

Portfolio Presentation

Hey there 🙌, I'm Adrian

What I'll be talking about today

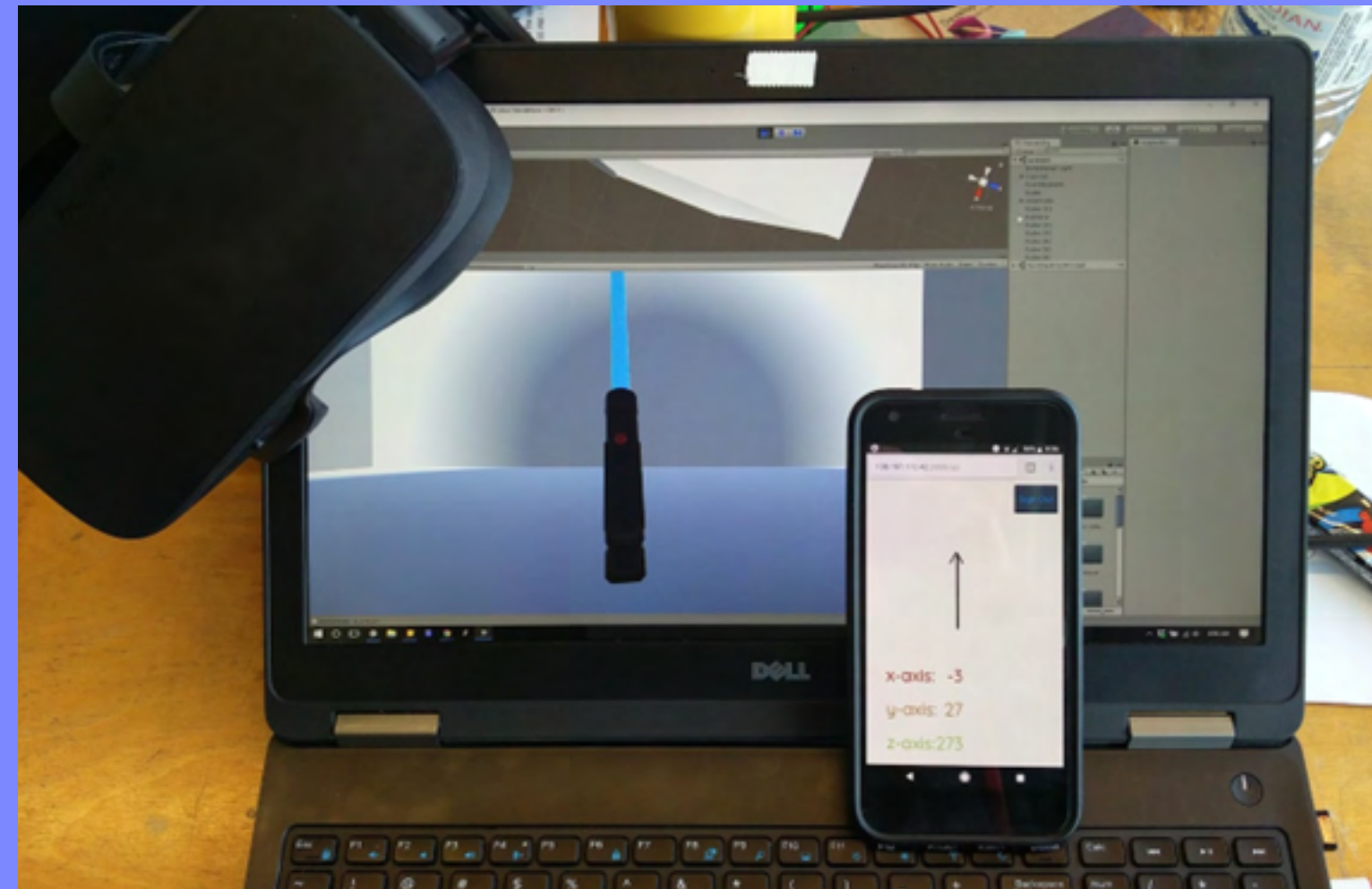
- About Me and How I got here?
- Case Study 1 – Technical Designs - Unity's Profiler
- Case Study 2 – Mobile and Desktop: Tell Us Once (Government of Canada)
- Case Study 3 - Building Management System
- Conclusion: Lessons I've learnt as a designer

A little about me

- Undergrad in Computer Science
- Master's Degree in Human-Computer Interaction
- Previous roles include Software Developer, UX Designer and Product Designer



Avid Hiker



VR Enthusiast



Amateur Axe Thrower

Companies I've worked with



Case Study 1: Unity's Profiling Module

What is the Unity Data Oriented Technology Stack?

The Unity Data Oriented Technology Stack (DOTS) is a group of technologies that work together to allow game developers to create ambitious games

What makes DOTS Unique?

DOTS allows game developers to write code that makes use of the computer's memory allocation as well as processor threads to create high performance games.

My Roles and Responsibilities

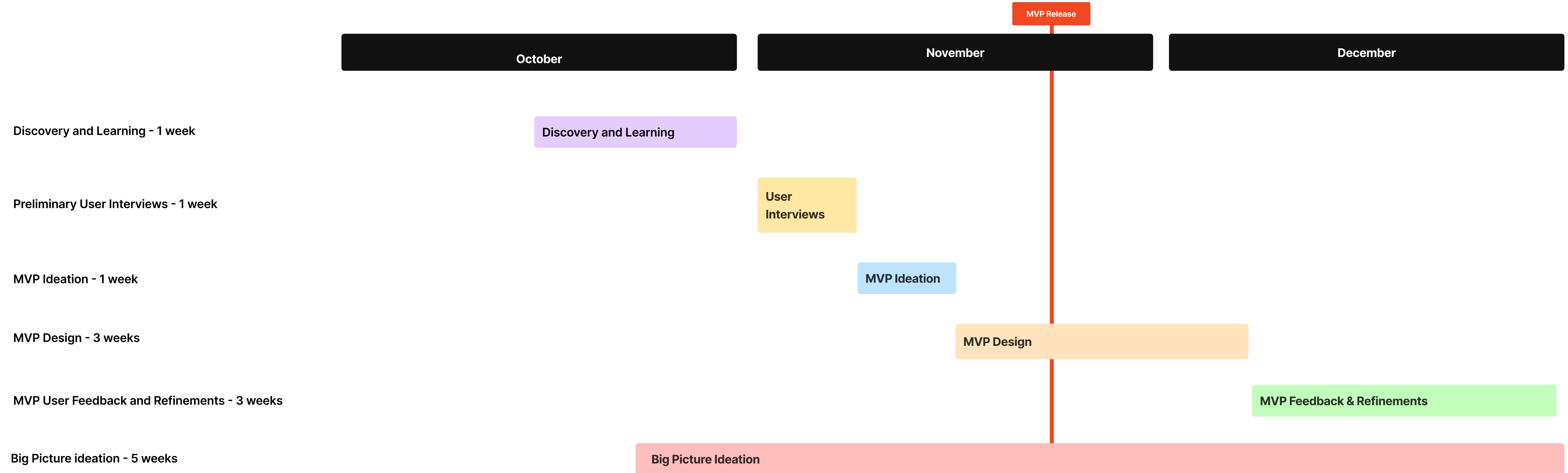
- Understand DOTS and the technology to better help the developer user experience
- Interview developers and design mock-ups and workflows to improve the user experience
- Present designs to the executive team in a easy to understand presentation

Case Study 1: Unity's Profiling Module

The team

- Project Manager
- Product Designer (me!)
- Software Engineers

Timeline



Case Study 1: Unity's Profiling Module

Preliminary User Interviews

Sample team -1 dev

DOTS Sample team - 4 devs

Consultants - 3 devs

The goal is to understand how developers profile their games currently. What they look for, how they identify performance/optimization opportunities and how they improve it.

Case Study 1: Unity's Profiling Module

Key Findings

- Performance benchmarks are based on the targeted platforms
- Understanding if jobs on the main thread can be scheduled in worker threads
- Ability to search for a job and view all instances of it
- Finding jobs over a certain performance threshold
- Filtering jobs by longest running

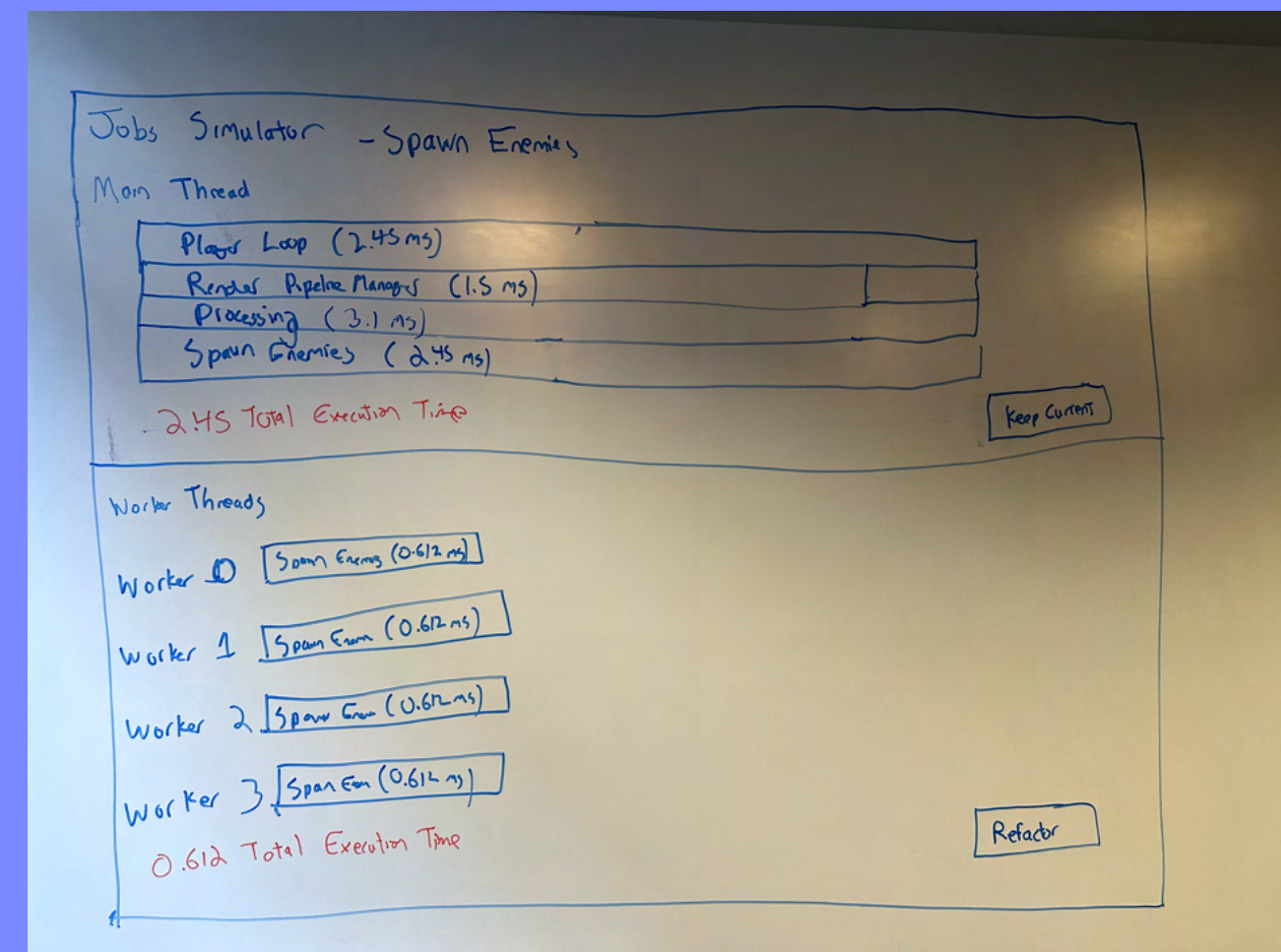
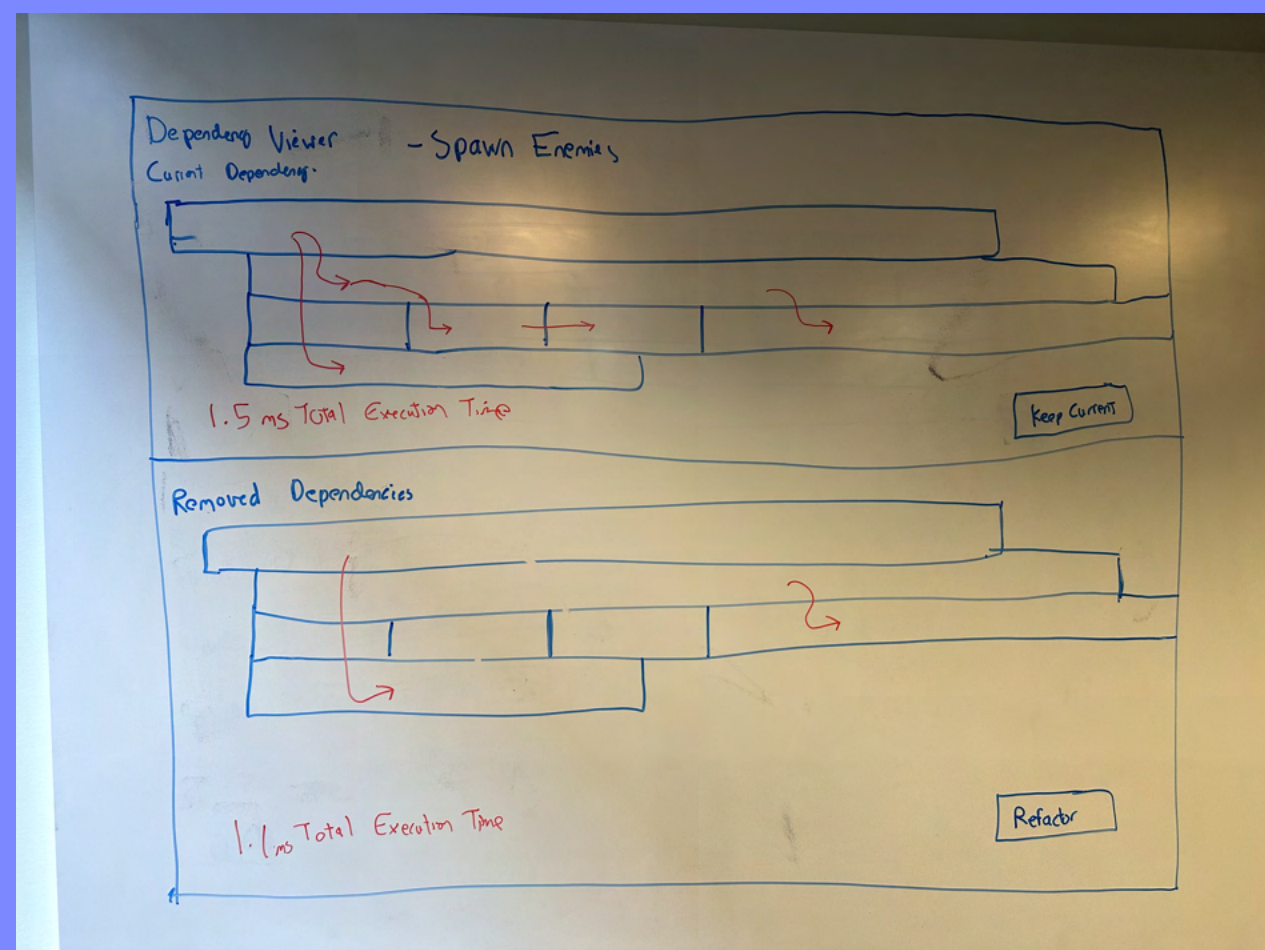
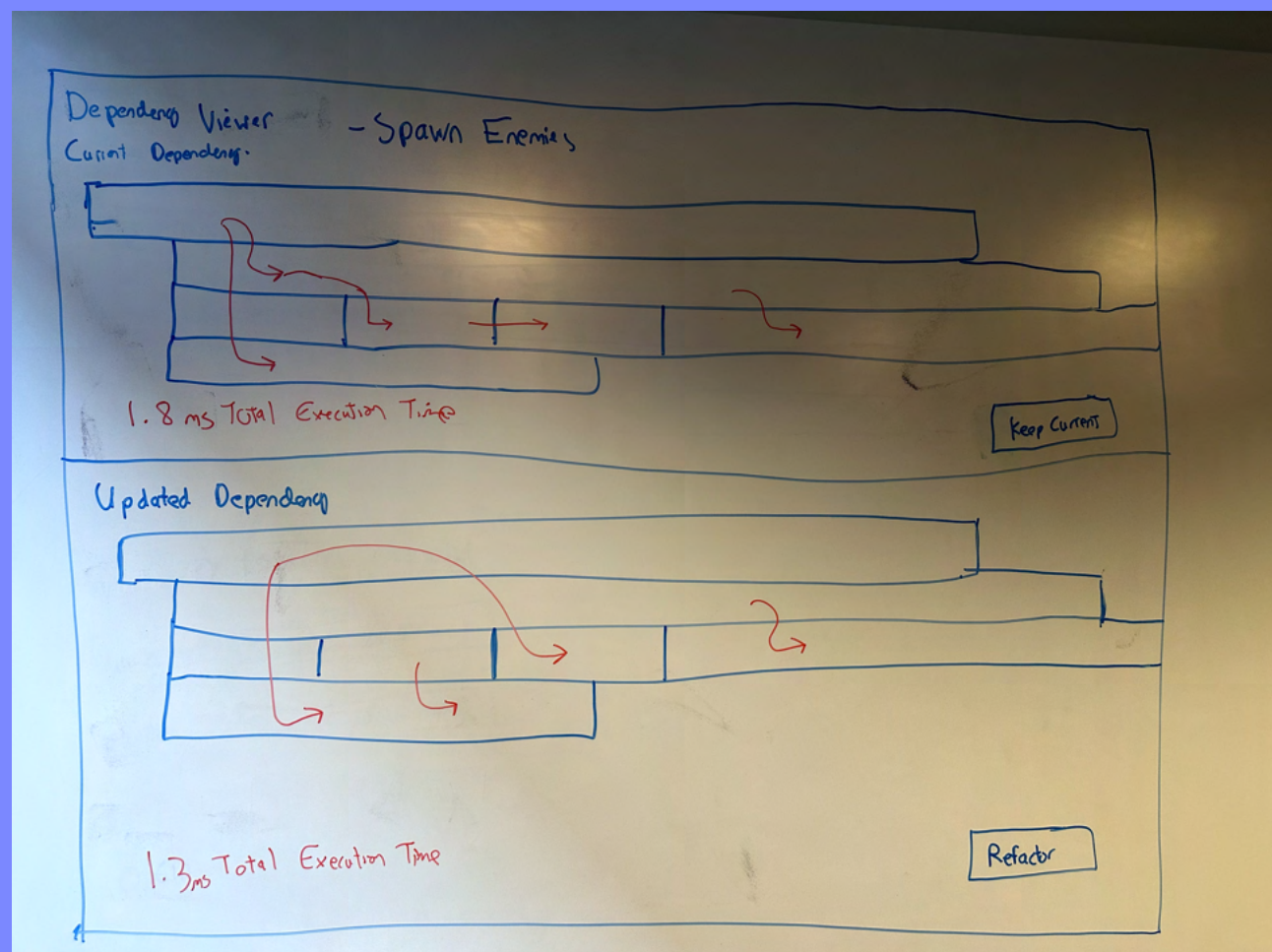
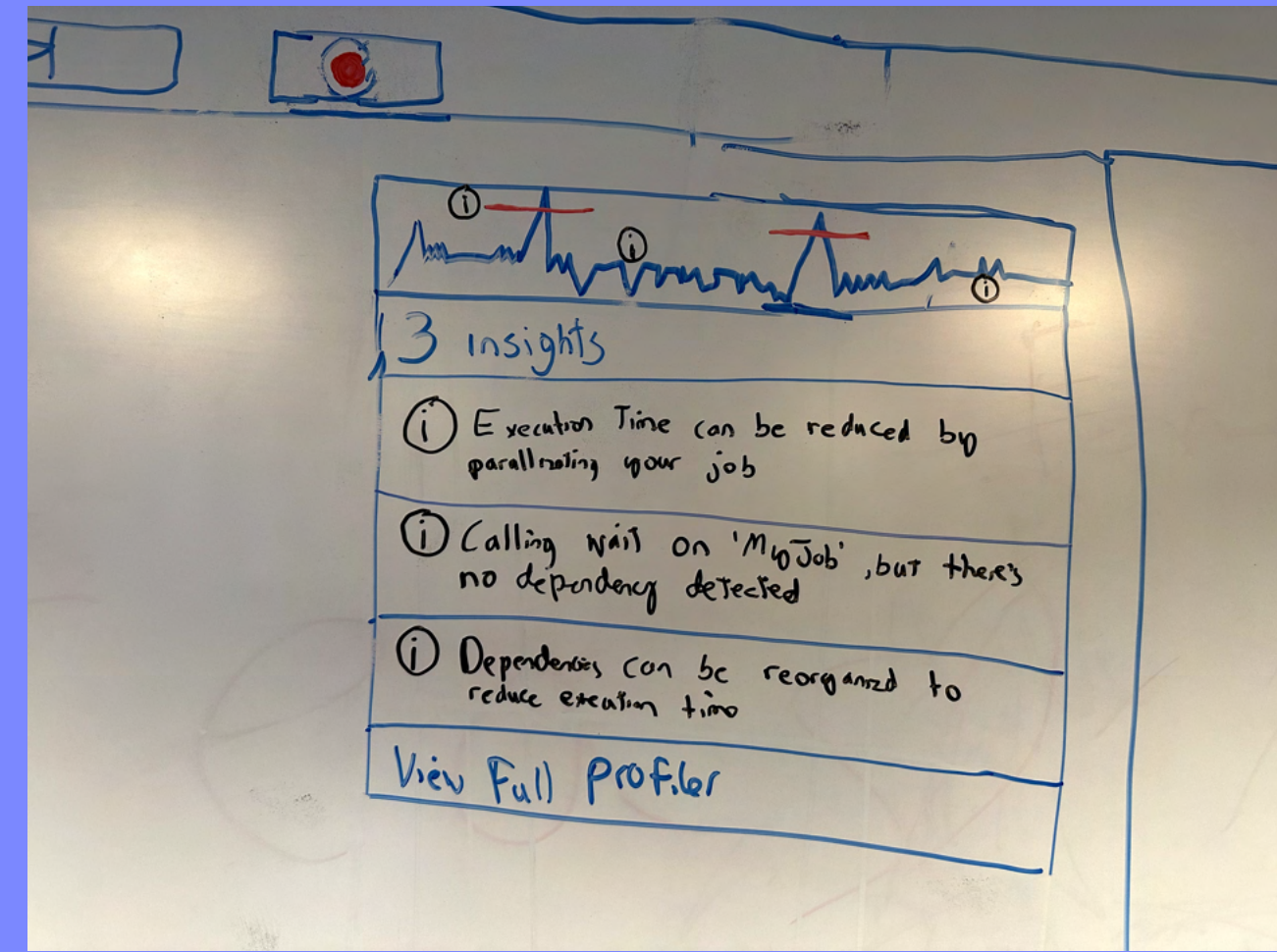
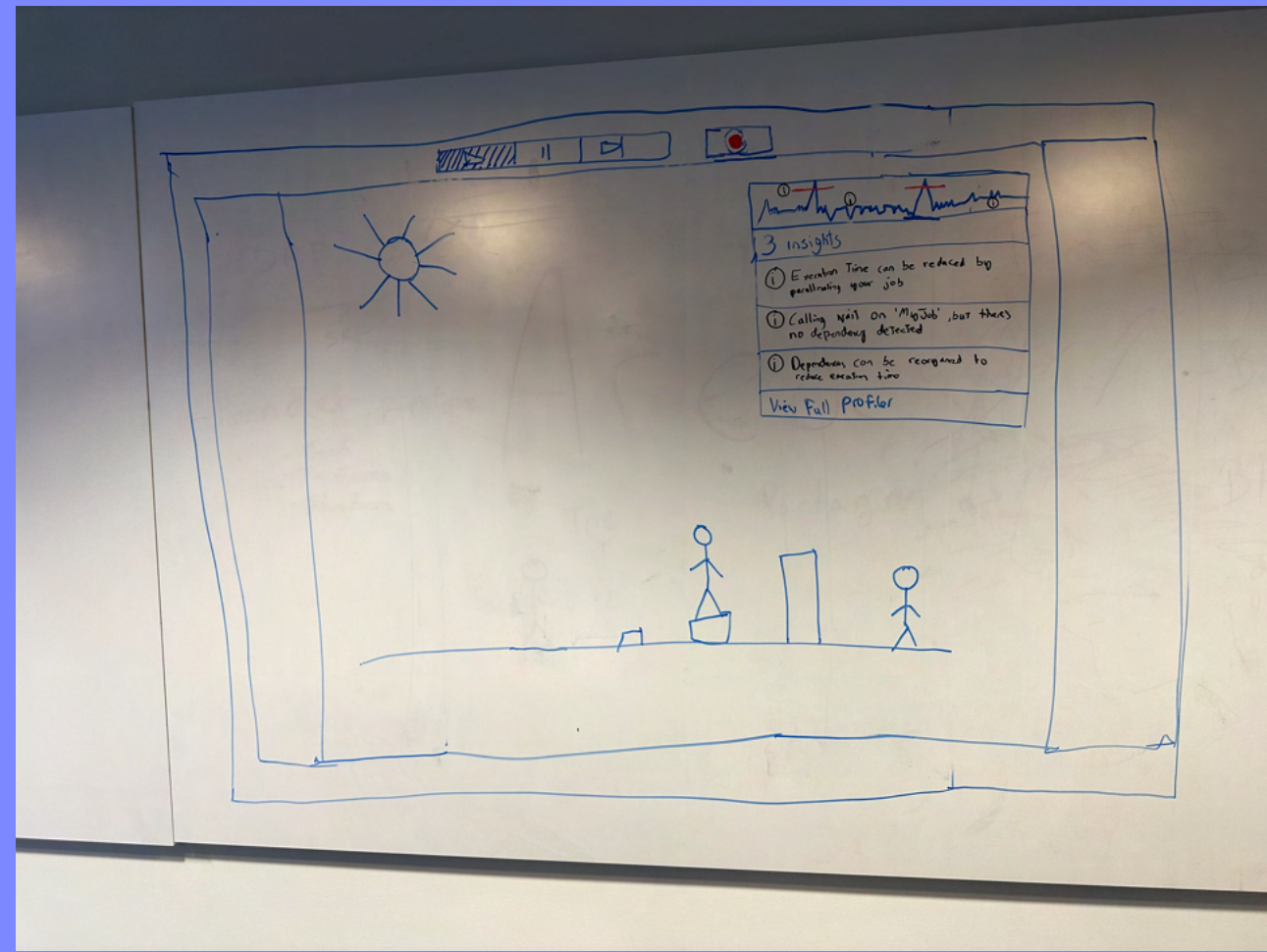
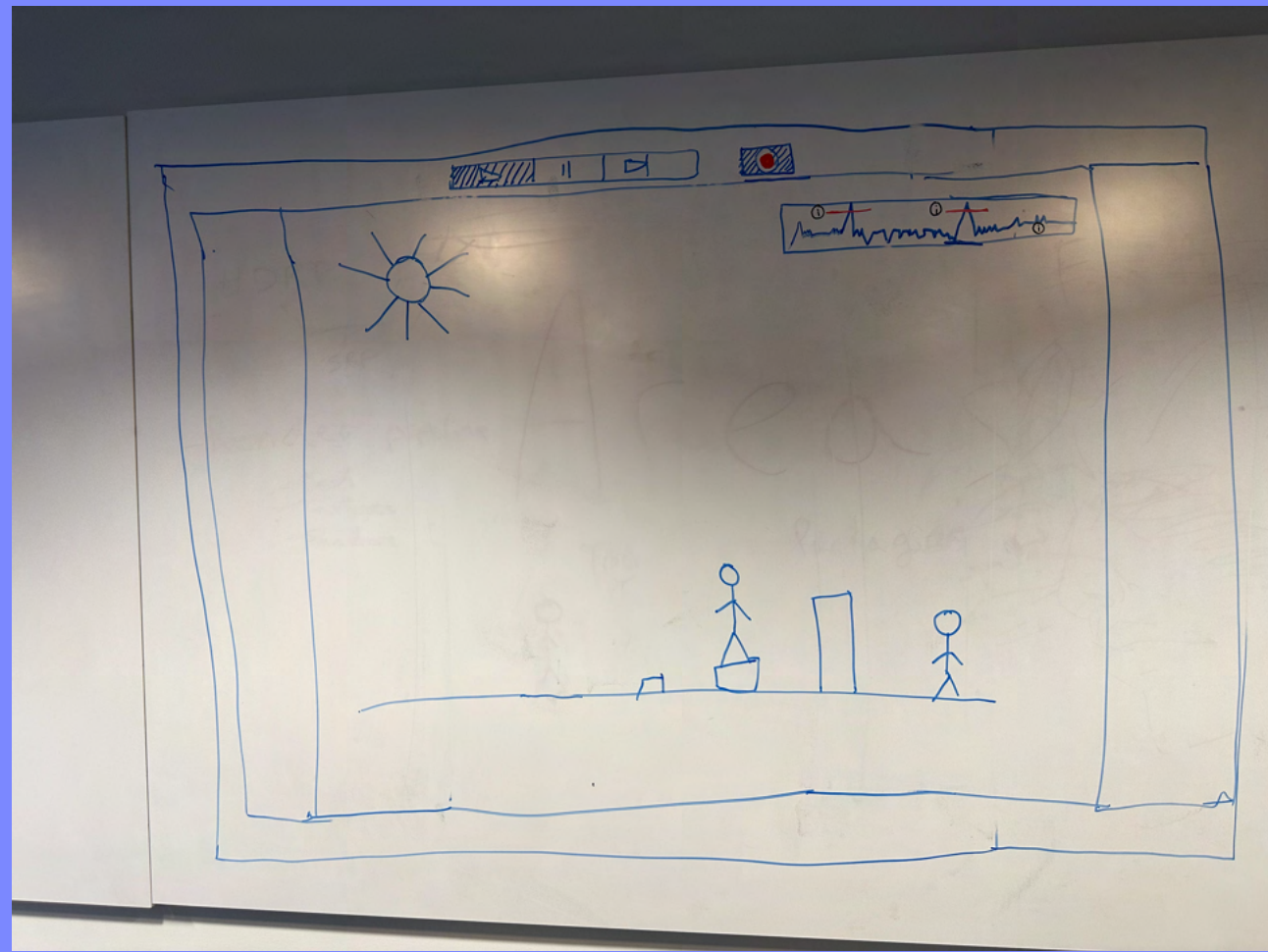
Case Study 1: Unity's Profiling Module

Key Questions

- How can I find a specific job and view all instances of it
- How can I find a job that's over a certain performance threshold?
- Can my one long job on the main thread be parallelized in worker threads?
- Is it worth it to parallelize my job?
- How can I view my longest running job(s)?
- How do I know what my job depends on/is dependant on?
- How can I find the bottlenecks in my code?
- Why is a specific job idle for so long?
- How can I reduce the idle time of my thread?

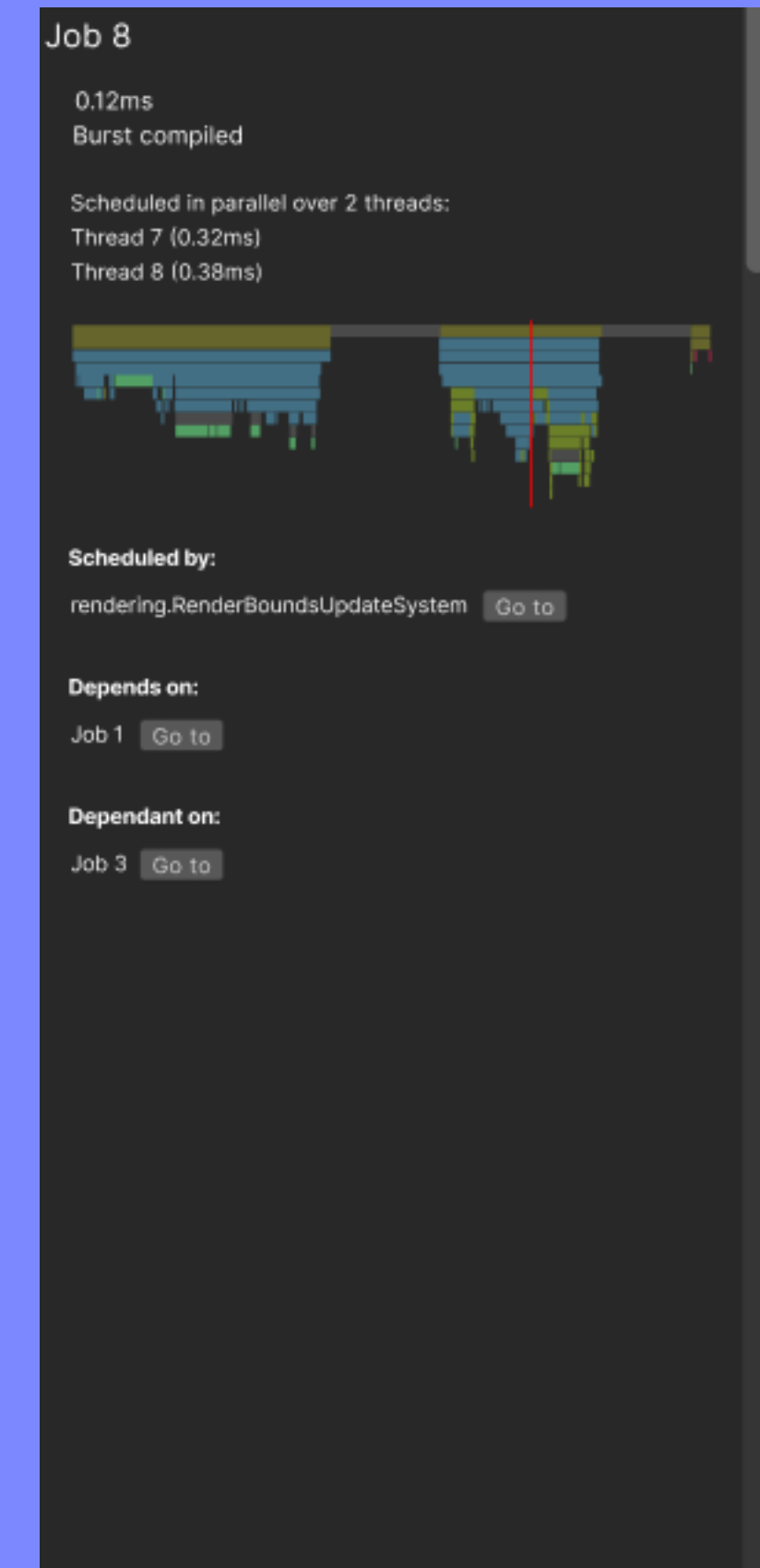
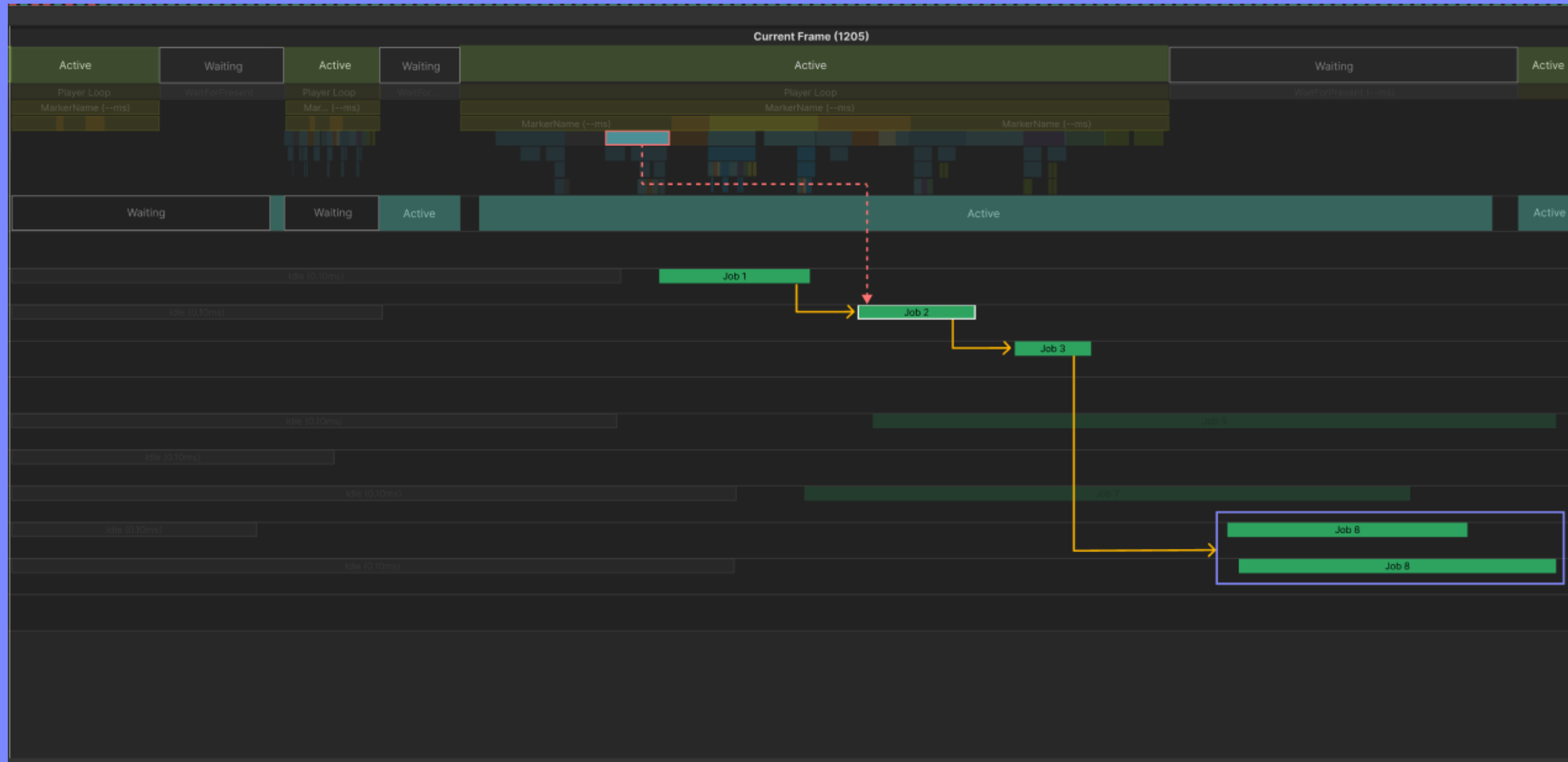
Case Study 1: Unity's Profiling Module

High Level Sketches



Case Study 1: Unity's Profiling Module

Refined Designs



Interactives

<https://figma.fun/KDDExA>

Case Study 2: Government of Canada - Tell Us Once

What is Tell Us Once?

A single portal to access all of your Government of Canada services

What makes Tell Us Once Unique?

Today, there are 56 different places to log in to a government account. That's pretty frustrating for a population that's used to having everything from the latest meme to a full grocery order available in just a few clicks.

My Roles and Responsibilities

- Lead product storytelling and UI Design
- Create the user experience design including user flows and wireframes designs
- Interview potential users to gain feedback on the UX design

Case Study 2: Government of Canada - Tell Us Once

The team

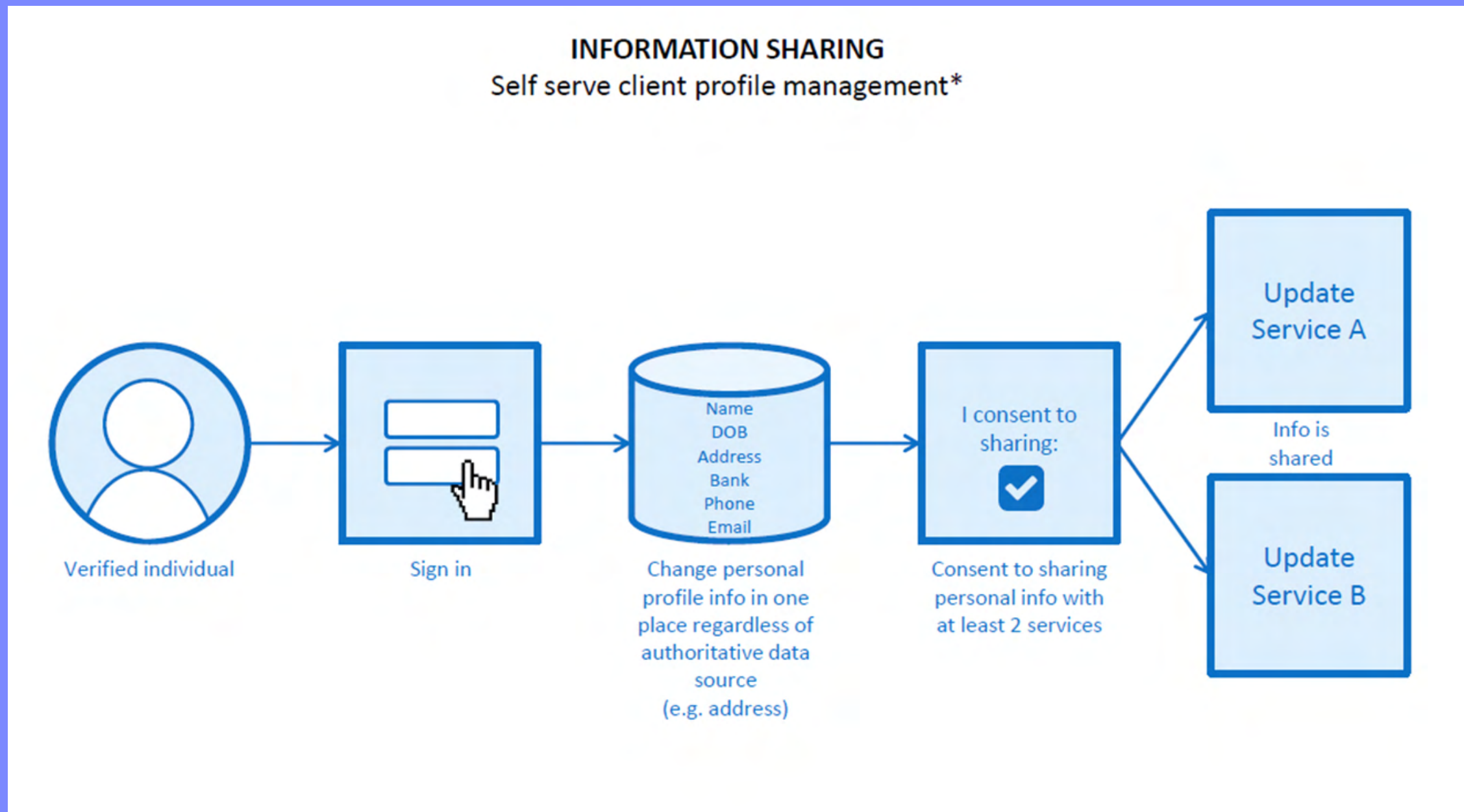
- Project Manager
- UX Designer (me!)
- UX Researcher

Timeline

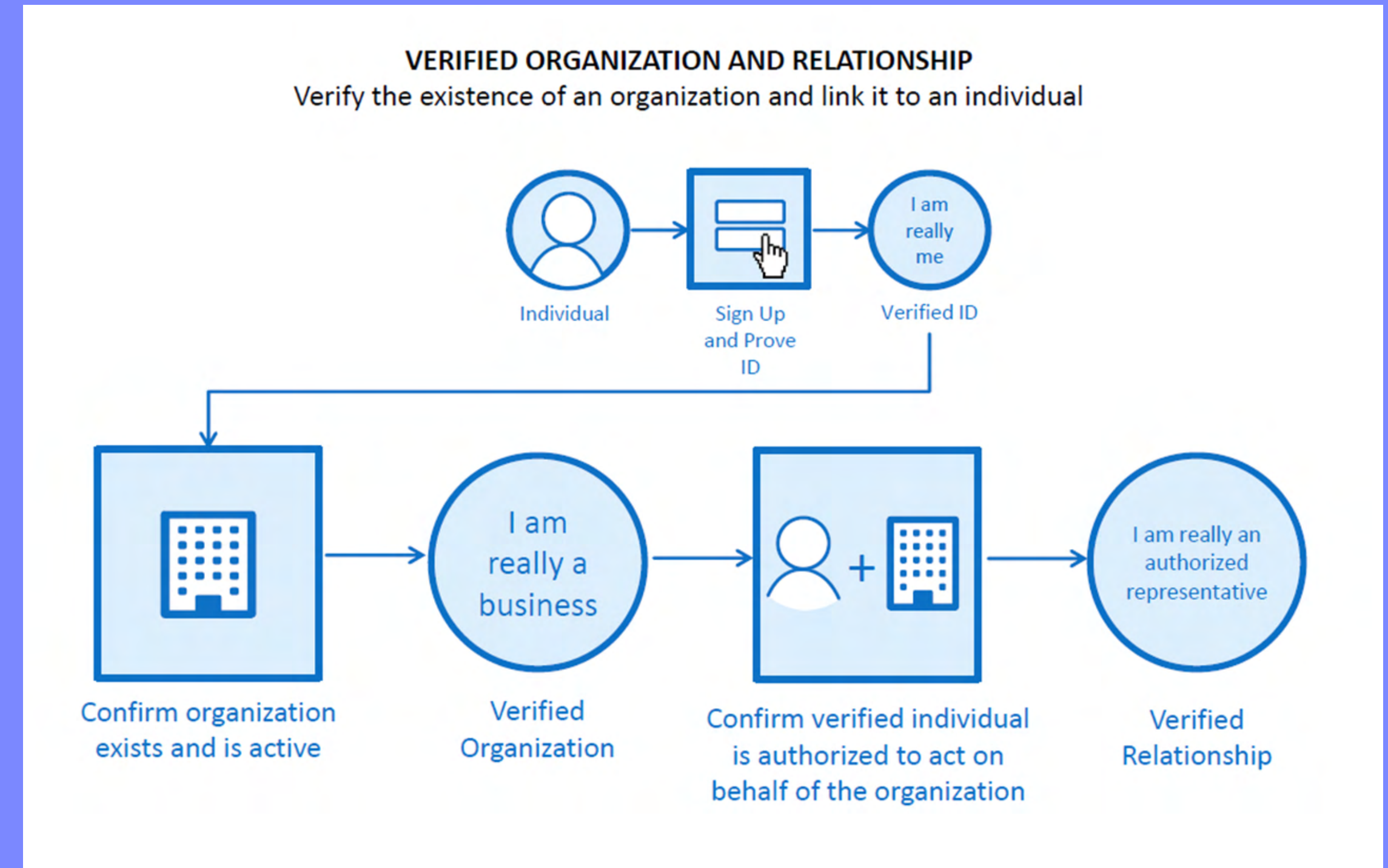
3 week sprints

- 1 week to research
- 1 week to design
- 1 week to test

Case Study 2: Government of Canada - Tell Us Once



Scenario 1



Scenario 2

Case Study 2: Government of Canada - Tell Us Once

Unknowns

- What about a user's privacy and consent?
- Who would we be designing for? The entire population of Canada? What about user who are permanent residents?
- What about a user's security?

Assumptions

- Consent must be given prior to sharing info
- Not constrained by existing policies or legislation
- When a service is selected on the non-authenticated side this information will be passed through to the authenticated side
- Web channel only
- User triggered changes and updates
- Users consist of both individuals and businesses
- Scope is limited to Canadian residents

Case Study 2: Government of Canada - Tell Us Once

Design Process

- Designed experimental prototypes that focused on the “happy path” for the two use cases
- Based designs on common UX patterns and leveraged existing research on Canadians’ expectations
- Recruited diverse research participants from traditionally underserved groups including Indigenous communities, people from lower income and lower education groups, and seniors
- Tested prototypes during in-person sessions and through remote, online testing tools.
- Tests for UC1 and UC2 included 28 participants in person
- Conducted statistical analysis to formulate findings and recommendations for next steps

Case Study 2: Government of Canada - Tell Us Once

Scenario 1 - Mobile Design

Sign in to Government of Canada services

Sign in to easily view and manage your Government of Canada services and benefits.

Government account

If you already have an online account with the Government of Canada, a province, or a territory, you can use it to sign in.

Choose a government account:

No selection

Sign in

Online banking account

The Government of Canada partners with Canadian banks and credit unions to make it easier to access services online.

Choose a bank or credit union:

No selection

Sign in

Québec

Sign In

Sign in using your province of Quebec credentials below

Username

Password

Sign In

[Forgot your username or password?](#)

Canada.ca account

Welcome Adrian

News and Alerts

- Don't forget to file your taxes by April 30th
- Your passport expires soon. Find out how to renew [here](#)

My Contact Information

Primary Address
123 Laurier Street,
Ottawa, ON, K2P8H3
Canada

Primary Phone
613-234-567

Taxes

Amount Owing\$1368

Due On: April 30th 2020

Canada.ca account

Contact Information

Phone and email

Primary Phone Number
613-123-4567

Primary Email
canada2020@gmail.com

Manage numbers and emails...

Addresses

Primary Address
123 Laurier Street
Ottawa Ontario K2P 8H3
Canada

[Services that use this address](#)

Edit

Other Addresses

285 Young St, Apt 302
Toronto, Ontario, M5B 2C3
Canada

[Services that use this address](#)

Canada.ca account

Edit Address

Canada

123 Laurier Street

Apartment, suite, unit, building (optional)

Ottawa

Ontario

K2P 8H3

Our records show that you previously agreed to use this address with the following services.

We will share this address with any service(s) that you leave checkmarked

- Federal Income Tax
- Employment Insurance (EI)
- Canada Pension Plan (CPP)
- Fishing License

Cancel Changes Update Changes

Case Study 2: Government of Canada - Tell Us Once

Scenario 2 - Desktop Design

Jamie Blair Add or Switch Profile

News and Alerts

- Don't forget to [file your taxes](#) by April 30th
- Your passport expires soon. Find out how to renew [here](#)
- [Coronavirus update](#) for Gatineau, Quebec.

Taxes

Amount Owing\$1368
Due On: April 30th 2020

My Contact Information

Primary Address
123 Laurier Street,
Ottawa, ON
K2P 8H3
Canada

Primary Phone
613-234-567

[Manage contact information](#)

Licenses and permits

Active licenses and permits

- Fishing license [>](#)
expires January 22, 2021
- Drone operator license [>](#)
expires July 17, 2020

New baby

Congratulations on your new baby! We know you have a lot on your plate right now.

There are a few things you need to do when you welcome a new family member. We've collected them in one place to help you keep track.

Done

- Register the birth
- Apply for short form birth certificate
- 2 month immunization

In progress

- Apply for maternity leave benefits [>](#)
View status

Optional

- Apply for Social Insurance Number (SIN) [>](#)
- Apply for long form birth certificate (required for issuing a passport) [>](#)

Canada.ca account
Bob's Maple Syrup Factory Add or Switch Profile

News and Alerts

- Your quarterly GST/HST filing is due April 1. [File here.](#)
- Your trademark for "A sweeter you" is up for renewal. [Renew here.](#)
- Your application for a liquor license has been approved. [More details.](#)
- Your payroll deductions account is past due. Amount owing: \$1,326.72 [More details.](#)

Taxes

Actions required

- File quarterly GST/HST [>](#)
due April 1, 2020
- Make payment of \$1,326 for payroll deductions (*overdue*) [>](#)
due February 12, 2020

Contact information

Primary Address
Bob's Maple Syrup Factory
50 Rideau Street
Ottawa, ON
K1N 9J7

Primary Contact
Jaimie Blair
613-555-5555
Jaimie@maplesyrup.com

[Manage contact information](#)

Intellectual property

Trademarks
2 active trademarks
4 trademark applications

Actions required

- Renew trademark (1)

[Manage intellectual property](#)

Employees

You have **5 employees** according to our records.

Actions required

- Review and file T4s (6) [>](#)
- Review and submit Record of Employment (2) [>](#)
- Review and submit Employer's Report of Injury or Disease (1) [>](#)

[Manage employees](#)

Licenses and permits

Active permits
Commercial sign permit
Liquor license

Actions required

Case Study 2: Government of Canada - Tell Us Once

What we learnt

1. Providing multiple unfamiliar sign-in options results in confusion
2. Most users do not read, even extremely brief and simple statements of consent, but assume data is shared by default
3. Participants reacted positively to the convenience of having data shared across departments—especially for businesses
4. Successful task completion was largely driven by participant age, their digital literacy, and their emotional state
5. Participants were eager for the experimental prototypes to become available, demonstrating enthusiasm for simplified digital services from the Government of Canada

Case Study 3: BuildingsIoT - onPoint

What is onPoint?

onPoint is a highly visual front-end management dashboards. User-friendly visualizations, including dynamic, color-coded floor plans, and customized reporting offer deep insight into what is happening inside each building.

What makes onPoint unique?

OnPoint helps building engineers and energy analyst diagnose and prevent ongoing building equipment issues

My Roles and Responsibilities

- Lead product UI Research and Design on a work request view for our end users. This work request view allows the users to create a work request based on a piece of equipment
- Create wireframes to guide user stories for the Product managers and developers
- Work with developers to implement the new designs and implement them into our existing code

Case Study 3: BuildingsIoT - onPoint

The team

- Project Manager
- Full Stack Developers
- QA Testers
- UI/UX Developer (me!)

Timeline

Monthly sprints

- 2 weeks to design
- 2 weeks to implement

Case Study 3: BuildingsIoT - onPoint


The UX Design Process

- **Understand** our users and their pain points
- **Define** and **prioritize** our UX goals with Produce Managers
- **Explore** some high level ideas with sketches and workshops
- Get feedback **early** and **frequently** from users
- **Refine** our designs based on user and Product Manager feedback

Case Study 3: BuildingsIoT - onPoint

Key personas include:

- Energy Analysts
- Building Engineer
- Facility Operators
- Onboarding Engineers



Francine | Facility Operator

Browser Usage

Internet Explorer	62%
Google Chrome	35%
Microsoft Edge	1%
Mozilla Firefox	1%

Device Usage

Desktop	100%
Mobile Devices	0%
Tablets	0%

Biography

Francine works as a Facility Operator at the Cadillac Fairview Corporation. She looks after the health and safety of the occupants in her building. She ensures that her building is kept in top condition in order to meet the requirements and expectations of clients for a fully functioning facility.

GOALS

- To ensure tenant satisfaction in her building
- Ensure her tenants are healthy and safe
- Address any concerns about may arise in terms of tenant safety and satisfaction

TASKS

- Communicate with tenants in her building to ensure satisfaction
- Investigate any alerts that have been raised
- Perform minor troubleshooting and repairs required for the maintenance and upkeep of equipment
- Create a work request to address any major maintenance issues
- Ensure that any issues have been resolved

FRUSTRATIONS

Data issues

- I'm frustrated by the lack of visibility on building data. Data is unavailable or difficult to obtain regularly

Finding and Reading information

- I'm overwhelmed by amount of information and don't know where to find what I need.
- I'm frustrated that I'm wasting time navigating the system to get where i want to.
- I'm frustrated that I can't view urgent issues right away
- I am not being informed of changes to specific insights that I have created a work request for
- I'm frustrated that I have to manually maintain a lists of tasks, initiatives , or corrective actions for the facility maintenance teams to execute

OnPoint Areas Used

- Alerts on a specific building view
- Insights on a specific building view

Questions

- How can I know when urgent issues arise?
- How learn more about any urgent issues?
- How can I resolve urgent issues?
- How will I know when an issue has been resolved?

Quote: When I am having trouble assigning diagnostic code to inpatient records, I need to find reference on how to do it. Hence I search at e-query to gain insight into coding

User group: Core

Age: 27

Occupation: Facility Operator

Education: Bachelor's Degree in Facility Management

Organization: Cadillac Fairview Corporation

Location: Toronto, Ontario

Case Study 3: BuildingsIoT - onPoint

Unknowns

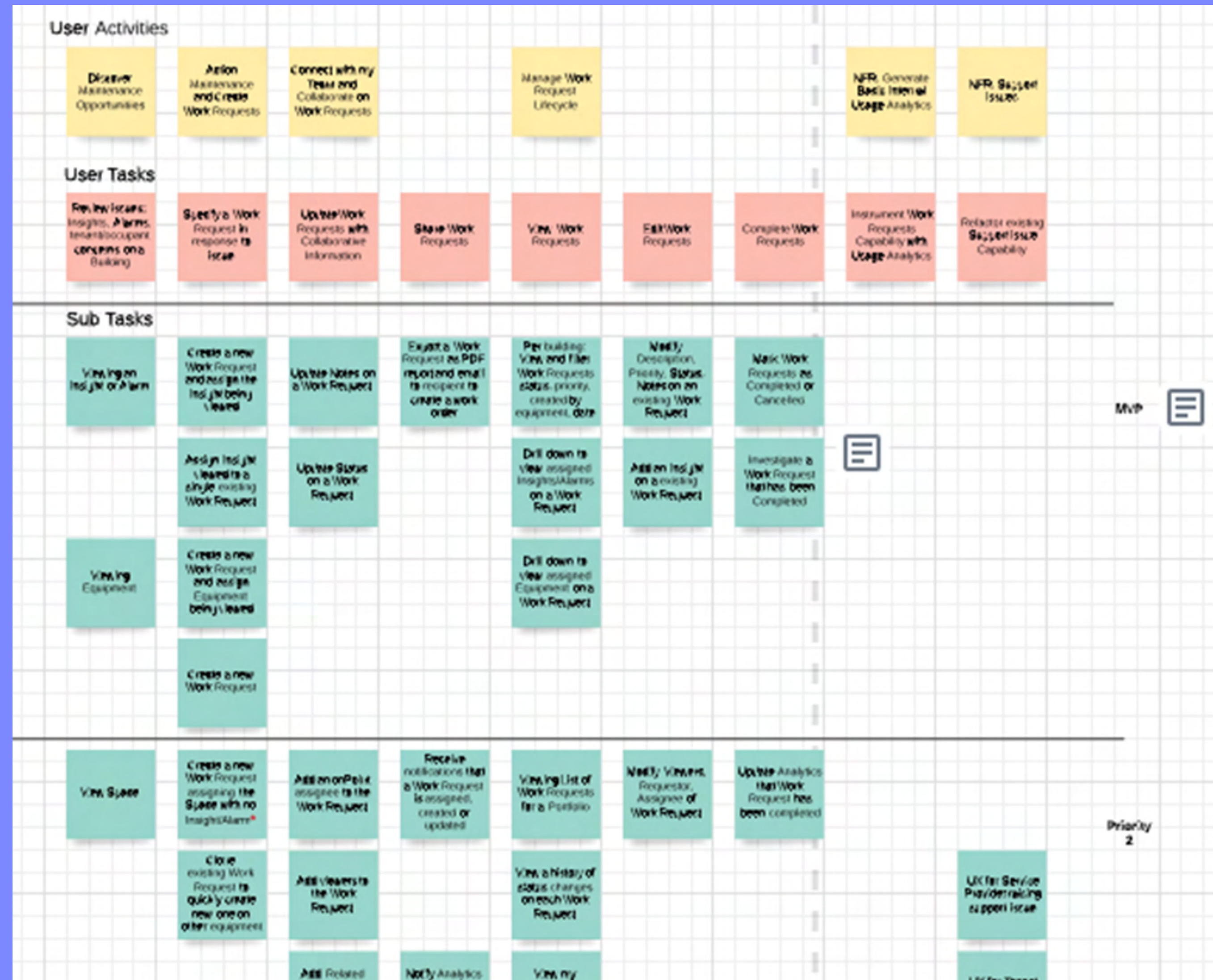
- What are the different ways a user can create a work request?
- How can we break down and prioritize features based on what product managers and our users would like to see?
- What's the best way to communicate with Developers and Product Managers?
- How can we get user feedback on my designs?

Unknowns

- Not constrained by technological limitations
- Would be based on the Material Design
- Would be for standard PC screens

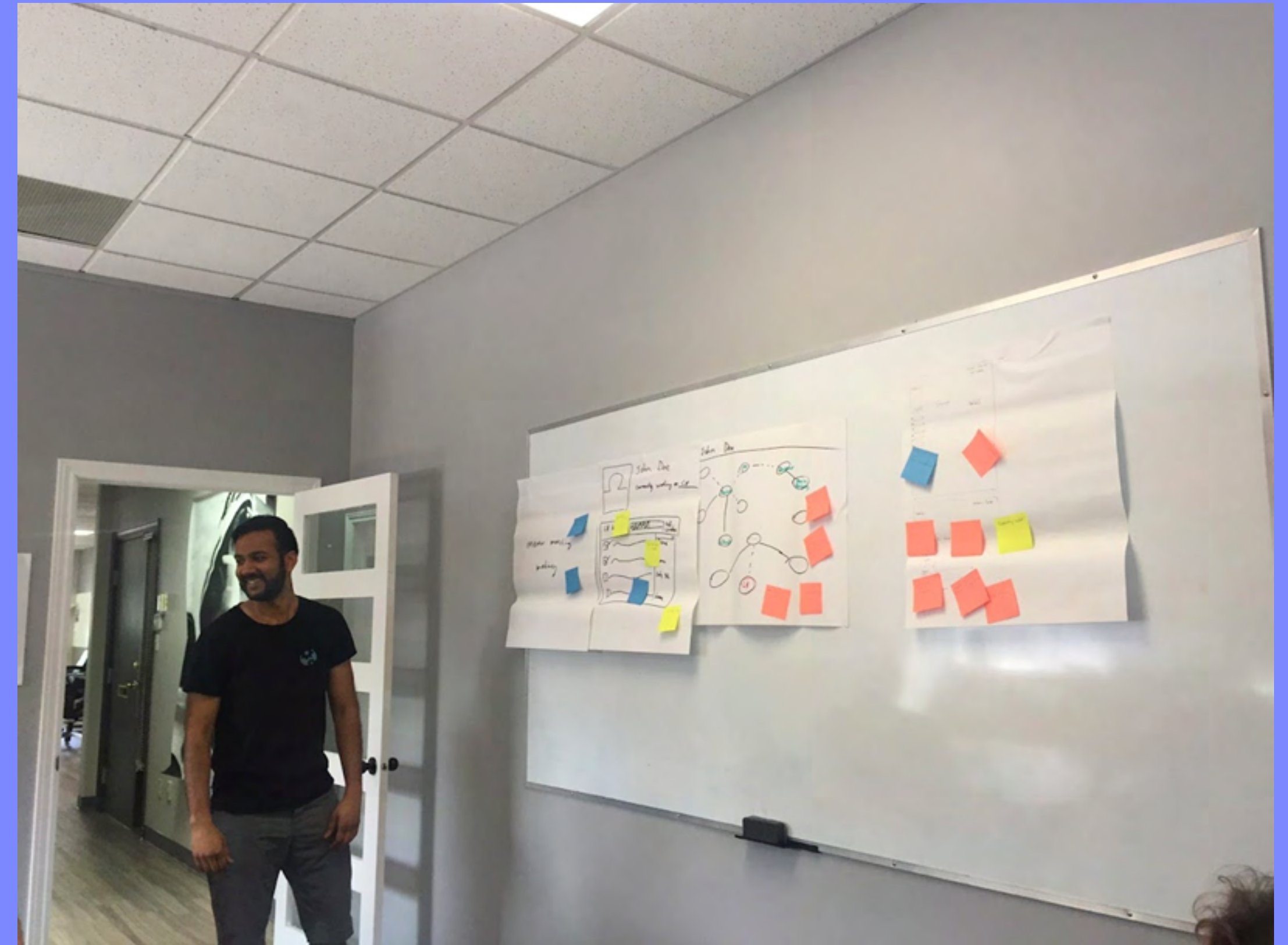
Case Study 3: BuildingsIoT - onPoint

Story map and Prioritization



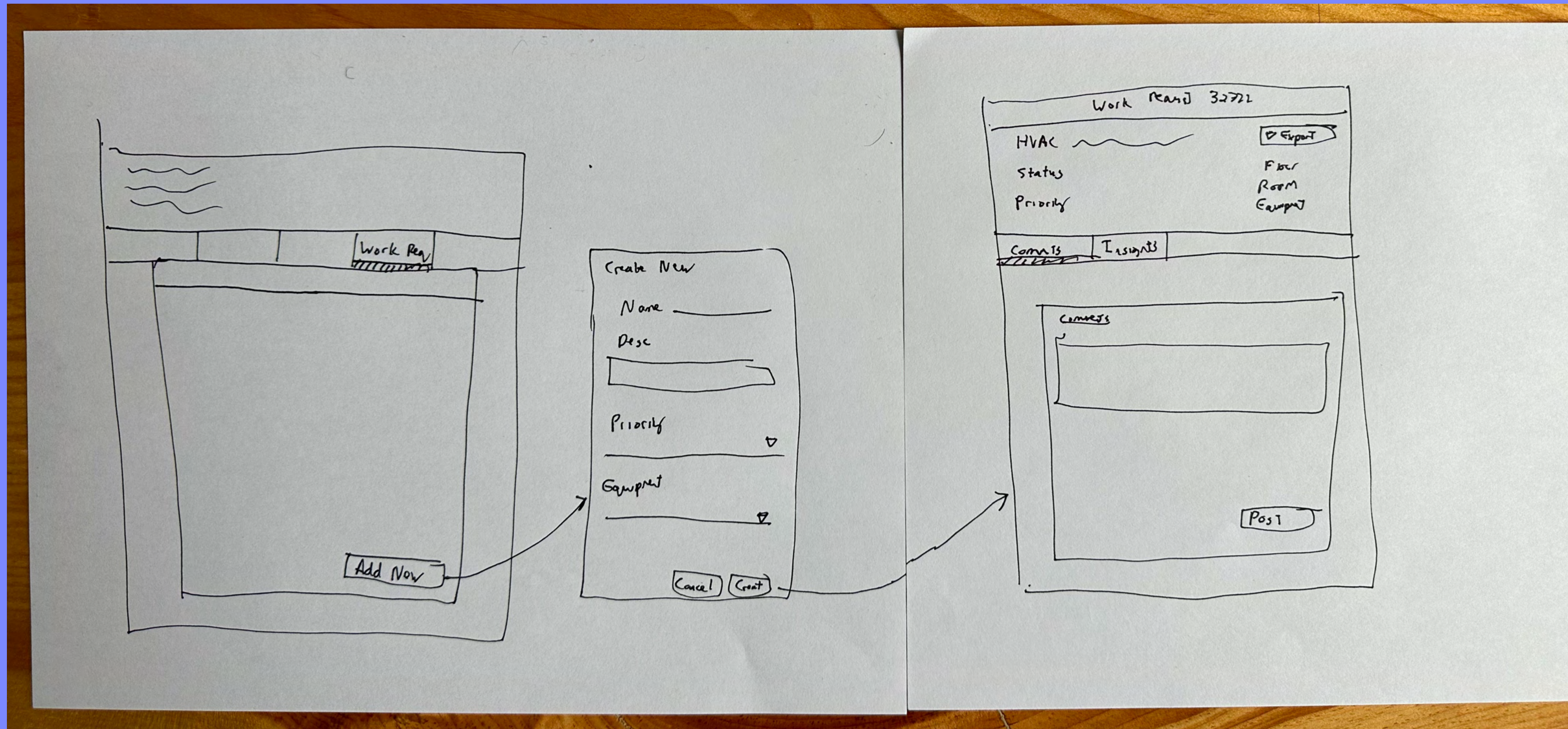
Case Study 3: BuildingsIoT - onPoint

Brainstorming & Ideation



Case Study 3: BuildingsIoT - onPoint

Sketching High level concepts



Case Study 3: BuildingsIoT - onPoint

Refined Interactive Prototype

AHU unable to provide cooling to space
The cooling command is on, but the temperature split across the coil is less than 4°F. Source: onPoint

Equipment	Building	Priority	Status	Class	Duration
MRTUM22	Basil Ventures	Low	Inactive	Comfort	2 Days

Range: 06/10/21 to 06/10/21 | Timezone: America/New_York | Acceptance: Unacknowledged

ACTIVE OCCURRENCES NOTES **WORK REQUEST** DETAILS

Active Work Request

Fix Cooling Sensors on MRTUM22

Created: 06 Oct 2021 by Joel
Last Edited: 1 hour ago by Bob Smith

The cooling sensor in room 120 has been malfunctioning recently. Several tenants have been complaining about it. This work request was created to fix that.

Status: Needs Verification | Floor: 3
Priority: Medium ● | Room: 120
Equipment: MRTUM22

Comments (2)

- Jane Doe** commented 30 mins ago
@Bob Smith you should follow up to see how the tech is doing
- Bob Smith** commented 8 hours ago
Technician called me today to state that he has started working on the repairs

[VIEW MORE](#)

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[VIEW MORE](#)

Interactives

<https://figma.fun/a0Zb2t>

Case Study 3: BuildingsIoT - onPoint

What we learnt

1. Breaking down complex problems into bite sized pieces allows users to easily digest complex information
2. Getting feedback early on from our users allows us to iterate over our design early on and refine them for a better UX
3. Creating hi fidelity interactive wireframes was beneficial for getting out product design ideas out to marketing as well as the executive team.

Lessons I've learnt as a Designer

1. Always design with diversity and inclusivity in mind
2. Spend time learning about your users and the product or service they will be using
3. Always communicate with your team, create an open connection between the users, product manager, and developers.
4. Don't be afraid of the unknowns, instead explore and learn from your users to iterate and converge on solutions

Thanks!