



Milestone 2: UI Design

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About the UI Design and UX

The following document will provide a visual demonstration of the user interface for the inventory management system application, **SimplyManage**. Due to the short time constraint for this assignment, the following wireframes and designs are intended only for the purpose of visually understanding the overall application structure and layout. Design elements may adapt and be implemented differently from what is presented below. Nonetheless, the core functionality and user experience should retain the initial design demonstrated here.

Additionally, having attempted to use an industry standard tool such as Figma, we encountered a learning curve and found it challenging to bring our ideas about design into actual visual references due to the unfamiliarity with the platform.

Target Users

The target users for the SimplyManage inventory management and check-in/out web application would be organizations or businesses which rely on an organized structure of their companies physical (or digital) assets, whether it be simply for organizational purposes or for create a borrowing system.

SimplyManage will allow for users to be assigned various roles (default is customer / basic user), staff, or admin. The basic user interface will allow employees or students to view the available catalog of items that are offered. The staff will be able to process these loans, and the admins will be able to curate what categories and items are available. Admins will also be able to add the actual assets for each item.

General Purpose

The **SimplyManage** Inventory Management and Check-In/Out Web Application is designed to provide organizations and businesses with a structured, role-based system for managing their physical or digital assets. Its core purpose is to streamline the process of organizing, tracking, and lending items, whether for equipment borrowing, office supply management, or digital resource tracking. The system introduces a clear hierarchy of roles: admins curate and maintain the catalog of categories, items, and assets; staff handle operational workflows such as approving, checking out, and checking in loans; and borrowers (employees, students, or general users) can browse available items, add them to a cart, and submit loan requests. This approach ensures an efficient and transparent asset management process, reducing manual recordkeeping and minimizing errors in lending workflows.

From a technical perspective, SimplyManage is built as a web-based, database-driven system utilizing a relational backend to maintain data integrity. Key features include hierarchical category organization, item lifecycle management (with shallow deletes and activation flags), and transactional loan processing with overdue detection. Overall, SimplyManage delivers a robust, scalable, and role-aware solution for organizations seeking to digitize and automate their inventory and lending workflows.

We have decided that it is best to implement this project as a full-stack web application as this will allow for users to be able to access a service that is in high demand in certain companies with ease and not reliant on a certain device. Additionally, developing this as a web application allows us to make this scalable and easy to adapt with modern technologies and frameworks.

LANDING PAGE

admin user header



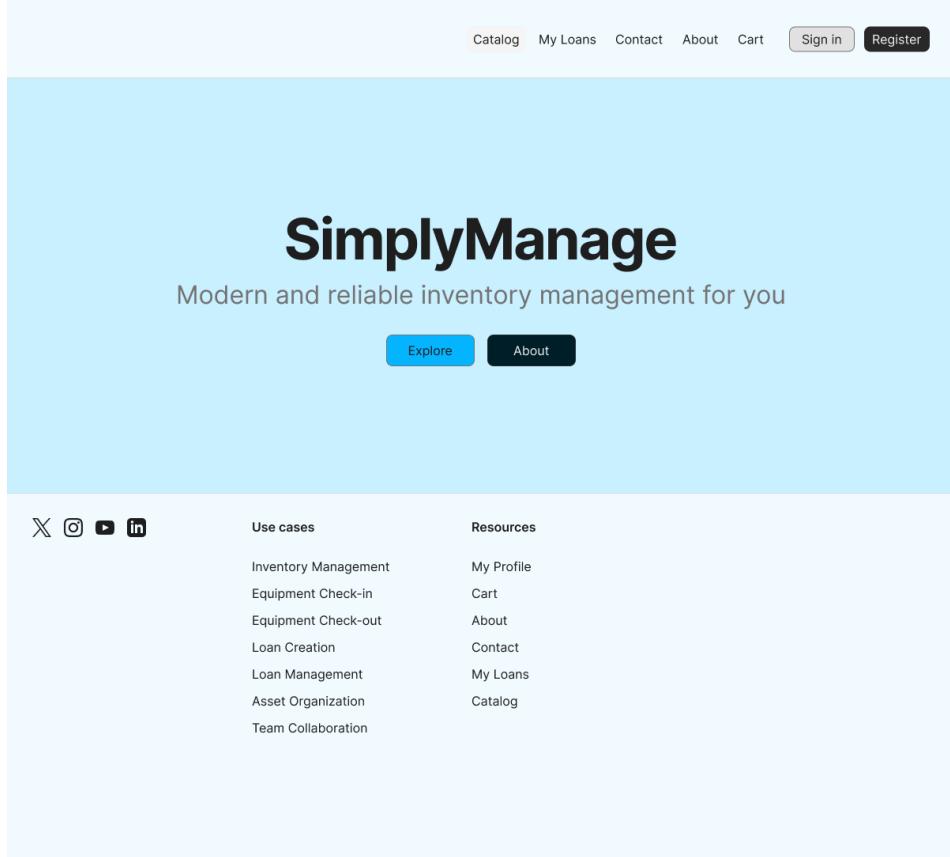
staff user header



logged in user header



not logged in user landing page



Purpose / Use

The main landing page will serve as the welcome page for all newly incoming and returning users. This page will provide a simple introduction to the web app, allowing the user to navigate to various pages of the app through the top nav bar as well as the two buttons in the center of the screen. The header and footer will be present as an element of every other page within the web app, allowing for simple navigation between the different pages. Furthermore, based on the users' role, the header will contain additional features for staff, such as the page for processing loans, and the admin panel for the actual customization of the various categories, items, adding items, and more. From this page, every user should be able to navigate to every other important page of the application.

ABOUT / CONTACT PAGE

Catalog My Loans Contact About Cart (0) **My Profile** Process Loans

About this system

A unified platform for managing inventories.

Brief Introduction: System overview, Security

Body text for whatever you'd like to say. Add main takeaway points, quotes, anecdotes, or even a very very short story.

Changelog / Updates

Subheading

Title
Body text for whatever you'd like to say. Add main takeaway points, quotes, anecdotes, or even a very very short story.
[Button](#)

Title
Body text for whatever you'd like to say. Add main takeaway points, quotes, anecdotes, or even a very very short story.
[Button](#)

Title
Body text for whatever you'd like to say. Add main takeaway points, quotes, anecdotes, or even a very very short story.
[Button](#)


[Email](#)
[Phone](#)

Contact & Support

Resources

My Profile
Cart
About
Contact
My Loans
Catalog

Purpose / Use

The about page will focus on technical details about the management system. It will elaborate on how it manages information and reaches security and convenience. It will also showcase the changelogs of the system and provide contact information in case users encounter any problems or have any doubts about the system.

EXPLORE / CATALOG

The mockup displays the 'Explore / Catalog' page. At the top right, there is a navigation bar with links: Catalog, My Loans, Contact, About, Cart (0), and My Profile. On the left side, there is a sidebar containing three filter sections: 'Show Only Available Description' (checked), 'Some other filter Description' (checked), and 'Some other filter Description' (checked). Below these are three category navigation buttons: 'Parent Category', 'Child Category', and 'Child Category'. The main content area shows a grid of six items, each represented by a placeholder image of a camera. Each item has a label 'Item' and two buttons: '[DETAILS]' and '[ADD TO CART]'. At the bottom of the grid, there is a pagination section with arrows for 'Previous' and 'Next', and page numbers 1, 2, 3, ..., 67, 68.

Use cases

- Inventory Management
- Equipment Check-in
- Equipment Check-out
- Loan Creation
- Loan Management
- Asset Organization
- Team Collaboration

Resources

- My Profile
- Cart
- About
- Contact
- My Loans
- Catalog

Purpose / Use

The explore / catalog page will provide the user with one of the core functionalities of the application, that is, to be able to browse and explore the various items that the organization has to offer through categories and by search. The user will be able to narrow their search by selecting the appropriate categories through a sophisticated navigation menu component that will be developed. Additionally, from this page, the user will be able to move over to a detailed page view for any item they choose, or directly add that item to their cart.

REGISTER / LOGIN / RESET PASSWORD

The image displays three wireframe prototypes for user authentication pages, each with a header bar containing links: Catalog, My Loans, Contact, About, Cart (0), and My Profile.

- Register:** A form with fields for User Name, Email, Password, and Confirm Password, followed by a "Register" button.
- Log In:** A form with fields for User Name/Email and Password, plus links for "Forgot Password" and a "Log In" button.
- Reset Password:** A form with fields for User Name/Email, a "Send Verification Message" button, a Verification Message field, a New Password field, and a "Reset Password" button.

Each page includes a sidebar with a logo and links to various system resources: Inventory Management, Equipment Check-in, Equipment Check-out, Loan Creation, Loan Management, Asset Organization, Team Collaboration, My Profile, Cart, About, Contact, My Loans, and Catalog. Social media icons for X, Instagram, YouTube, and LinkedIn are also present.

Purpose / Use

The REGISTER / LOG IN / RESET PASSWORD pages are the component with which users can register, log in, and reset their passwords for their account.

For registration, users can input their preferred user name, email and password for it. Just as the conventions, users should correctly input their passwords twice, one for setting, one for confirmation. Once he clicks "resiger", the system will resiger an account for this user, and update its info into the database. Once registered, he will be automatically logged in.

On signing in, user should input their user name or email, and the correct password. If he inputs it correctly, he will be signed in, and have access to our system. Otherwise, an error message will be thrown to tell him to check if there is anything wrong with the user name / email or the password. If one could not resolve this issue, he could click "forget password" to reset his password.

For the reset password, user must input the email he used when registering the account. The system will check if it's in our DB, otherwise, it will throw an error message. Once the email is correctly inputted, user can click "send verification message" and expect a verification message carrying an unique code to be sent to his email address, just as convention. Then user should input the verification code and new password. Only when user correctly inputted the code can he reset the password. Once he clicked reset password. The system will update the information and he will be able to sign in via new password.

PROFILE PAGE

The wireframe illustrates the layout of the Profile Page. At the top, there is a navigation bar with links: Catalog, My Loans, Contact, About, Cart (0), and **My Profile**. Below the navigation bar is a large grid area containing several UI elements:

- A placeholder for a profile picture.
- A button labeled "Edit Profile".
- A button labeled "LOG OUT".
- A section labeled "User Name" and "User Type and Status".
- A section labeled "User Profiles".
- Two buttons at the bottom: "MY LOANS" and "CONTACT STAFF".

At the bottom left, there are icons for social media platforms: X, Instagram, YouTube, and LinkedIn. On the right side, there are two columns: "Use cases" and "Resources".

Use cases	Resources
Inventory Management	My Profile
Equipment Check-in	Cart
Equipment Check-out	About
Loan Creation	Contact
Loan Management	My Loans
Asset Organization	Catalog
Team Collaboration	

Purpose / Use

My Profile Page is the place where users can clearly view and manage their personal information. It displays the user's name, type (User, Staff, or Admin), and account status (Active or Banned). Users can easily edit their profile details, log out of their account, check their current loans, or contact staff for further assistance by clicking the corresponding button. This page allows users to intuitively understand their account status and maintain direct access to key profile actions. Due to some issues with Figma, the UI is not the same as other pages, but we will fix it in actual implementation. Styles will be consistent.

MY LOANS

The screenshot shows a user interface for managing loans. At the top, there is a navigation bar with links: Catalog, My Loans, Contact, About, Cart (0), and My Profile. Below the navigation, there are three asset cards, each with a placeholder image and a status indicator.

- Asset Name:** Overdue (red button)
Borrow date: [redacted]
Return date: [redacted]
Asset loan period: [redacted]
Quantity: [redacted]
Value: [redacted]
Check-Out button
- Asset Name:** Checked out (green button)
Borrow date: [redacted]
Return date: [redacted]
Asset loan period: [redacted]
Quantity: [redacted]
Value: [redacted]
Check-Out button
- Asset Name:** Overdue (red button)
Borrow date: [redacted]
Return date: [redacted]
Asset loan period: [redacted]
Quantity: [redacted]
Value: [redacted]
Check-Out button

At the bottom, there is a footer navigation bar with icons for Home, X, Instagram, YouTube, and LinkedIn. The "Use cases" and "Resources" sections are also present.

Use cases	Resources
Inventory Management	My Profile
Equipment Check-in	Cart
Equipment Check-out	About
Loan Creation	Contact
Loan Management	My Loans
Asset Organization	Catalog
Team Collaboration	

Purpose / Use

This section helps users manage assets they've borrowed. Users can see the status of their loans ("Checked out" or "Overdue"), along with details like borrow and return dates. They can also check out assets once returned or monitor overdue ones for follow-up.

CART

The screenshot shows a cart page with three asset items. Each item has a placeholder image, an asset name, a status tag, a description input field, a quantity input field, and two buttons: 'Remove from Cart' and 'Process Loan'.

Asset Name	Status	Description	Quantity	Action Buttons
Asset 1	Out of Stock	<input type="text"/>	<input type="text"/>	<button>Remove from Cart</button> <button>Process Loan</button>
Asset 2	Available	<input type="text"/>	<input type="text"/>	<button>Remove from Cart</button> <button>Process Loan</button>
Asset 3	Available	<input type="text"/>	<input type="text"/>	<button>Remove from Cart</button> <button>Process Loan</button>

Social Media Icons: X, Instagram, YouTube, LinkedIn

Use cases:

- Inventory Management
- Equipment Check-in
- Equipment Check-out
- Loan Creation
- Loan Management
- Asset Organization
- Team Collaboration

Resources:

- My Profile
- Cart
- About
- Contact
- My Loans
- Catalog

Purpose / Use

This section allows users to view items they've added to their cart before processing a loan. Users can check asset availability, set quantities, and either remove items from the cart or proceed to process the loan. The status tags ("Available" or "Out of Stock") help users know which assets can be borrowed.

PROCESS LOANS

The screenshot shows a web application interface for managing loans. At the top, there is a navigation bar with links: Catalog, My Loans, Contact, About, Cart (0), My Profile, and Process Loans. The main content area is titled "Pending Loans" and contains a subheading "Subheading". Below this, there are two rows of loan entries, each enclosed in a light blue box. Each entry includes a placeholder image, the asset name, the borrower's name, and three buttons: "Disapprove" (red), "Approve" (green), and "Details" (blue). The first row is labeled "Pending" and the second row is labeled "Approved". At the bottom left, there is a sidebar with social media icons (X, Instagram, YouTube, LinkedIn) and sections for "Use cases" and "Resources".

Asset Name	Borrower Name	Action
	User Name User Role User Information	Disapprove Approve
	User Name User Role User Information	Disapprove Approve
	User Name User Role User Information	Disapprove Approve
	User Name User Role User Information	Disapprove Approve
	User Name User Role User Information	Disapprove Approve

Purpose / Use

The process loan page is for faculty staff or admins. They will see pending loans from users and make decisions on whether the loans are permitted. This page will display all pending loans with loan details about the asset and the borrower. So that processors can make decisions given these details with ease.

ADMIN PANEL

The screenshot shows the Admin Panel interface. At the top, there is a navigation bar with links: Admin Panel (highlighted in dark grey), Catalog, My Loans, Contact, About, Cart (0), My Profile, and Process Loans. Below the navigation bar, the main title "Category and Item Management" is displayed in large, bold, black font. On the left side, there is a sidebar containing a tree structure for categories. It starts with "Parent Category" (indicated by a downward arrow icon), which has two children: "Child Category" and "Child Category". Below these is a blue button labeled "+ Add Category". In the center, there are two items listed in boxes: "item x" (Quantity: 10) and "item y" (Quantity: 4). Each item box contains a placeholder image, an "Edit Item" button, and a small "Add Item" button in the top right corner. At the bottom of the page, there is a footer section with social media icons (X, Instagram, YouTube, LinkedIn), a "Use cases" section listing various management functions, and a "Resources" section listing various application pages.

Use cases

- Inventory Management
- Equipment Check-in
- Equipment Check-out
- Loan Creation
- Loan Management
- Asset Organization
- Team Collaboration

Resources

- My Profile
- Cart
- About
- Contact
- My Loans
- Catalog

Purpose / Use

The admin panel is a very important page for the SimplyManage web application. Through this page, admins will be able to create the category tree, adding categories to the selected node on the left menu, and be able to add items to each category. Through this modular design, each item will then be able to store a collection of assets (visible only to the admins and perhaps the staff) where they are able to see the individual assets that are available as well as other details.