

Projects & Case Studies

DARK MODE

Overview: The UW Credit Union brand is very light with a lot of white and light gray. At night or in bright light, the banking app could be very difficult to look at and use.. Some staff reported they suffered from migraines so they quite often use dark mode for their apps. Frequent member and staff requests made dark a feature I wanted to give to them.

My Role: UX Engineer, Project Lead, Delivery Manager

My Tools: CSS/SCSS, HTML, Illustrator, Photoshop

My Process:

- Made a plan of the steps needed to prepare our static bundles and assets in order to implement dark mode
- Planned what digital properties would get dark mode: Mobile App, Web Branch, Sales and Account Openings Application, style guide and prototype
- Planned to implement a three tier color system with a combination of SASS vars and custom properties.
- Pared down the many shades of gray
- Changed all colors from HEX/RGBA values to HSL/HSLA values
- Developed the three tier color system
- Tier 1 - base/brand colors (red, blue, grays, etc.)
- Tier 2 - property colors (text colors, background colors, border colors, shadows, etc.)
- Tier 3 - component colors (buttons, links, headings, etc.)
- Cleaned up the SASS/CSS and made sure all color properties had an appropriate SASS variable, either from Tier 2 or 3
- Converted Tier 1 SASS variables to Custom Properties/CSS vars
- Created new CSS bundles to include Dark Mode
- Updated style guide to use dark mode
- Worked with another Senior UX Engineer for feedback
- Partnered with software engineers to create a feature gate
- Cleaned up and reorganized images into new assets folder
- Created some dark mode images and partnered with Marketing for creating some additional images for dark mode
- Uploaded and published all new images
- Implemented the light and dark mode images in markup with <picture> element and feature gate using a reusable component for all digital properties getting dark mode
- Implemented the new CSS bundles, feature gate and prefers-color-scheme meta tag in the <head> tag of all digital properties getting dark mode.
- Tested dark mode in all digital properties and made bug fixes wherever necessary

- Conducted a team teach for other UX engineers on how to do new images and create new components with light and dark mode
- Used feature detection to warn IE users we were going to end support for IE soon.
- Waited for the company to stop support for IE in June 2022
- Released all CSS and markup changes to production
- Turned on an employee only pilot of Dark Mode
- Go live in December 2022 in coordination with a new major app release

Links and Screens:

- [Figma File](#): includes, Auto Loan Find Your Rate & Apply, Mobile App Onboarding Online Banking and Style Guide screens
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DESIGN SYSTEM DOCUMENTATION

Overview: Since starting at UW Credit Union in 2015, I have been the co-owner of the Design System. In that time, we have gone through two redesigns, a conversion to SASS, added many new components and much more. Our team has tripled in size since 2015. Over the years I had studied other companies' design systems and in 2021, I recognized a need to change our static HTML style guide into something we could update easier, faster and have more features available. Some requirements were: flexible Information Architecture, code snippets, easily copy code, easy to publish without pull requests and approvals, easily allow non-engineers to update, ability to search content would be a huge bonus.

My Role: UX Engineer, Co-Owner, Researcher, and Delivery Manager

My Tools: Zeroheight, CSS/SCSS, HTML, Iconmoon, Illustrator, Photoshop, Typography.com, Adobe Fonts, Slack Design System Channel, Miro

My Process: I joined a Slack Channel on Design Systems to see what other businesses were using to document their design systems. After gathering a list of potential documentation tools, I researched each one for the features and requirements we were looking for. I signed up for free trials, watched videos, read documentation and finally landed on using Zeroheight as the overall fit for our team.

In the second phase, I enlisted the team to share what they would like to see in the documentation tool. Then I mentored another UX Engineer to lead the work on executing information architecture for the new site. We looked at other companies' Design Systems and conducted a card sort with our fellow UX engineers. Meanwhile, I worked on setting up the styles, fonts and javascript in Zeroheight's admin settings.

After the information architecture was determined, we enlisted the rest of the team to move content from the static site to the new Zeroheight site. This gave everyone an opportunity to get familiar with the new tool and to also feel like they were co-owners.

I suggested we give our new site a new name and together we came up with the “Galaxy”. I then worked with our DevOps team to secure a new subdomain and coordinated the new subdomain with Zeroheight.

We have since expanded our site content to include many more things than the previous style guide offered, like accessibility statements & guidelines, detailed how-tos and much more. The new site is far more robust and stays current.

Links and Screens:

- Static Style Guide: <https://static.uwcu.org/StyleGuide/Patterns>
 - New: <https://galaxy.uwcu.org/> pw: 8675309
 - [Figma File](#): Includes screens for the static HTML style guide and the new Galaxy Design System powered by Zeroheight
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LOAN APPLICATIONS

Overview: A multi-year, multi-phased project to modernize all loans and lines applications (Personal, Auto, Recreational, RLOC, HELOC and Credit Cards) by leveraging technology and views recently developed for the New Membership Application. This move to modernize the code base would set the stage for future enhancements. But the main goal was to retire the legacy Consumer Lending Application system and eliminate tech debt. The new system must have the information the staff needs to make a loan decision. Also, the solution would need to allow members as well as non-members to apply,

My Role: UX Engineer, UX Researcher, Project Lead

UX Methods: UX Research, Wireframing, Prototyping, Usability Testing, Flow Diagrams, MSCW (must haves, should haves, could haves, won't haves), 6 Questions Exercise

My Tools: Figma, usertesting.com, Illustrator, HTML, CSS/SCSS, JavaScript, Visual Studio, Azure DevOps, OneNote, Miro

My Process: We decided as a team we would build out the Personal Loan Application first. Then we would use the foundation we built to add the other loan and line types (see Overview for all types).

I started my research by looking at the quantitative data we had at the company like, Analytics, Voice of the Member Surveys, Marketing Research, Raddon Reports, 2019 Personal Loan Statistics (purposes for the loan, loan amounts, and credit scores) and Stakeholder

Interviews. Next, I used the quantitative data to inform my qualitative research. I started with competitive research looking at financials and fintechs. I then conducted User Interviews on people who recently applied for a personal loan at different credit scores. I used my learnings from my user interviews to create 3 user journey maps, documenting their journey through discovery, research, applying and post application process. I presented my quantitative research, qualitative research, and journey maps to a cross-functional team.

When digging into the reasons someone may want a personal loan, I discovered many users marked “other” because they had more than one reason to get a personal loan, like paying off debt and making a purchase. I analyzed a spreadsheet of all the reasons people entered and categorized them. I also looked at competitors’ UI for categories and reasons to align on the right taxonomy.

I ran a problem statement and a how might we workshop with a cross functional team to generate a variety of potential solutions to some of the most common problems users have when applying for a personal loan.

I took the results from the workshop and began to diagram user flows and wireframe the potential solutions. The previous UI didn’t give an option to enter more than one reason. I knew the new solution should include ideas to allow the user to choose more than one reason for the loan and should also educate them on what they could or could not use a personal loan for. If they couldn’t use personal loan funds for a particular purpose, we would recommend a product or service that could work for their needs..

I shared wireframes of the potential solution ideas with the software engineers first to gather feedback and to make sure the solution was feasible. Once we were all in alignment, then I would share the wireframes with the stakeholders. I took feedback from both the software engineers and the stakeholders and made adjustments to the wireframes.

The steps were to do high-fidelity prototypes (using near production quality code), to write and conduct an unmoderated usability test. I would then analyze the usability test and decide from the learnings I discovered if I should make any changes and retest. I would later share any usability finds with the cross-functional team along with any changes I made to correct those findings.

The next step was to document the prototype and any expected interactions. Then lastly but most importantly work with the development team throughout the delivery process, including refinements and phased approaches if necessary.

I repeated many of the steps I outlined above throughout the discovery and delivery process for Credit Cards, Auto Loans, Recreational Vehicle Loans, Home Equity Lines, and Reserve Lines of Credit Application.

User/UX Goals:

- Reduce time needed to complete the application
- Increase confidence and reduce anxiety for applicant about
 - What to expect during the application process
 - What rate ranges we offer
- Make it easier for applicant to communicate intent/purpose of the loan to the underwriter

Business Goals:

- Modernize code base
- Reduce/eliminate apps submitted with incomplete information
- Reduce/eliminate misconception that everyone will receive the promo rate

Links and Screens:

- [Personal Loans Research Deck](#) - Powerpoint on research conducted for Personal Loans
- [Personal Loans - Find Your Rate & Apply](#) - Include flow diagrams, workshops, wireframes and screenshots

FIND YOUR RATE

Overview: Give users more confidence when they are in search of a loan that they will be approved and they can afford the payment before they apply. We will do this by showing them their own personalized custom rate and payment based on a soft credit pull or equity in their home. This project was planned to be a fast follower to modernizing the loan application project and the experience would be placed before they would begin their loan application. Find your rate is a part of the “consideration” phase of a user journey. When they apply, they have tipped over from “consideration” to “decision”.

My Role: UX Engineer, Project Lead, UX Researcher, Mentor

UX Methods: Competitive Research, Stakeholder Interviews, How Might We Workshop, MSCW Workshop (Must Haves, Should Haves, Could Haves, Won't Haves), Flow Diagrams, Wireframes, Prototypes, UX Copywriting, Usability Testing,

My Tools: HTML, CSS/SCSS, Javascript, usertesting.com, Visual Studio, Azure DevOps, OneNote, Miro, Figma

My Process: We learned a lot in the modernized loan application project about user pain points and business needs. Some of the lessons learned carried over to the Find Your Rate problem and solution space. We conducted additional workshops and exercises similar to the loan application project, like stakeholder interviews, How Might We, MSCW, etc.

Based on the workshops and exercises, I updated flow diagrams from the loan application project and wireframed potential solutions for the Find Your Rate tool.

Again, I shared the updated flow diagrams and new wireframes with the software engineers to gather feedback and to make sure the solution was feasible. Once we were all in agreement, I shared them with the stakeholders. I took feedback from both the software engineers and the stakeholders and made adjustments to the flow diagrams and wireframes.

The steps were to do high-fidelity prototypes (using near production quality code), to write and conduct an unmoderated usability test. I would then analyze the usability test and decide from the learnings I discovered if I should make any changes and retest. I would later share any usability finds with the cross-functional team along with any changes I made to correct those findings.

The next step was to document the prototype and any expected interactions. Then lastly but most importantly work with the development team throughout the delivery process, including refinements and phased approaches if necessary.

I repeated many of the above steps throughout the discovery and delivery process for Auto Loans.

The Find Your Rate project also included finding Home Equity Line of Credit rates as well as allowing non-members to find their rate on HELOCs, Auto Loans and Personal Loans . Instead of taking the lead role for these phases of the project, I mentored another UX Engineer with their discovery and delivery process.

User/UX Goals:

- Users have more confidence and less anxiety they will qualify for a loan and it will meet their budget and goal
- Feels fast/simple/easy/secure
- View and understand options available to them
- Will they save money
- Will it impact their credit score
- Understanding the application and post-application process
- Fast turnaround and decision on their loan app
- Modern UI/UX

Business Goals:

- Fewer application abandonment, more apps originated,
- more offers communicated on screen before application
- Leads to faster app turnaround, more apps originated to decisioned, less effort to staff if they don't need to reach out as often
- Increased member satisfaction/Decreased member complaints
- Less apps approved not taken
- Compete with our competitors
- More memberships with loans as the driver

Links and Screens:

- [Personal Loans - Find Your Rate & Apply](#) - Figma files - Include flow diagrams, workshops, wireframes and screenshots
- [Personal Loans Find Your Rate and Apply](#) - Interactive HTML/CSS/JS prototypes

- [Auto Loans Find Your Rate and Apply](#) - Interactive HTML/CSS/JS prototypes

Ask me about these other projects:

- Document Verification
- New Membership Application
- Brand Refresh
- Public Site Design & Development on a CMS
- SASS Conversion
- Card Management
- Credit Card Offers
- Credit Card Upgrades & Limit Increases
- Credit Card Upgrade Invitation
- Dispute Card Transactions
- Notification Management
- Loan Portal: document upload, loan status & communication
- Zelle Integration into the banking app
- Mortgage Rate Quote
- Help Center
- Mortgage Application Single Sign On
- Dashboard Organization
- Hackathon - React Components Proof of Concept
- Membership Qualification Revamp
- Sales and New Accounts Template Design
- Dashboard Redesign - Coming Soon
- Digital Card Issuance - Coming Soon