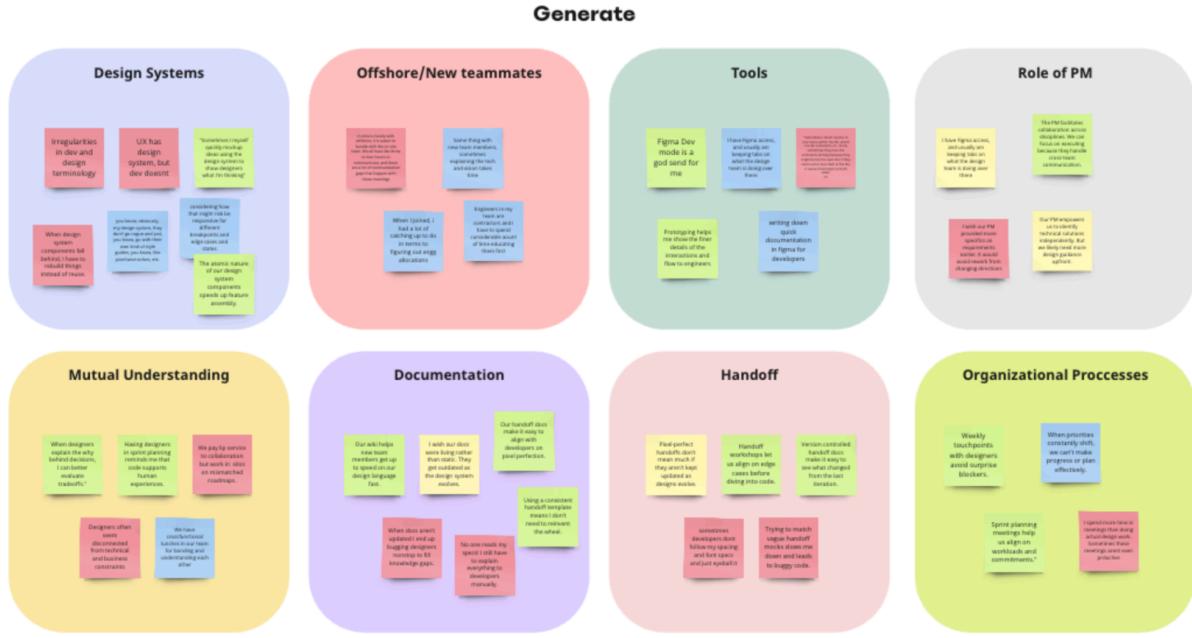


Figure 2: Affinity Mapping themes and patterns

Initial data gathered through secondary research, digital ethnography, and user interviews was compiled and reviewed using Miro. Relevant quotes, experiences, feedback and pain points were documented on digital sticky notes and rapidly clustered and organized to come up with themes and commonalities across the data. This preliminary synthesis aimed to extract meaningful findings from the qualitative data collected so far across multiple methods. This data-driven approach provided an initial set of data-backed insights to build upon using further participatory activities with designers and developers.

Initial Research Findings

Based on the analysis of research, some key initial findings emerged:

1. Communication Gaps and Early Integration:

- Offshore developers often lack full context on the product's direction, leading to misalignment unless regularly updated. "It occurs mostly with

offshore...there are a lot of communication gaps that happen with those meetings" (P1).

- Involving developers early in the design process, such as during ideation and requirements gathering, helps pinpoint technical constraints and feasible design ideas early on.

2. Challenges with Immature Design Systems:

- Lack of a robust component library forces developers to frequently rebuild patterns, slowing down implementation. Collaboration on creating reusable components is essential.
- "Our legacy system is like five years old... It is hard for the developers to just switch from one design system to another so quickly" (P4).

3. Creating a Shared Language:

- Misalignment in terminology between designers and developers can lead to confusion during handoffs. Establishing a common glossary and aligning coding conventions with design tools is crucial.
- "I was working on implementing a search component... She had no idea what I was talking about until I realized she was calling it an 'input field'" (P2).

4. Building Mutual Understanding and Documentation:

- A collaborative mindset and mutual understanding between designers and developers enhance product quality. Documentation plays a key role in bridging gaps, especially for new team members, but should remain agile.
- "Design specs and handoff documentation reduces assumptions and knowledge gaps...Too much rigid documentation can reduce agility."

5. Importance of Tools and PM Involvement:

- Tools like Figma facilitate better collaboration through features like developer handoff and component libraries, though variations between Figma libraries and actual code can create issues.
- The alignment of designers and developers is often contingent on the clarity and priorities set by project managers (PMs). Misalignments can originate from unclear resourcing and priorities by PMs.

Design - Early Exploration

Initial Ideation

I conducted several rounds of brainstorming and sketching for concepts and prototypes. For such an organizational and strategic focused project, sketching had to be supplemented with adequate notes, highlighting key touchpoints, stages and stakeholders.

Interactive Project Onboarding

While many organizations utilize online courses to familiarize new employees with company culture, products, and procedures, I sketched a similar approach for startups during project onboarding. Envision an interactive onboarding experience, gamified to guide employees through a roadmap encompassing project vision, collaboration rituals, knowledge banks, and tools. As they journey through each segment, they're introduced to various facets of the product development lifecycle, highlighting the operational habits of the team and emphasizing the critical role interdisciplinary collaboration plays in ensuring success.

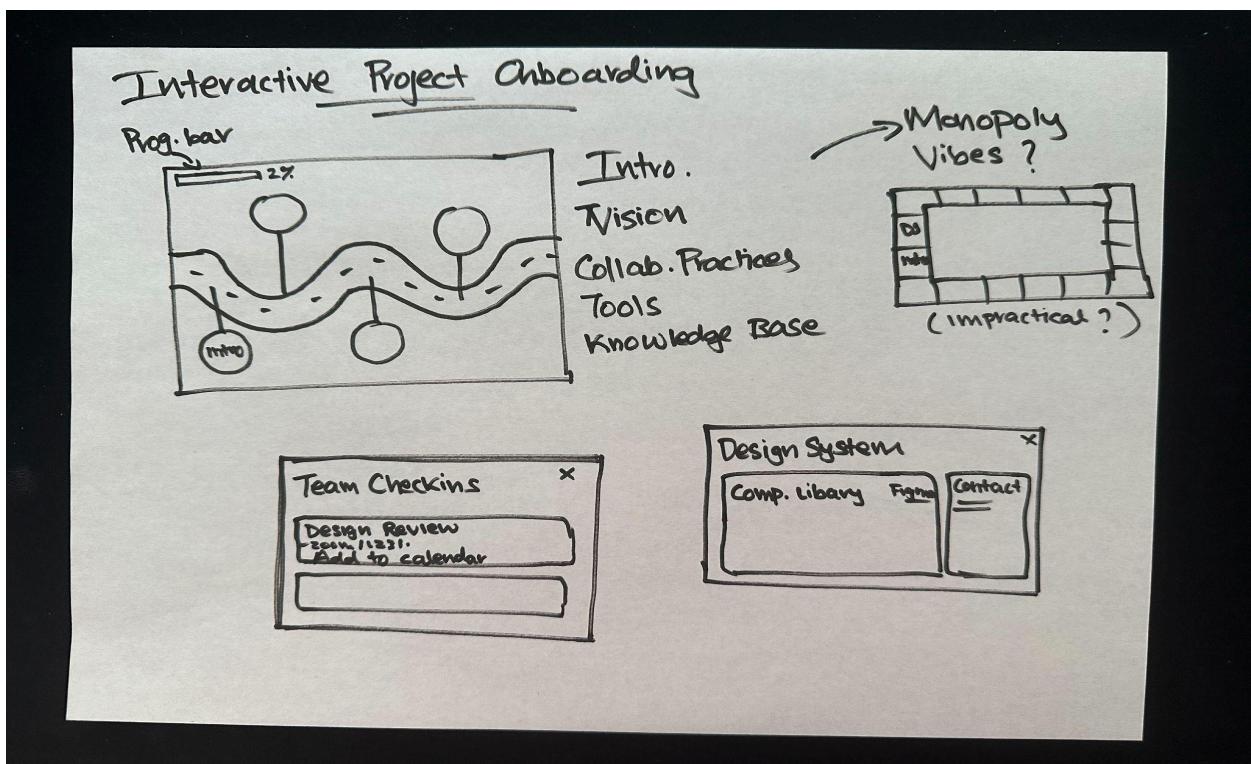


Figure 3: Interactive Project Onboarding Sketches

Design Handoff Workshops

Since several interview participants reported that the design handoff stage presented significant challenges in terms of collaboration, I revisited my initial idea of workshops between designers and engineers. Some activities I considered for this workshop included:

Role Reversal Activity: Allow designers and developers to swap roles temporarily. Designers could be tasked with understanding and critiquing a piece of code while developers could evaluate a design mockup. This promotes empathy and understanding of each other's roles.

Shared Lexicon Creation: Spend time creating a shared vocabulary that both designers and developers can use through flash cards. This prevents miscommunication and ensures that everyone is on the same page.

Collaborative Sketching Sessions: Involve developers actively in the ideation process for challenges the team is addressing. Feedback from developers I've spoken with suggests that designers occasionally focus solely on the 'happy path'. These sessions can help spotlight potential navigational challenges and bugs.

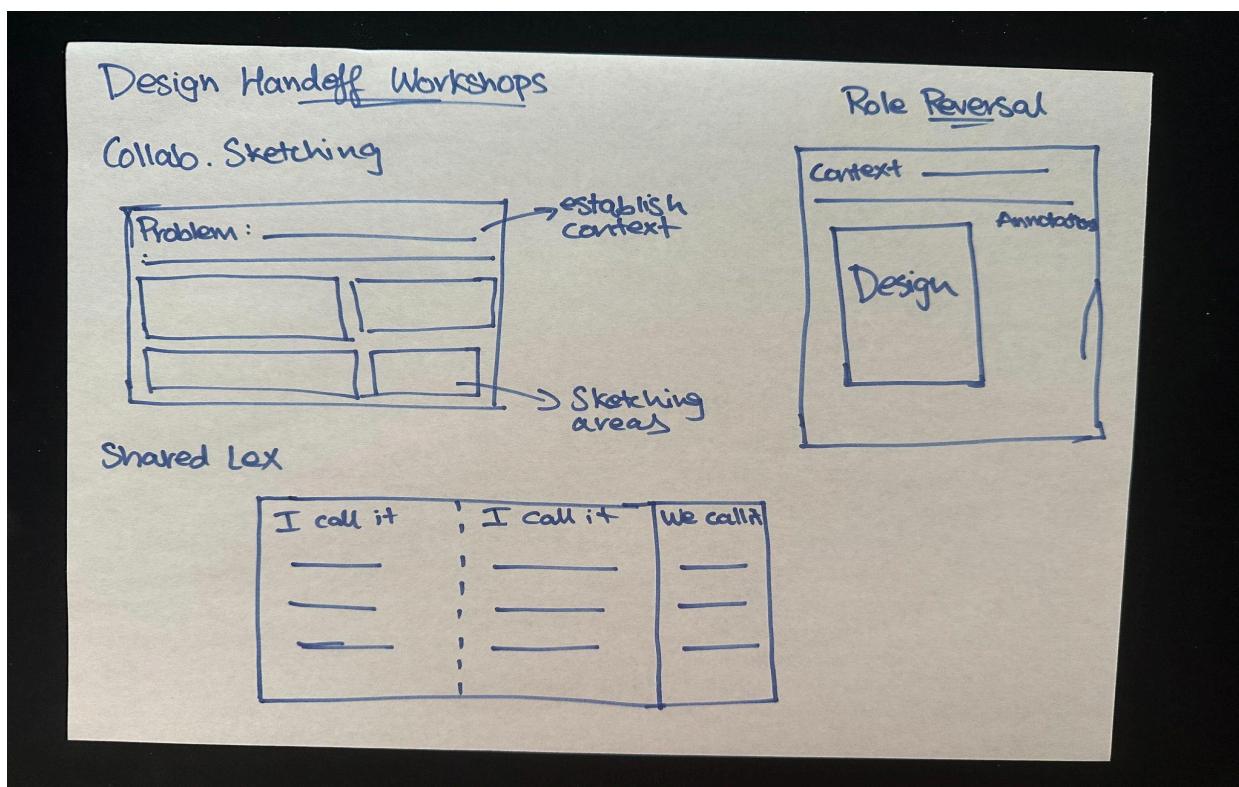


Figure 4: Design Handoff Workshop Activities sketches

Drawbacks and Limitations

While the above ideas are interesting, upon reflection, I realized they address only parts of the problem. Disruptions in communication stem from more than just a lack of understanding of team operations. Often, confusion during handoffs originates from initial misalignment. Addressing the root cultural issues demands proactive leadership, ensuring team members align with guiding principles and a shared vision from a project's inception. I combined the strengths of both concepts to propose my first proper design intervention: Collaborative Roadmapping.

Collaborative Roadmapping

During my midterm presentation, I introduced a visual strategy roadmap centered on collaboration. Feedback suggested that a one-size-fits-all static tool might not effectively address the varied challenges across different companies. Strategy is so reliant on specific business goals and an org's culture, that having a context-agnostic solution made no sense. Recognizing this, I've evolved the concept into a flexible, collaborative roadmapping template, designed for use during project kickoffs. This dynamic tool, crafted as a FigJam template in Figma, facilitates real-time cross-functional collaboration. Guided by supplementary resources, team leads would spearhead discussions, inviting all team members to shape procedures together for the project's entirety.

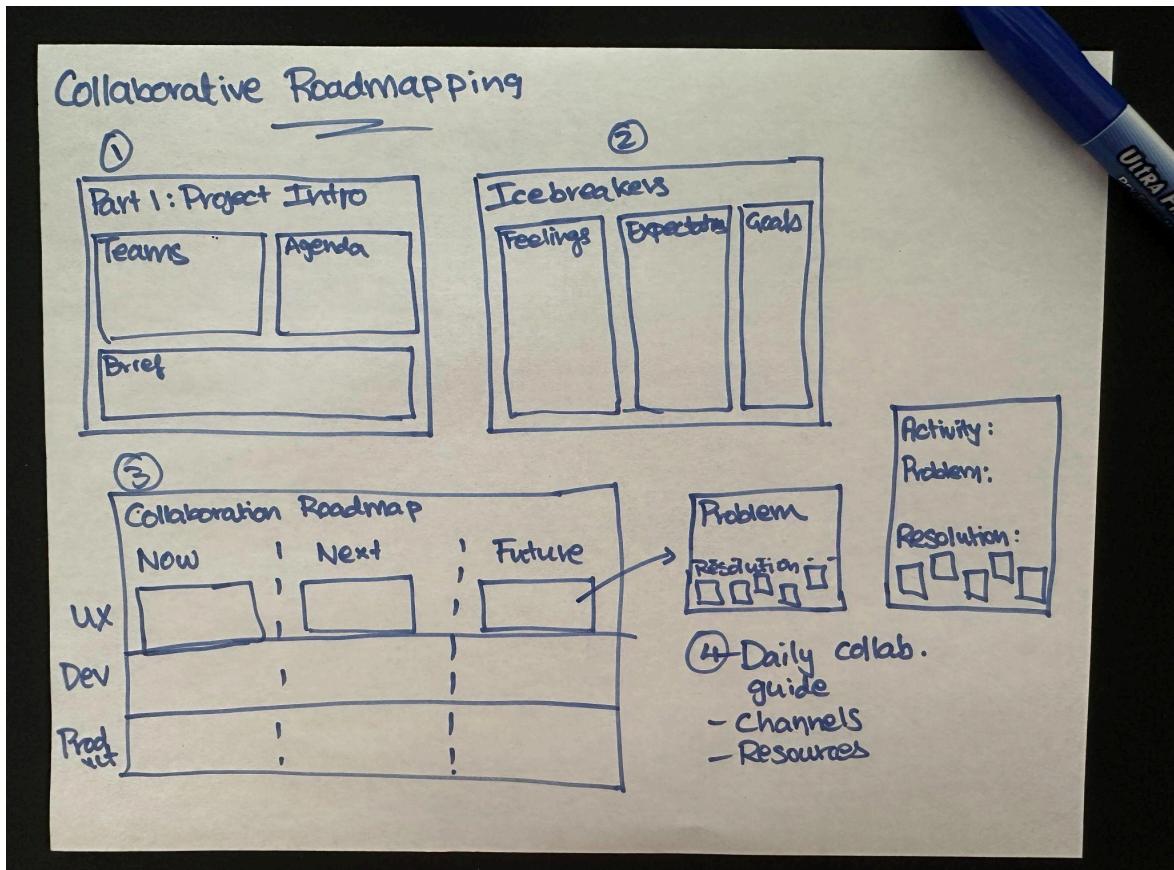


Figure 5: Collaborative Roadmap Template Sketches

Insights from Feedback

Presenting my initial research insights and ideas at the midway critique was particularly enlightening. The feedback I received was insightful; most attendees felt that encouraging team members to collaborate on planning and roadmapping could be highly beneficial. Typically, this process is handled in isolation by management. Other aspects like onboarding and handoff, though important, are smaller elements of the product development lifecycle and may not effectively tackle the core issue. Additionally, I learned that collaboration practices vary significantly by company size. Larger organizations often have well-established processes, whereas startups, grappling with more immediate challenges, tend to deprioritize collaboration. Motivated by this feedback, I decided to focus on developing the Collaborative Roadmapping approach specifically for early-stage startups.

Stage 2 - Collaborative Roadmapping

Having done the wider research and received feedback on the initial framing, this stage was focused on studying the collaboration challenges between cross functional teams in startups. I recruited more startup employees, and engaged more actively in startup communities to come up with the Collaborative Roadmapping Workshop design.

Research Goals

Subsequently, my goals in this stage were narrowed down and aimed to:

- *Assess the specific practices, tools, and communication patterns utilized in cross-functional collaboration within early stage startups.*
- *Evaluate the concrete strategies and actions taken by team leads and product managers to foster and sustain collaborative efforts among their teams.*
- *Identify and categorize specific issues that early-stage startups encounter when attempting to foster cross-functional collaboration, emphasizing their unique operational environment.*

Framing the problem

Narrowing down from larger issues of collaboration, my problem was now scoped down to collaborative project planning and roadmapping in startups. The problem statement thus became:

How can we facilitate better alignment in cross-functional startup teams by enhancing collaboration in project planning and roadmapping processes?

Methods

Secondary Research - Understanding Project Strategy

"Early Product Design in Startups" by Hokkanen et al. (2016) highlights the crucial nature of collaboration between developers and designers in startups, especially under conditions of limited resources and the need for rapid iteration. It identifies specific challenges like disparate languages and terminologies used by different teams, and differing priorities. The

study also points out key factors that enable collaboration, such as the early involvement of designers and adherence to iterative processes. A significant focus is on the role of prototypes in bridging the gap between design and development. The paper advocates for a shared language, consistent communication, and an iterative methodology as essential for effective collaboration and the achievement of successful product outcomes in startups. It emphasizes the importance of a company culture that supports cross-functional communication and feedback to achieve Minimum Viable User Experience (MVUX). The research also acknowledges the diversity in operational conditions across different companies, suggesting that context-specific solutions might be more effective than universal frameworks.

User Interviews - Speaking to Startup Leaders

For this phase of the research, I focused exclusively on startups. I engaged with startup employees, especially managers, to gain a deeper understanding of the dynamics at early-stage companies. My goal was to uncover the practices they employ, the challenges they encounter, and any notable successes in collaboration. I recruited participants through communities on Reddit's r/startups and various Discord channels.

S.no	Role	Industry	Company Size	Experience
P6	UX Lead	Fintech	Startup (<100 employees)	6 years
P7	Software Engineer	De-Fi	Startup (<50 employees)	1 year
P8	Product Owner	B2B Supply Chain	Startup (<300 employees)	~15 years
P9	Product Manager	Fintech	Startup (<300 employees)	8 years
P10	CTO	Fintech	Startup (<100 employees)	4-5 years

Table 2: User Interview Participant Details (Stage 2)

Overall Themes - STEP

Based on all existing research data from stage 1 and 2, four key actionable themes emerged. These served as the pillars for all ideation going forward. These four insights are Strategy, Tools, Early Alignment, and Processes (STEP).

Strategy

Within the bustling and ever-evolving ecosystem of startups, a well-articulated strategy is the backbone of successful collaboration. By championing shared outcomes, teams are anchored with a unified vision. Open communication channels ensure there's no room for ambiguity, and regular meetings serve as touchpoints to recalibrate and ensure both designers and developers are on the same page.

"Our weekly alignment meetings aren't just routine; they're so important for the product. It's where we clear doubts, share updates, and make sure everyone is headed in the same direction."

-P7

"In my previous company, our lead was always stressing on sharing documentation. He called it The Playbook."

- P2

Tools

The fast-paced world of startups necessitates tools that enhance collaboration in real-time. Platforms like Jira, Figma, and spreadsheets offer a collaborative space where tasks, designs, code, bugs, feedback and documentation can be tracked, creating a transparent ecosystem where everyone remains informed and involved.

"I started in a time when tools weren't this collaborative - you guys are so lucky. Using Figma changed how we operate. Real-time design feedback means we're iterating faster than ever before."

- P6

"It's amazing how a simple spreadsheet can keep the entire team aligned. It's old school but it works for us - and my team uses it all the time to refer to open tasks and track things"

- P9

Early Alignment

Engaging developers early in the design process not only helps identify potential hurdles but also paves the way for a design that's both innovative and feasible. Similarly, involving designers during the onset of development ensures that the product's visual integrity is maintained.

"I will say that the first second and third most annoying things are overuse of happy path content. Usually with menus, titles and tabs where 1 or 2 small words are easy to accommodate within a design then the designer provides no indication of how wrapping and stacking should behave once the "real" content is put in. Or omg if its a card situation with equal heights in row the content creators are always wanting to cram 30 lines of text next to a card that has 3 lines of text and then bitching it doesn't look balanced."

- /u/Salamok on Reddit

"I'm so glad the engineer participated in our ideation workshop. As we were sketching out user flows, I described a path where the user would access a settings page from the main menu. The engineer asked - what if the user makes a change to the settings but then doesn't want to save it? How do they get back to the main flow? I realized I had designed a dead end where the user couldn't proceed. The engineer wasn't dismissive, he was just trying to avoid us creating future navigation issues."

-P3

Processes

The Agile methodology, with its focus on rapid cycles of design and development, is tailor-made for the dynamic startup environment. By prioritizing swift iterations, teams can adapt to feedback, market changes, or new insights, ensuring that the end product is finely tuned to user needs and market demands.

"Incorporating design feedback from Tuesday's review and seeing it in Friday's sprint demo-That's the power of Agile in our company."

- P6

"Agile is crucial for us. If a feature isn't resonating, we iterate or pivot by the next sprint, ensuring we're always aligned with our market fit."

- P10

In my initial findings from stage 1, I touched upon preliminary insights such as 'Immature Design Systems', 'Offshore Developers', and 'Creating Shared Language'. However, these broader themes enabled me to understand that startup leadership perceives these challenges from a strategic and 'big picture' perspective. To illustrate, while immature design systems can create bottlenecks, the core issue in one instance was a lack of awareness among developers about the design team's decision to introduce a new component rather than utilizing an existing one, highlighting the importance of 'Early Alignment'.

Workshop Design

Expanding on the initial roadmapping concept, which is structured around the STEP framework, I developed a Collaborative Workshop template using Figjam. This choice was motivated by the frequent use of Figma in facilitating cross-functional communication.

Introduction

The Collaborative Roadmapping workshop is designed to be initiated by key figures such as Founders, Product Managers, Team Leads, or other leadership roles at the outset of a project. This workshop encourages leaders to work closely with their entire team to collaboratively establish plans covering goals, expectations, deliverables, and other critical details for the duration of the project. It is an interactive session where team members are actively involved and expected to identify and discuss any discrepancies they notice in the planning phase. This proactive approach allows the team to address potential issues immediately, creating solutions collaboratively to prevent these challenges from impeding the product development process. Taking cues from the research that employees already work on established collaborative tools, this workshop takes place on a Figjam board.

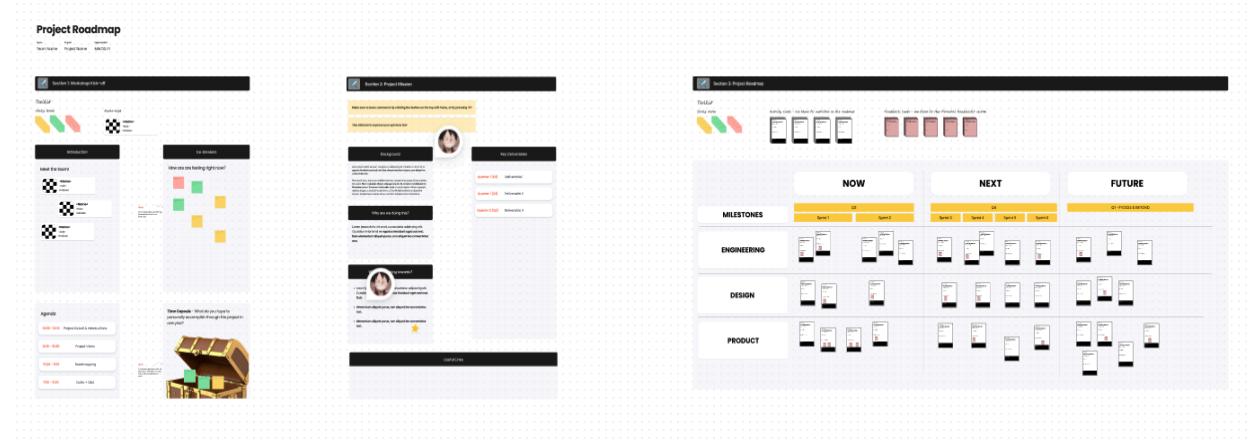


Figure 6: Collaborative Roadmap FigJam Template

Section 1: Workshop Kick-off

The initial phase of the Collaborative Roadmapping workshop is designed as an ice-breaker, aimed at helping team members become acquainted with each other while setting the tone for what they aspire to achieve through the project.

1. **Meet the Team:** This segment involves the distribution of virtual badges to each team member, displaying their name, role, and hobbies. This simple yet effective tool

fosters a sense of identity and connection among team members, highlighting both professional and personal aspects.

2. Ice-breaker 1 - "How are you feeling right now?": This initial ice-breaker question is directed to the team to understand their current sentiments about the team and the project. Responses to this question provide valuable insights for leadership, enabling them to tailor their management approach to better align with the team's mood and expectations.
3. Ice-breaker 2 - "Time Capsule": In this exercise, employees are encouraged to write down their individual goals and aspirations related to the project. These entries are meant to be revisited in a year, allowing both the employees and management to reflect on the progress and growth achieved over the project's lifecycle. This activity not only sets a benchmark for personal and professional development but also creates a sense of accountability and motivation among team members.

Section 2: Project Mission

Feedback received on the initial roadmap idea suggested that building a common shared vision for all team members to strive for might be very impactful for startup employees, and this is done in stage 2. This stage is primarily led by the workshop facilitator, but active participation from team members is encouraged to ensure a collaborative atmosphere.

1. Background: This segment involves presenting comprehensive background information about the product. It covers past work, requirements, and other pertinent details that provide context and a foundation for the team's efforts. This step is crucial for aligning everyone's understanding and setting the stage for the tasks ahead.
2. "Why are we doing this?": This part of the workshop aims to articulate the reasons behind forming the team or initiating the project. It's about understanding the motivations and driving forces that led to the project's inception, thereby ensuring that every team member connects with the underlying purpose of their work.
3. "What are we working towards?": Here, the collective vision and overarching goals of the project are highlighted. This step is essential for aligning the team's efforts towards common objectives that contribute to the growth of the startup. It helps in creating a sense of shared responsibility and direction.
4. Key Deliverables: This section outlines the expected deliverables and features that the team is responsible for during the project. Discussing key deliverables ensures that everyone is aware of their roles and the specific outcomes they need to achieve, providing clear guidelines and targets for the project.

Throughout this stage, team members are encouraged to leave comments and use stickers as a means of expressing their thoughts and feelings. This interactive element not only fosters engagement but also allows for a diverse range of inputs, enriching the roadmap with varied perspectives.

Section 3: Project Roadmap

The main Collaboration Roadmap includes three sections - Now (relating to work in progress, Next (relating to work coming up soon), and Future (relating to work that will take place in the coming months). Participants are asked to write down tasks on 'Activity' cards, and place them on the timeline. The Activity cards contain the name of a task, the designated point-of-contact, description, links and a roadblocks section. The roadblock section can contain 'Roadblock Cards', which employees can use to anticipate challenges to this problem and work together right then and there to resolve them as needed.

Post-session, the roadmap is available for all to revisit, refine and extend. It acts as a living document, evolving as the project progresses and new challenges or insights arise. This not only makes sure that everyone's voice is heard, but also provides a dynamic, transparent, and accountable way to create early alignment towards a common mental model on how the team should operate.

Section 4: Project Resources

This section of the workshop serves as a repository of valuable information and resources. It's essentially a streamlined, accessible alternative to more elaborate knowledge repository systems like SharePoint. The focus here is on providing a "knowledge dump" – a centralized collection of useful links, documents, and information that can be crucial to the success of a project. This approach is based on the insight from research indicating that early-stage startups are looking for efficient, cost-effective ways to manage and share knowledge without the burden of complex software.

Section 5: Outro

This final section is designed to reflect on the impact of the workshop on the team. It begins by asking employees to share their feelings about the project after participating in the workshop. This feedback is vital for assessing the workshop's effectiveness in enhancing team morale and understanding. By comparing the responses from the initial ice-breaker session to the concluding remarks, facilitators and leaders can gauge shifts in team sentiment and gain insights into the workshop's impact on team dynamics and project outlook.

Following this reflective exercise, the session transitions into a Q&A segment. This portion allows team members to raise any questions or clarifications they might have regarding the project, the workshop, or any related topics. It's an opportunity for open dialogue, ensuring that all team members leave the workshop with a clear understanding of the project's goals, their roles, and the collaborative roadmap laid out for the project's lifecycle.

Project Roadmap

Team Name	Project Name	Department
		M.M.D.D.YY

🔗 Section 1: Workshop Kick-off

Toolkit

Sticky Notes



Name-tags



Introduction

Meet the team!



<Name>
<Role>
Hobbies:



<Name>
<Role>
Hobbies:



<Name>
<Role>
Hobbies:

Ice-breakers

How are you feeling right now?

Note
Use these sticky notes to describe how you're feeling. Then have the others stick them to you.

Agenda

10:00 ~ 10:15	Project Kickoff & introductions
10:15 ~ 10:30	Project Vision
10:30 ~ 11:15	Roadmapping
11:15 ~ 11:30	Outro + Q&A

Time Capsule - What do you hope to personally accomplish through this project in one year?



Note
Let's store our aspirations within this time capsule. We'll break it a year from now to see if you accomplished your goals!

Figure 7: Workshop Kick-off Section



Section 2: Project Mission

Make sure to leave comments by clicking the button on the top-left menu, or by pressing 'C'

Use stickers to express your opinions too!

Background



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Why are we doing this?

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What are working towards?



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Key Deliverables

Quarter 1 (Q1) Deliverable 1

Quarter 1 (Q1) Deliverable 2

Quarter 2 (Q2) Deliverable 3

Useful Links

Figure 8: Project Mission Section

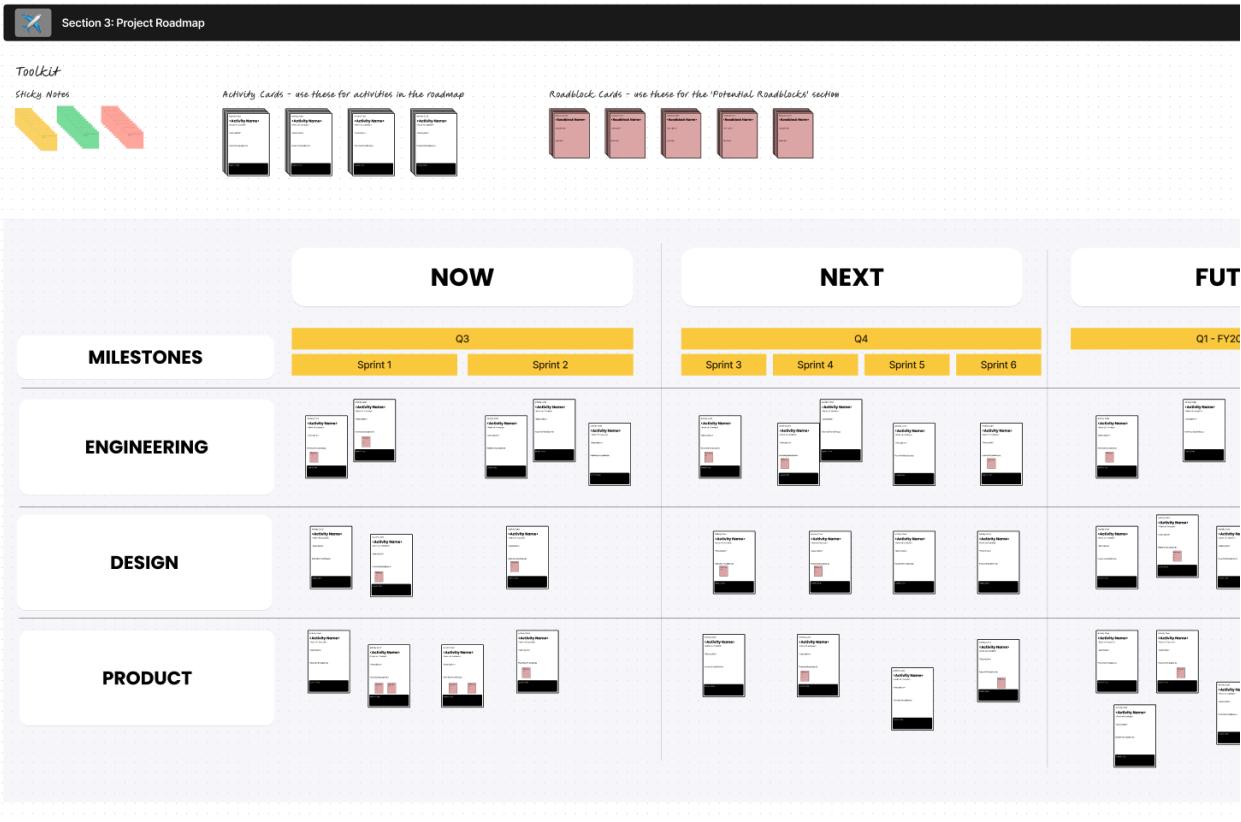


Figure 9: Collaborative Roadmap Section

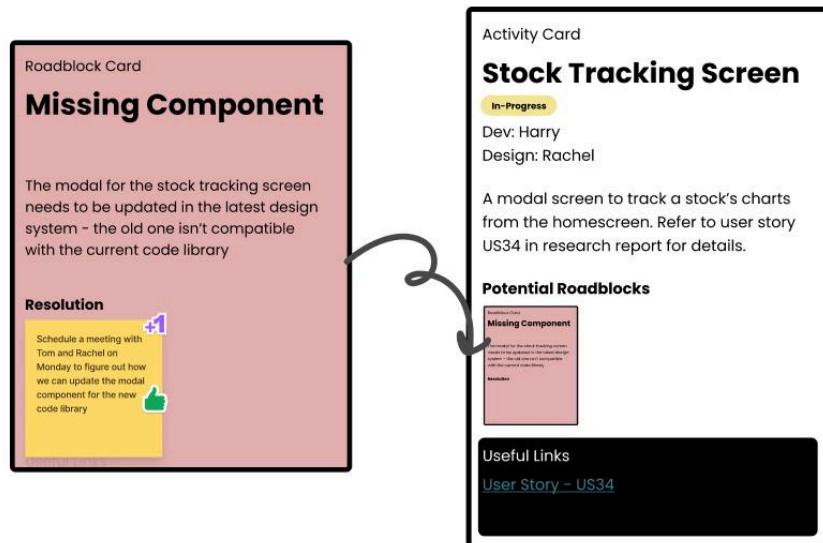


Figure 10: Roadblock and Activity Cards

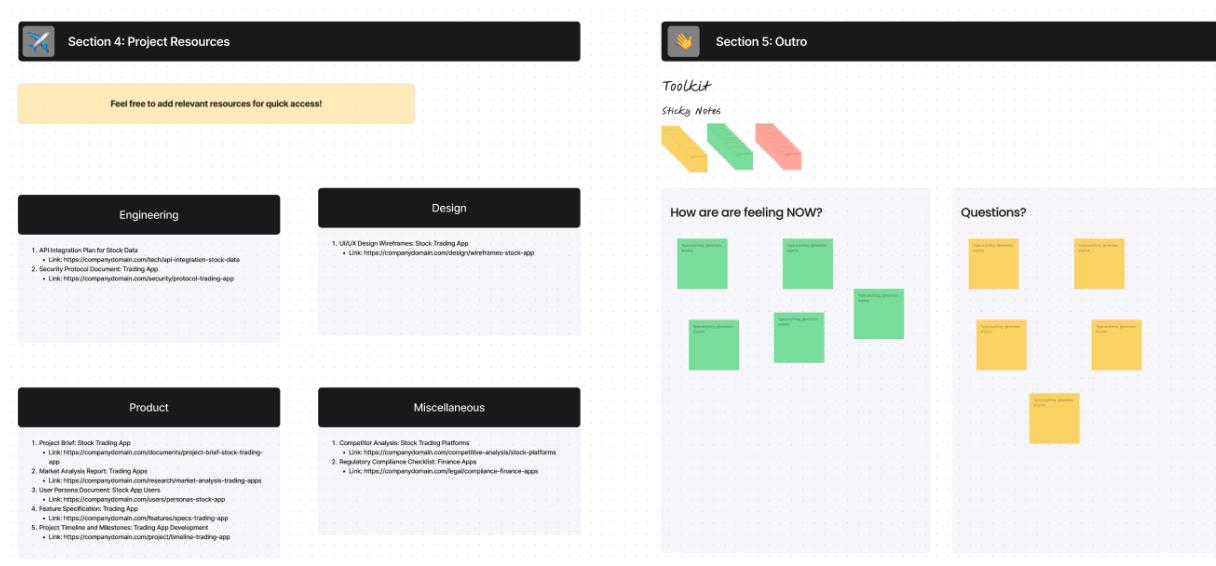


Figure 11: Resources and Outro

How does Roadmapping facilitate collaboration?

- Collaborative problem-solving: Roadmapping serves as a preemptive strategy where team members collectively anticipate potential challenges and develop solutions in advance. This foresight allows for a proactive approach to project management, creating a culture of shared responsibility. The roadmap's adaptable and flexible timeline accommodates the often unpredictable nature of projects, ensuring that when unforeseen issues do arise, the team can pivot and realign their strategies without derailing the project.
- Unified Vision: The process of roadmapping aligns all participants around a shared set of objectives, establishing a clear consensus on the project's intended outcomes and key deliverables. This alignment is critical as it ensures that every team member understands what success looks like for the project and their role in achieving it. A unified vision also minimizes the risk of miscommunication and misaligned efforts, streamlining the project's progression towards its goals.
- Hub for teamwork: A roadmap is more than just a schedule; it's a living document that centralizes communication and resources, acting as a focal point for the team's collaborative efforts. This centralization is crucial in maintaining a cohesive team dynamic, as it provides a common ground where all team members can access, update, and refer to the project's key information. Continuous access to the

roadmap and its related artifacts ensures that collaboration is not a one-time event but an ongoing, integral part of the project's lifecycle.

Insights from Feedback

When I presented this idea at the final critique in the first semester, I received plenty of constructive feedback regarding the framework and design concept.

Relevance Over Time: Questions were raised about whether the roadmap could stay relevant throughout a project's lifecycle, given that project requirements, stakeholder demands, and team compositions often evolve. At the time, I didn't have a convincing answer, highlighting a need for further refinement and iteration of the concept.

Retaining Startup Context: A critical observation was made that the roadmapping workshop template was losing its specific relevance to startups. It seemed applicable to any type of company, which meant I needed to better integrate startup-specific challenges into the solution.

Broad Scope: Despite efforts to focus on a narrower topic, many peers felt that the scope of the problem was still too broad, preventing the solution from addressing any specific issue effectively. Moving forward, I planned to refine and narrow the focus even further in the subsequent semester.

Stage 3 - Collaborative Kickoff Workshop

In the second semester, equipped with valuable feedback from instructors and peers, my primary goal was to convincingly address the questions raised during the final critique of the first semester. These questions focused particularly on maintaining the roadmap's relevance over time and tackling specific challenges encountered by startups. To achieve this, I embarked on another round of research and ideation, ending up with my final design proposal: a collaborative kickoff workshop.

Research Goals

In this second leg of my research, I hope to find answers in three key areas:

- *Examine the typical structure of kickoff meetings in early-stage startups, gaining insight into their organization and execution.*
- *Identify the challenges and concerns that designers and developers face at the outset of a project, pinpointing specific pain points in their collaborative efforts.*
- *Discover informal strategies and techniques employed by startup team members to overcome obstacles to collaboration, highlighting creative and effective approaches to problem-solving.*

Methods

Secondary Research - Understanding Team-Building in Startups

To achieve the research objectives and desired outcomes, a further review of literature was undertaken, focusing specifically on the dynamics of kickoff meetings in agile environments, team building within startups, and the challenges encountered by startup employees around initial project work. I looked at three papers in particular - “*Building an effective startup team*” (Thirasak, 2019), “*What We Know and What We Do Not Know about Trust in Work Teams: A Systematic Literature Review*” (Dumitru & Mittelstädt, 2020), and “*Agile Practices in Product Development: Investigation of how agile practices may be applied in a product development context*” (Anderzon & Davidsson, 2021).

The three papers examined various aspects of startup team dynamics, emphasizing the importance of trust, agile practices, and effective team composition for fostering collaboration. The first paper delved into the trust dynamics within teams, illustrating how

trust plays a foundational role in enhancing team performance and facilitating the swift trust model in temporary teams. The second study explored the application of agile practices in the context of production development, highlighting the benefits of flexibility, adaptability, and enhanced communication and collaboration among team members. The third paper focused on the structure of startup teams, identifying the essential roles, knowledge, skills, and abilities needed for a startup's survival, along with the significance of team-related competencies in the early stages of a startup.

From these papers, five key themes emerged relevant to enhancing collaboration in startups:

The Importance of Trust: Establishing trust early on, especially in newly formed or temporary teams, sets a foundation for effective collaboration and team performance.

Agility and Adaptability: Adopting agile practices encourages flexibility and adaptability, crucial for startups navigating the fast-paced and often unpredictable market environment.

Clear Role Definition: Understanding and defining clear roles within the team, while maintaining flexibility, supports better coordination and collaboration between different functions. This theme in particular caught my attention, since it came up in interviews and feedback sessions as well.

Balanced Skill Sets: Focusing on a balance between technical expertise and soft skills such as communication, problem-solving, and resilience is key to fostering a collaborative team environment.

Team-related Competencies: Developing competencies like collaborative problem-solving, conflict resolution, and effective communication is essential for enhancing teamwork and ensuring the startup's success.

It was clear that from a strategic standpoint - roadmapping and kickoffs are two separate events. Instead of trying to merge them, I tried to focus on kickoff meetings that build better working relationships, highlight skillsets, and align team members on the vision. By doing this, the effects can be felt for a longer period of time, thus helping answer the questions I was grappling with for so long.

Digital Ethnography - Continuing the conversation

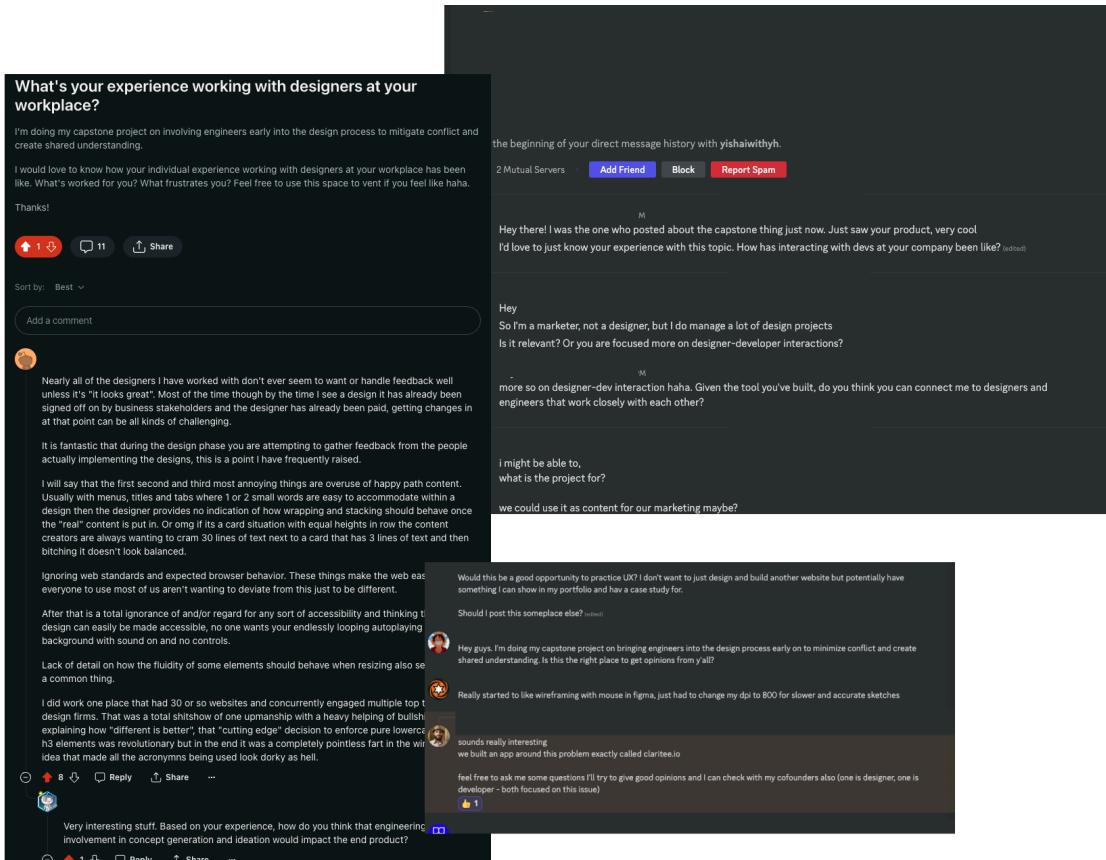


Figure 12 - Engaging with the Community

Building on the networks and platforms I connected with last semester, I've been tapping into the casual setting of these online communities to both observe and join in on the conversations. These spaces offer a relaxed environment where designers and developers can talk about their careers, network, share feedback, and express workplace frustrations without much pressure. I've also been actively using these forums to pose questions and recruit interviewees for my research.

On Discord, specifically within the Design Buddies server, I've been tuning into discussions and conducting interviews through channels like #uiux-design, #ask-professionals, #venting, and #career-questions. It's been a great way to get a real feel for the raw, unfiltered exchanges between professionals in the field.

On Reddit, I've thrown my questions into the mix on subreddits such as r/userexperience, r/frontend, r/webdev, and r/startups to gauge different perspectives on collaboration.

And on LinkedIn, I've been leveraging my existing network and various groups to touch base with relevant professionals. I've sparked discussions by posting questions in communities like 'Agile UX', 'Frontend Developers', and 'Real Startup Group', shared articles to ignite conversation, and reached out directly to connections for deeper insights.

User Interviews - Speaking to USERS

The main aim of conducting these interviews was to gather insights into the challenges, goals, and expectations that startup employees face regarding collaboration, particularly at the outset of a project, and during kickoff meetings. Additionally, I focused on engaging with startup leaders to understand the hurdles they encounter in nurturing effective cross-functional teamwork, along with identifying the roadblocks that arise when collaboration isn't executed smoothly.

Most of my participants were employees (of varying levels of experience) of small startups with 100 employees or less.

S.No	Role	Industry	Company Size
P11	Designer	Finance	<50 employees
P12	Lead Developer	Healthcare	<100 employees
P13	Full-Stack Developer	Cryptocurrency	<10 employees
P14	Founder	Cryptocurrency	<10 employees

Table 3: Interview Participants (Stage 3)

Ideation and Brainstorming

The initial phase of ideation and brainstorming took place with classmates, where we adapted the Crazy 8s brainstorming method to a more time-efficient Crazy 4s variant. This process began with setting the stage for our project, followed by roughly 10 minutes dedicated to sketching out concepts, which then led to a presentation and discussion of these ideas.

This brainstorming session was incredibly beneficial and highlighted several key themes. These insights will guide the development of my proposed workshop design, aiming to address these identified themes effectively.

Identifying Skillsets: The discussion began with a reference to the TV show "Silicon Valley" and led to recognizing the importance of understanding each team member's strengths. This could help in knowing whom to approach for specific issues. Ideas like creating superhero personas for team members to highlight their skills, skill compatibility matching, and tech stack profiles were suggested to make this process effective.

Setting Realistic Expectations: It became clear that setting clear, achievable expectations regarding project deliverables, timelines, and potential obstacles is crucial. My initial project roadmap focused more on planning and less on managing expectations. To improve this, we thought about using "I can," "I can't," "I want to" cards for better communication of abilities and planning for edge cases with "if __ then __" scenarios to prepare for various outcomes.

Creating Informal and Fun Relationships: The discussion also covered the importance of building a friendly and supportive team atmosphere to improve communication. Introducing icebreakers and activities to help team members understand each other better was suggested.

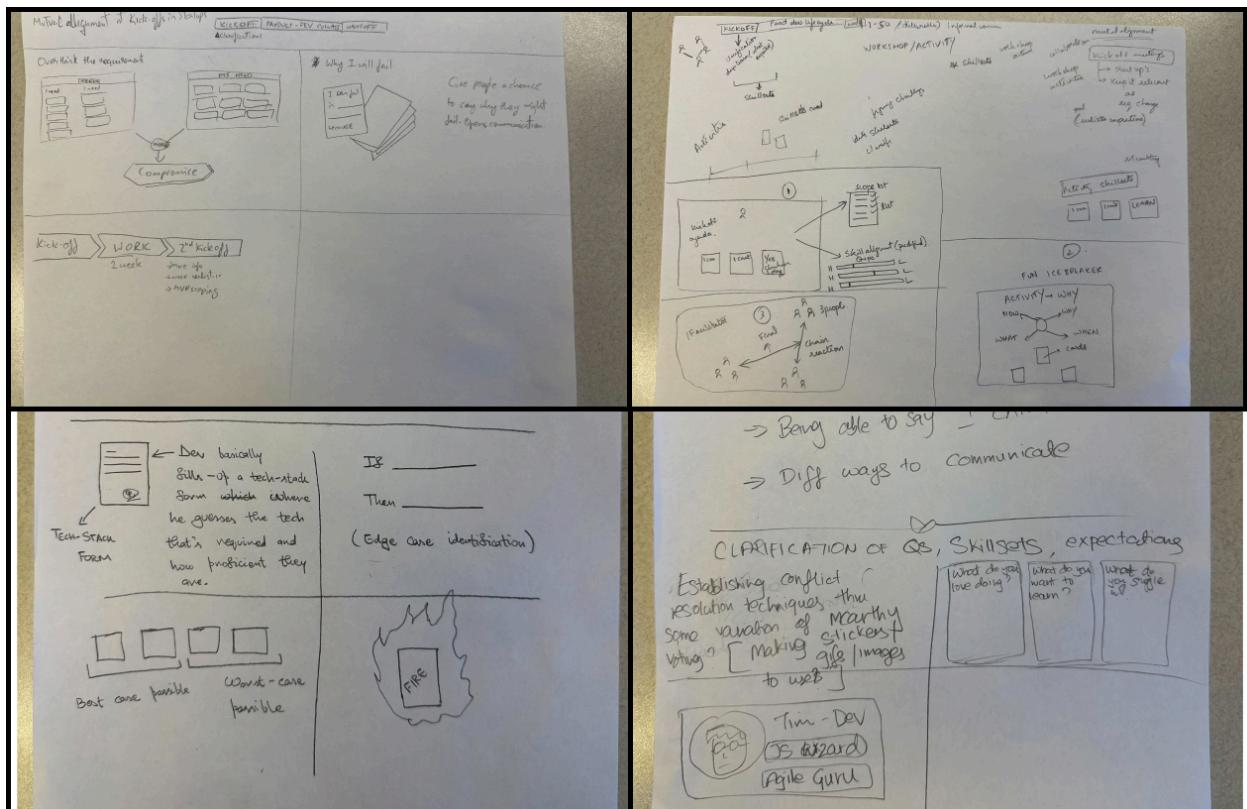


Figure 13: Crazy 4s Ideation Concepts

Insights

From the secondary & primary research (digital ethnography and interviews); along with the ideation exercise, 4 key actionable themes emerged that form the basis of all further design exploration.

Structured Kickoff Meetings as a Foundation for Collaboration

Clearly structured kickoff meetings, where roles, responsibilities, and project goals are defined and communicated, are crucial for setting the tone for successful collaboration between designers and developers.

Opportunity: Startups should institutionalize the practice of holding structured kickoff meetings for every project. These meetings should include clear agendas, defined objectives, and explicit role assignments. Employing visual tools and collaborative platforms can aid in ensuring that all team members have a shared understanding of the project's goals and their individual contributions.

Bridging Communication Gaps Early On

Early identification and mitigation of potential communication barriers between designers and developers can prevent misunderstandings and project delays.

Opportunity: Implement regular, informal check-ins alongside formal meetings to encourage open dialogue between designers and developers. Startups might also benefit from workshops or training sessions aimed at improving cross-disciplinary communication skills, ensuring team members are equipped to articulate their ideas and concerns effectively across different domains.

Involving Developers Early in the Design Process

A significant portion of front-end developers advocated for early involvement in the design process, seeing it as beneficial for both the project's outcome and the team's workflow. However, obstacles such as organizational structures, tight timelines, and the scalability of this practice in larger teams create resistance to such integration, impacting the quality control and overall effectiveness of collaboration.

Opportunity: Organizations could strive to create more flexible and inclusive workflows that allow developers to participate in the design phase from the outset. This could involve adjusting project timelines, reevaluating team structures, and implementing collaborative tools and practices that facilitate easier communication and exchange of ideas between designers and developers.

Leveraging Informal Strategies for Problem-solving

Informal strategies and techniques, such as spontaneous brainstorming sessions, pair programming, or design sprints, can effectively overcome obstacles to collaboration by fostering a culture of creativity and mutual respect.

Opportunity: Create opportunities for designers and developers to engage in creative problem-solving outside of the structured project workflow. This could involve dedicated time for innovation sprints, where team members work together on challenges, or social events focused on team building. Encouraging cross-functional pairs to share skills and knowledge can also help in building empathy and understanding between different roles.

Final Design Framing

After a comprehensive round of research, I narrowed down my scope from the entire product development lifecycle to focus solely on kickoff as a touchpoint for creating mutual alignment between designers and developers. The design frame was finalized:

In small startup teams, early-stage interpersonal and technical challenges can significantly impact project outcomes. The kickoff workshop plays a crucial role in aligning team members by setting clear goals, expectations, and understanding of each other's skills and potential roadblocks. How can this initial workshop be optimized to effectively communicate these critical elements, reducing miscommunication and ensuring smoother project execution down the line?

My HMW thus became:

"How might we establish working relationships and initial alignment among startup teams during project kickoff?"

Design

Workshop Design

To tackle the communication hurdles that often crop up in small startups between designers and engineers, I've rethought the approach to the traditional kickoff workshop. This isn't just another presentation filled with slides. Instead, the proposed workshop makes it a hands-on, collaborative session where everyone on the project team plays an active role. Founders, product managers, and team leads will facilitate these workshops on

Figjam, ensuring full team participation. This approach aims to foster a more cohesive team, that is aligned on goals, expectations, workflows and skill sets.

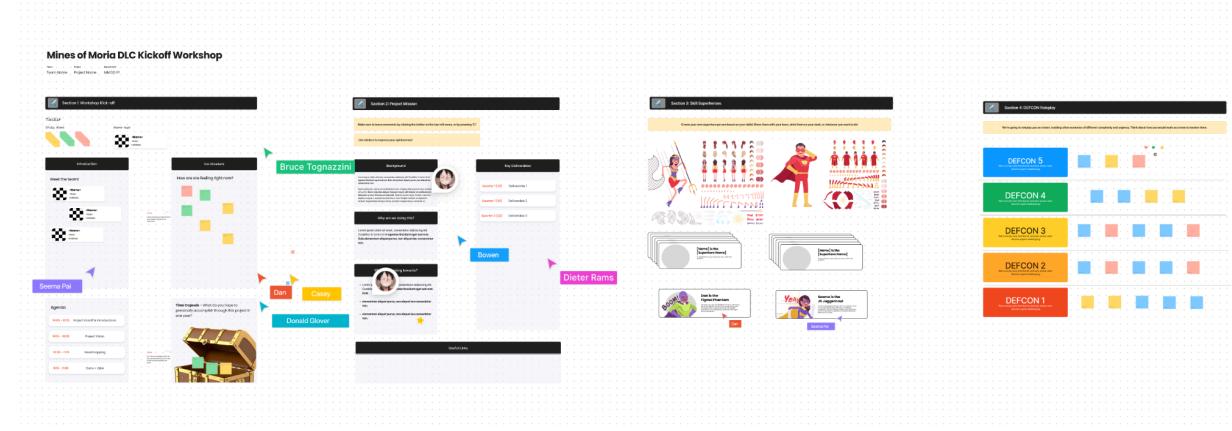


Figure 14: Collaborative Kickoff Workshop Template

Stage 1: Workshop Kick-off (10mins)

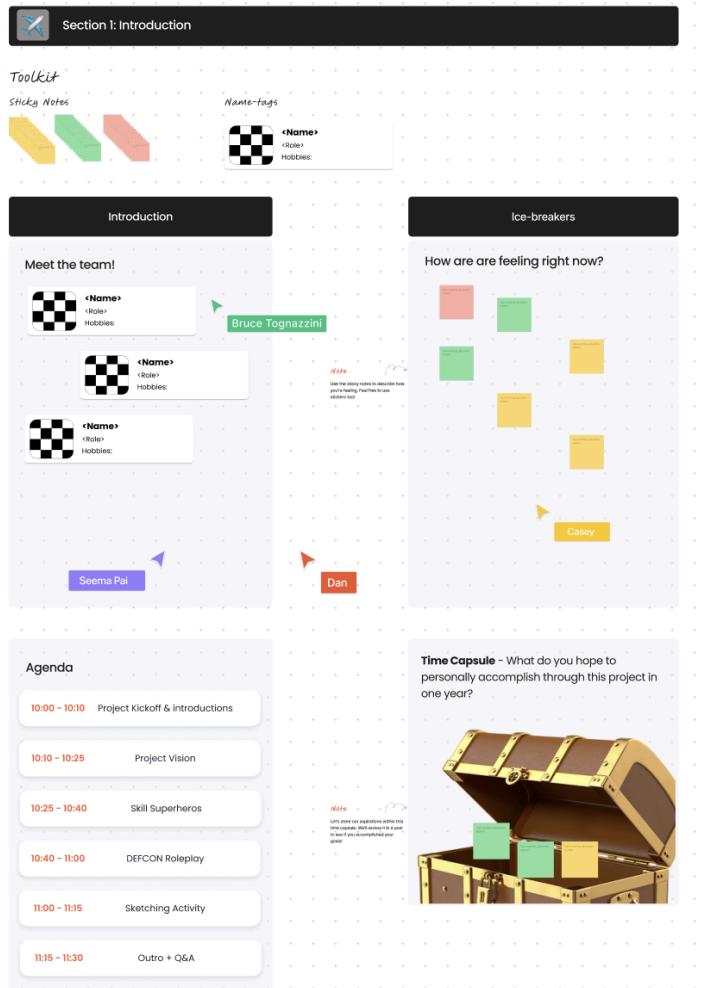


Figure 15: Introduction Section

The initial phase of the Collaborative Kickoff Workshop is designed as an ice-breaker, aimed at helping team members become acquainted with each other while setting the tone for what they aspire to achieve through the project.

1. **Meet the Team:** This segment involves the distribution of virtual badges to each team member, displaying their name, role, and hobbies.
2. **Ice-breaker 1 - "How are you feeling right now?"**: This initial ice-breaker question is directed to the team to understand their current sentiments about the team and the project. Responses to this question provide valuable insights for leadership, enabling them to tailor their management approach to better align with the team's mood and expectations.
3. **Ice-breaker 2 - "Time Capsule"**: In this exercise, employees are encouraged to write down their individual goals and aspirations related to the project. These entries are

meant to be revisited in a year, allowing both the employees and management to reflect on the progress and growth achieved over the project's lifecycle. This activity not only sets a benchmark for personal and professional development but also creates a sense of accountability and motivation among team members.

Stage 2: Project Mission (15mins)

The screenshot shows a digital whiteboard interface with a dark theme. At the top, there is a header bar with a small icon and the text "Section 2: Project Mission". Below the header, there are two yellow callout boxes: one on the left saying "Make sure to leave comments by clicking the button on the top-left menu, or by pressing 'C1'" and another below it saying "Use stickers to express your opinions too!".

The main area is divided into several sections:

- Background:** A text box containing placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur in tortor id mi egestas tincidunt eget sed erat. Duis elementum aliquet purus, non aliquet leo consectetur non. Nunc justo justo, varius ac condimentum nec, congue vitae ipsum. Fusce sodales elit auctor libero vulputate aliquet. Aliquam mauris elit, tempor et vestibulum et, bibendum a arcu. Vivamus ut ante odio. Nulla at scelus neque. Nullam vulputate dapibus magna, a suscipit est pharetra a. Cras fringilla molestie ex dignissim semper. Suspendisse tempus nisi ex, porttitor vulputate lectus commodo. . .".
- Key Deliverables:** A section with three items:
 - Quarter 1 (Q1)**: Deliverable 1
 - Quarter 1 (Q1)**: Deliverable 2
 - Quarter 2 (Q2)**: Deliverable 3
- Why are we doing this?**: A text box containing placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur in tortor id mi egestas tincidunt eget sed erat. Duis elementum aliquet purus, non aliquet leo consectetur non. . .".
- What are working towards?**: A section with a list of bullet points:
 - Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur in tortor id mi egestas tincidunt eget sed erat. Duis elementum aliquet purus, non aliquet leo consectetur non.
 - elementum aliquet purus, non aliquet leo consectetur non.
 - elementum aliquet purus, non aliquet leo consectetur non.
 There is also a yellow star sticker in this section.
- Useful Links:** A section with a large, empty rectangular area for linking resources.

Figure 16: Project Mission Section

Feedback received on the initial roadmap idea suggested that building a common shared vision for all team members to strive for might be very impactful for startup employees, and this is done in stage 2. This stage is primarily led by the workshop facilitator, but active participation from team members is encouraged to ensure a collaborative atmosphere.

1. Background: This segment involves presenting comprehensive background information about the product. It covers past work, requirements, and other pertinent details that provide context and a foundation for the team's efforts. This step is crucial for aligning everyone's understanding and setting the stage for the tasks ahead.
2. "Why are we doing this?": This part of the workshop aims to articulate the reasons behind forming the team or initiating the project. It's about understanding the motivations and driving forces that led to the project's inception, thereby ensuring that every team member connects with the underlying purpose of their work.
3. "What are we working towards?": Here, the collective vision and overarching goals of the project are highlighted. This step is essential for aligning the team's efforts towards common objectives that contribute to the growth of the startup. It helps in creating a sense of shared responsibility and direction.
4. Key Deliverables: This section outlines the expected deliverables and features that the team is responsible for during the project. Discussing key deliverables ensures that everyone is aware of their roles and the specific outcomes they need to achieve, providing clear guidelines and targets for the project.

Throughout this stage, team members are encouraged to leave comments and use stickers as a means of expressing their thoughts and feelings.

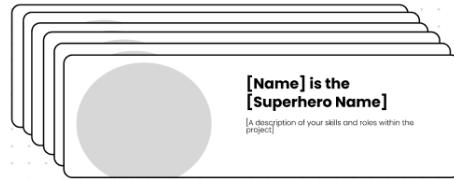
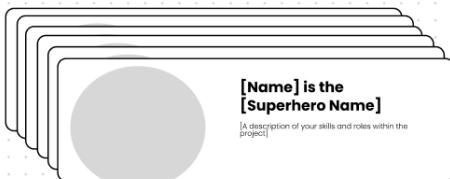
Stage 3: Skill Superhero (15mins)

Expanding on a key theme that emerged from research, this activity helps team members create their own superhero persona using a variety of assets. These personas are shaped by the specific skills—be it technical or soft skills—that are essential to their project. This method not only aids in deepening the understanding of each team member's strengths and expertise but also clearly highlights who to approach with specific questions. Plus, it doubles as a fun activity, allowing employees to bring a personal touch to their workspace by printing out these personas and displaying them at their desks.



Section 3: Skill Superheroes

Create your own superhero person based on your skills! Share them with your team, stick them on your desk, or whatever you want to do!



Dan is the Figma Phantom

I'm Dan, your go-to designer when it comes to all things Figma. I'll also be coordinating with the devs and making sure that all design handoff occurs smoothly, and with the right documentation!

Dan

Seema is the JS Juggernaut

I have a background as a dev in startups, and I'll be working closely with you amazing designers on the design system. Any time you want to publish or update a component, you know who to call!

Seema Pai

Figure 17: Skill Superhero Section

Stage 4: DEFCON Roleplay (20mins)

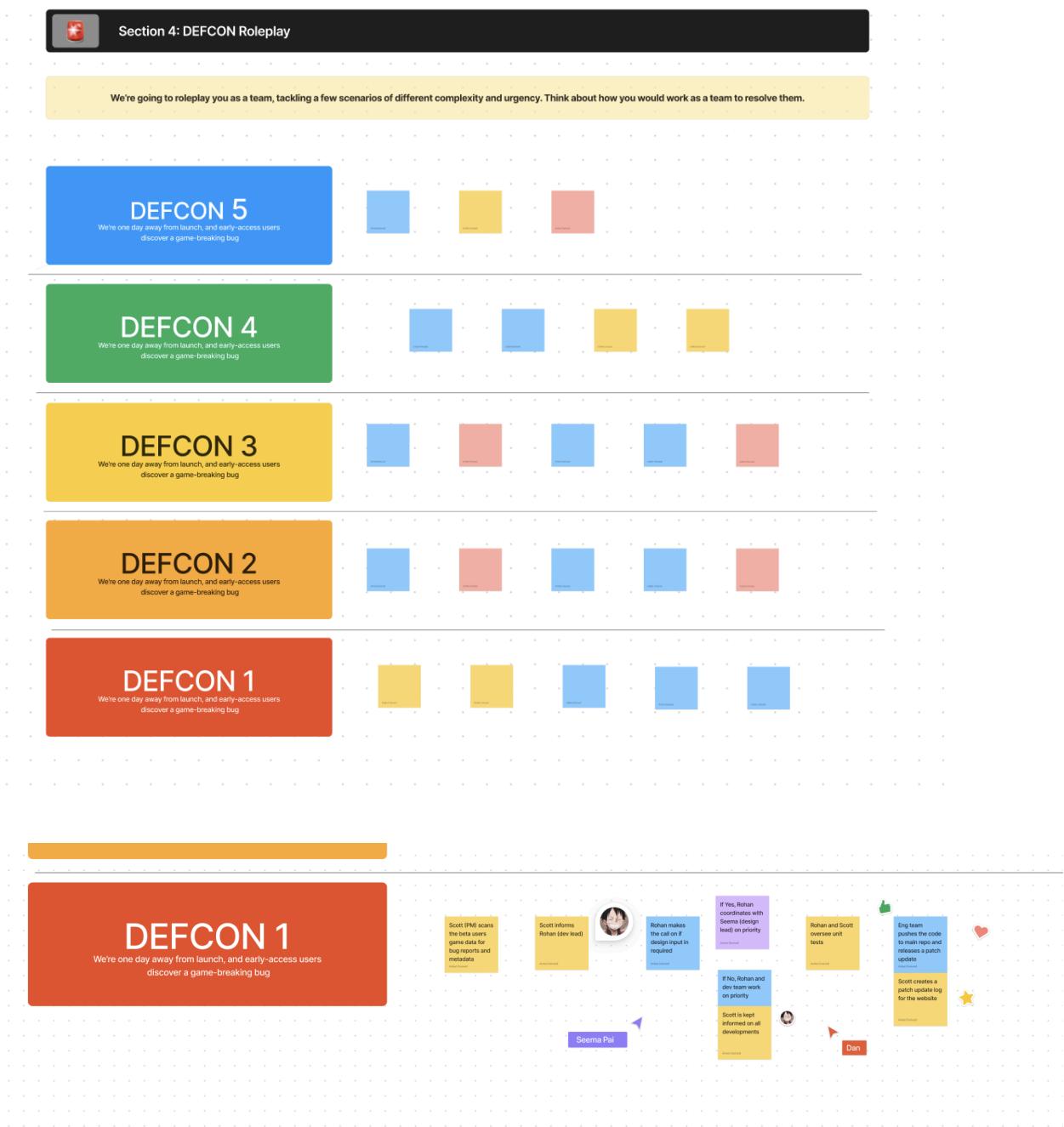


Figure 18: DEFCON Roleplay Section

Drawing inspiration from the DEFCON alert system, the team faces hypothetical roadblocks of different severities that might arise during project development. Through role-playing exercises, they immerse themselves in these scenarios by planning out their responses. This might include deciding whom to contact first, determining the best way to communicate the issue, and strategizing solutions to overcome the challenge. This activity

is designed to foster mutual agreement on the procedures to tackle potential obstacles, ensuring a unified approach to problem-solving across the team.

Stage 5: Sketching Activity (15mins)

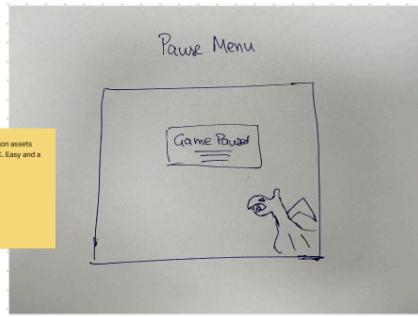
 Section 5: Early Design Ideation

Design Team! What are some topics you'll be ideating on soon? Let the rest of the team know.

Everyone. Sketch for 10 minutes! Post your sketches here.

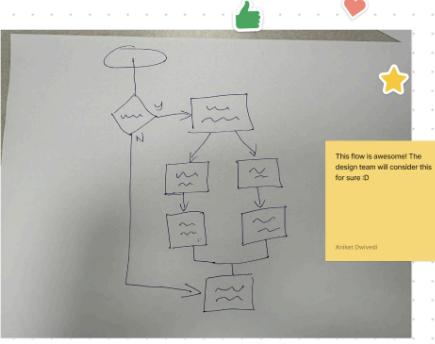
How do we update the UI for the DLC Lore?

Ankit Divedi



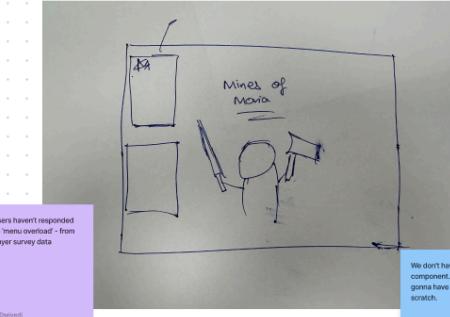
The flow is awesome! The design team will consider this for sure ☺

Ankit Divedi



Reusing the dragon assets from the last DLC. Easy and a great addition.

Ankit Divedi



We don't have a container component. If we do this we're gonna have to make them from scratch.

Ankit Divedi

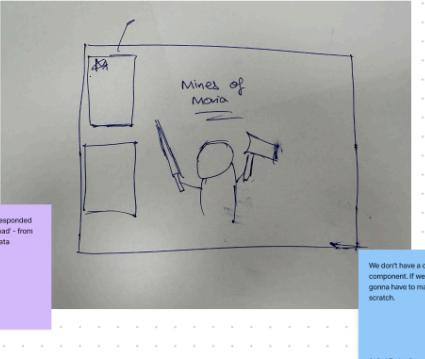


Figure 19: Sketching Section

The design team reaches an agreement on a problem they're initially brainstorming about. This issue is then presented to the entire group, inviting every participant, including the facilitator, to sketch out ideas that could offer valuable insights for the design team. This

process enables designers to grasp feasibility issues highlighted by developers, as well as broader business-related concerns raised by team leaders.

Stage 6: Outro and Q&A (15mins)

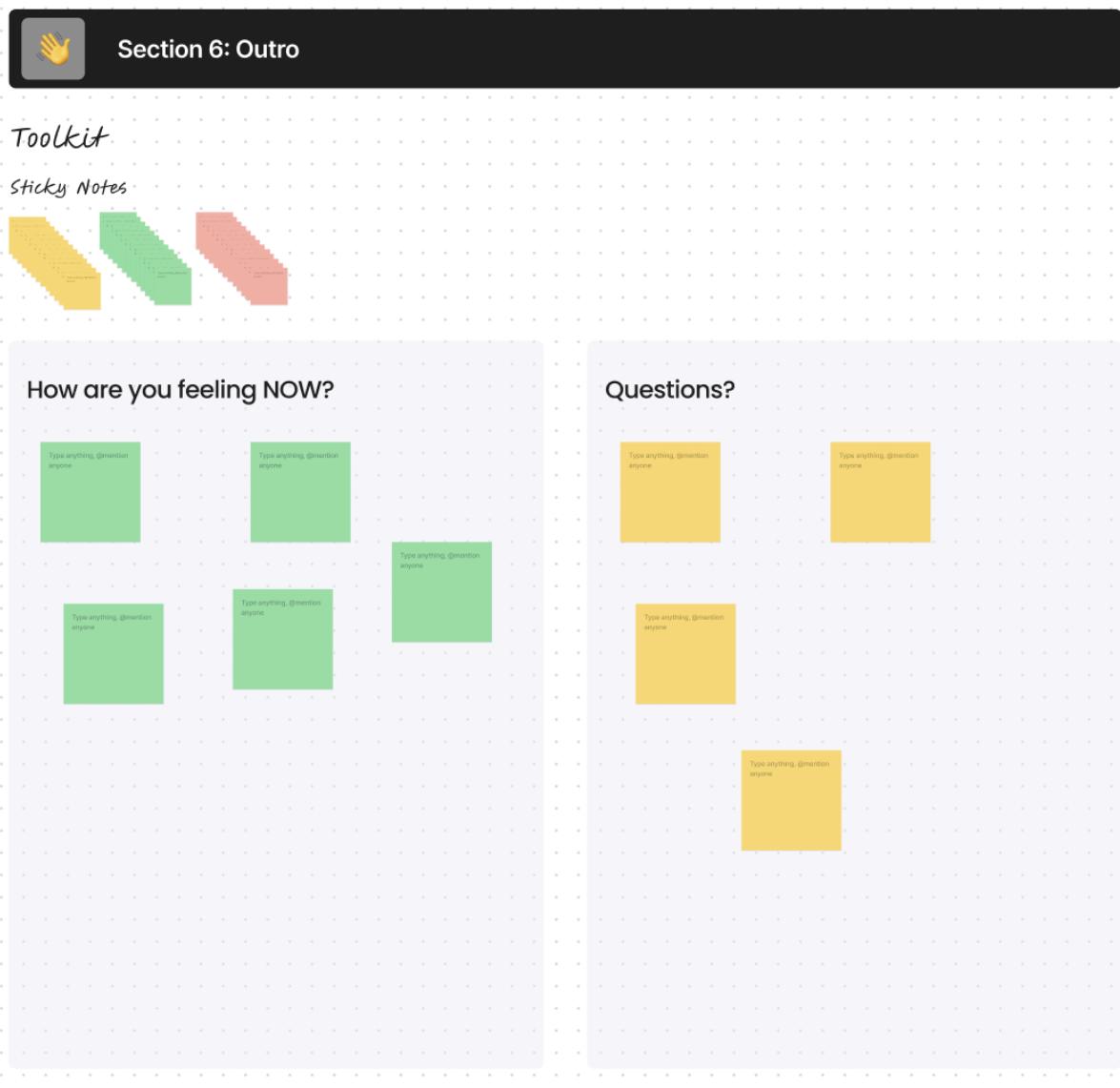


Figure 20: Outro Section

This final section is designed to reflect on the impact of the workshop on the team. It begins by asking employees to share their feelings about the project after participating in the workshop. This feedback is vital for assessing the workshop's effectiveness in

enhancing team morale and understanding. By comparing the responses from the initial ice-breaker session to the concluding remarks, facilitators and leaders can gauge shifts in team sentiment and gain insights into the workshop's impact on team dynamics and project outlook.

Following this reflective exercise, the session transitions into a Q&A segment. This portion allows team members to raise any questions or clarifications they might have regarding the project, the workshop, or any related topics. It's an opportunity for open dialogue, ensuring that all team members leave the workshop with a clear understanding of the project's goals, their roles, and the collaborative roadmap laid out for the project's lifecycle.

How does the Collaborative Kickoff Workshop improve collaboration?

Project Vision: During the workshop, team members spend time understanding the project's background, its importance to the company, and the personal learning opportunities it presents. This fosters a deeper understanding and alignment with the broader project goals, building trust among the team.

Highlighting Skill Sets: Team members become familiar with the skills and talents of their colleagues, which facilitates smoother collaboration. Knowing who to approach with questions or issues enhances working relationships.

Practice Dealing with Roadblocks: Through the DEFCON role-playing activity, team members practice responding to various levels of project challenges. This preparation ensures they are well-equipped to handle potential issues effectively when they arise.

Early Involvement in Design: By involving engineers and managers early in the design process, the workshop garners diverse perspectives on potential challenges. This early input helps assess the feasibility and business implications of design decisions.

Reflections

Working on this 10-month capstone project was an awesome experience, unlike anything I've tackled in my academic career. The full autonomy and absence of concrete constraints presented a challenge similar to navigating unfamiliar terrain—exciting, yet daunting. This project taught me not just to navigate but to thrive amidst ambiguity, making decisions with limited guidance, which turned out to be both the most challenging and rewarding aspect of my work.

Interacting with a variety of startup leaders and employees was another highlight of this project. These interactions weren't mere interviews; they felt like collaborative sessions where everyone contributed their experiences, while I was listening closely (and vigorously taking notes). This not only deepened my understanding of collaboration in startups, but also expanded my network immensely.

Additionally, this project served as a playground for honing my storytelling skills. The challenge was not just in collecting data and insights but in weaving them into a narrative that was compelling and coherent. Learning that effective storytelling involves making complex information engaging and accessible was a crucial takeaway.

However, the project also highlighted areas for personal improvement, particularly in visual design. While I could manage basic layouts and aesthetics, the nuances of sophisticated visual design often eluded me, especially when using Figma to translate complex concepts into digestible visual formats. Improving my Figma skills is clearly essential.

Time management was another skill that could use improvement. Balancing research, interviews, and the iterative cycles of design often left me wishing for more hours in the day. This project highlighted the importance of scheduling and prioritizing tasks—skills I plan to develop further. I really need to stop being the ‘thrive under pressure’ guy!

Reflecting on the past ten months, this project was not just an academic requirement; it was a journey of personal and professional growth. It was about stepping out of my comfort zone, learning to manage multiple responsibilities, and occasionally facing setbacks. But with each challenge, I learned how to better navigate through uncertainties and obstacles. Of course, none of this would be possible without my amazing professors, AIs and peers – so a big shoutout to all of them 😊

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Appendix

Stage 1 Interview protocol

Interview protocols with lead and follow-up questions were developed to guide discussions with designers and developers (separate versions tailored to each audience). Informed consent was obtained from all participants to record the interviews.

The protocols covered several key topics:

- Participant background - Understanding their company, specific roles and responsibilities, established processes for communication, and overall UX maturity.
 - Can you walk me through a recent experience collaborating with engineers on a product design project?
 - How does your company view interdisciplinary collaboration?
 - If you had to say, how much of a say does UX have in product decisions at your company?
- Collaboration experiences - Discussing past experiences working with counterpart roles, including common frustrations and pain points encountered in collaboration.

- What are some key challenges you've faced when designers and engineers collaborate?
 - What approaches have you found effective when collaborating across roles?
- Conflict mitigation strategies - Exploring approaches and tactics participants personally use to address collaboration challenges.
 - How do you address conflicts in these meetings?
 - When do conflicts usually occur?
- Early stage involvement - Gathering perspectives on involving developers in early ideation and concept generation stages.
 - How do you feel about involving engineers in early ideation activities?
 - What design activities do you think would benefit from an engineer point of view?
 - What is difficult about communicating UX concepts to engineers?

Using these structured protocols ensured all interviews thoroughly covered the same crucial subject matter while allowing flexible follow-up questioning based on participant responses. This provided consistent yet customized qualitative insights into designer-developer collaboration, conflict, and integration opportunities.

[Stage 1 - Midway Document](#)

[Stage 2 - Final Document](#)

[Stage 3 - Midway Document](#)

[Capstone Sheprading Document](#)

[FigJam Workshop Template](#)