Final Presentation (60 min)

[Picture illustration for title]

**Self-Introduction (2 min)**

* *Why this coop*
* *Describe job responsibility*
* *What project worked on here*

Good afternoon everyone, my name is Y. (I am P.) We have been joining the dev team for 6 months, and it is about to wrap up our journey here.

Starting from July, we worked on a project to rewrite the billing app which will be used for the data team (at that corner / over here).

**Background Problem (3 min)**

* *Why we start on this project*
* *What kind of problem this project aims to solve*

So, a little bit of background story, what does this billing app do and why we need it now?

A brief explanation of UPC code: Well essentially it is the bar code along the bottle.

[Picture illustration for listing the fees and company roles]

Given the state law, each bottle is charged with a certain amount of deposit fee, handling fee, and pickup processing fee. Each bill varies mostly depending on the initiator, distributor, pickup agents, and the location it was dropped. (briefly explain each role)

Init - bill customer

Dist - bring product into the state

PA – collect after recycling

[Picture illustration for the nickel travel]

The role of Clynk in this cycle is to help customers get their nickel back. Part of our salaries are paid by that pickup processing fee????

[Picture illustration for the existing upc + billing app + simple rule + analytics]

So far everything is good. The old billing app is pretty effective under Elva, even though there are some performance issues.

However, as the Clynk is expanding outside of multiple states, many problems arise.

1. Separate function
2. Separate database (pickup processing in another db & each state in its own db)
3. Poor performance
4. Complex operation – hard for beginners to start with

**Project Workflow (2 min)**

* A general description of the coop timeline: starting from collecting user requirements, writing tickets, designing MockFlow UI, and eventually coding

To address those issues and release some burdens for the data group, we almost start from scratch.

[Picture illustration for the coop timeline]

Then quickly name all the process.

**\*\*Project Demo\*\* (23 min)**

* General layout
  + Login (white list) -> user account -> access
  + Record tabs based on URL
  + Local storage& session storage
  + Route guard (white list, token, role, max tab restriction)
  + Idle: 30 min -> auto logout, but not
  + Admin: re-auth
  + Idle 5 min -> re-auth
* UPC
  + Auto-fetch
* Billing
  + Pauline
* Work in List (ToDo + list\*2)
  + Pauline

**Summary of current progress (3 min)**

* Current outcome of this project

**Next Steps (5 min)**

* What will I suggest for the next step of this project?
* How can it be improved later?
* What will be the future vision?

Next step: connect to PostgreSQL db, KeyClock

Future improvement:

More user roles such that each employee is responsible for one or multiple states instead of all states.

Batch processing – both UPC and BR

Enable notification like when their to-dos are stolen

Tab switching based on url, so maybe cache contents on each tab

We can also talk about how the future vision aligns with CLYNK’s expectations as this project is moving forward. There will be long-term benefits vs challenges.

**Learnings (10 min)**

* What do I learn from this coop (2-3 bullet points like cross-team collaborate)
* What skill do I grow during this coop
* What I can do better
* How does this coop impact my long-term career growth

**How did the Coop go in general? (3 min – more target directors like Dan)**

* Was it good? Which part is good?
* What could be improved in the future?

**Show Gratitude (2 min)**

I appreciate the incredible learning journey I experienced here. This Co-op will be a transformative chapter in my professor career.

(Thank you reference for Dan / Gus / Eliza / Travis / Matt / Adon)

**Q&A (10 min)**

[Picture illustration for Q&A]

Audience:

1. Director: impact, cross-team cooperation, how it improves the company
2. Team: design flow and project details, why decision & personal experience

**Self-Introduction (2 min)**

**Script:** Good afternoon everyone! My name is Y [or insert name]. Over the past 6 months, we have had the incredible opportunity to join the development team here at Clynk. Today, as we wrap up this rewarding journey, we are excited to share what we’ve accomplished and learned along the way.

Starting from July, we worked on a project to rewrite the billing application, which will be used by the data team — who are conveniently sitting over there [gesture to data team].

**Background Problem (3 min)**

**Script:** To give you a little bit of background, let me explain what this billing app does and why this project is so important.

The first big concept is the UPC code. [Engage audience]: *How many of you here are familiar with the UPC code?*

* [Option 1]: "Essentially, it’s the barcode you see along the side of a bottle. And each beverage theoretically has its own UPC code."
* [Option 2]: *"Looks like everyone already knows! Let’s skip that part."*

**[Picture Illustration: Fees & Roles in the Process]** So here’s how it works:

1. **State Law**: Every bottle is charged with a **deposit fee**, **handling fee**, and a **pickup processing fee**.
2. The bill varies depending on:
   * **Initiator (Init)**: The ones billing customers.
   * **Distributor (Dist)**: Those who bring products into the state.
   * **Pickup Agents (PA)**: Responsible for collecting bottles after recycling.

**[Picture Illustration: The Nickel Cycle]** Clynk’s role is to ensure customers get their nickel back. Part of our salaries are actually funded by the pickup processing fee. So, as you can see, this process plays a critical role in supporting the entire business.

**[Picture Illustration: Existing System & Issues]** The current billing app (under Elva) works, but it has its limitations:

1. **Separate Functions**: Scattered and hard to maintain.
2. **Separate Databases**: Pickup processing and state data are isolated.
3. **Performance Issues**: Slow and unscalable.
4. **Complex Operations**: Hard for beginners to learn and use efficiently.

As Clynk expands into multiple states, these issues become more critical, leading us to take on the challenge of rewriting this app.

**Project Workflow (2 min)**

**Script:** To address these challenges and make life easier for the data team, we started almost from scratch. Here’s a quick overview of our project timeline:

**[Picture Illustration: Co-op Timeline]**

1. **Collecting User Requirements**: Conversations with stakeholders.
2. **Writing Tickets**: Breaking features into manageable tasks.
3. **Designing UI**: Using MockFlow to create wireframes.
4. **Implementation**: Coding the desktop app using Electron, Vue, and TypeScript.

**Project Demo (23 min)**

**Script:** Now, let’s dive into the heart of the project: the application itself.

**General Layout**

1. **Login System**:
   * White-list-based login for security.
   * User accounts are role-based for access control.
2. **Record Tabs**:
   * Tabs are dynamically rendered based on the URL.
   * Local storage and session storage are implemented for efficiency.
3. **Route Guard**:
   * Role-based access, token validation, and tab restrictions.
   * Idle timeout:
     + **30 minutes**: Auto logout (secure session management).
     + **5 minutes**: Re-authentication for admins.
4. **UPC Management**:
   * Auto-fetch feature to simplify UPC data retrieval.
5. **Billing Functionality**:
   * A user-friendly billing workflow.
6. **Work in List**:
   * To-Do tasks + two list views for better task management.

**Live Demo**: [Walk through each of the above features with visual illustrations on screen].

**Summary of Current Progress (3 min)**

**Script:** Here’s where the project stands today:

* A new, streamlined billing application has been successfully developed.
* Core features like login, UPC management, and billing workflows are in place.
* The system is designed to be scalable, maintainable, and user-friendly.

**Next Steps (5 min)**

**Script:** While we’ve made great progress, there’s always room for improvement. Here are my suggestions for the next steps:

1. **Database Integration**:
   * Connect the app to a PostgreSQL database for better data management.
   * Implement Keycloak for enhanced authentication and authorization.
2. **Enhanced User Roles**:
   * Assign responsibilities for specific states to streamline operations.
3. **Batch Processing**:
   * Enable batch uploads for UPC codes and billing records.
4. **Notifications**:
   * Add alerts when a user’s to-do tasks are reassigned.

**Future Vision**: This app has the potential to become a one-stop solution for billing and data processing across all states where Clynk operates.

**Learnings (10 min)**

**Script:** Reflecting on this co-op, here are my key takeaways:

1. **Cross-Team Collaboration**:
   * Working with stakeholders across teams taught me the importance of clear communication and aligning goals.
2. **Technical Skills**:
   * Gained hands-on experience with Electron, Vue, and TypeScript.
   * Learned how to design scalable systems and manage complex workflows.
3. **Problem-Solving**:
   * Overcame challenges like performance bottlenecks and data handling.

**Personal Growth**: This co-op has not only improved my technical expertise but also shaped my ability to manage projects and think critically. It has been a stepping stone toward my long-term goal of becoming a full-stack developer.

**How Did the Co-op Go? (3 min)**

**Script:** Overall, this co-op has been a fantastic experience.

* **What went well**: The support and guidance from mentors like Dan, Gus, and Eliza helped us stay on track and learn effectively.
* **What could improve**: Perhaps more structured onboarding for future interns would help kickstart projects even faster.

**Show Gratitude (2 min)**

**Script:** Before wrapping up, I want to express my gratitude to everyone who made this experience special.

* To **Dan, Gus, Eliza, Travis, Matt, and Adon** — thank you for your mentorship and support.
* This co-op has been a transformative chapter in my professional journey, and I truly appreciate the opportunity to learn and contribute.

**Q&A (10 min)**

**Script:** Thank you all for your attention! I’d now like to open the floor for any questions you may have.

**End of Presentation.**