

MICHIGAN STATE

UNIVERSITY

Project Plan

Virtual Dollar Dog Store

The Capstone Experience

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*From Students...
...to Professionals*

Functional Specifications

- Virtual Store that expands existing system
 - Ease of access
 - Convenient for remote users
- Teach children about banking
- Customer and administrator support
- Multi-platform
 - Web, Android, iOS

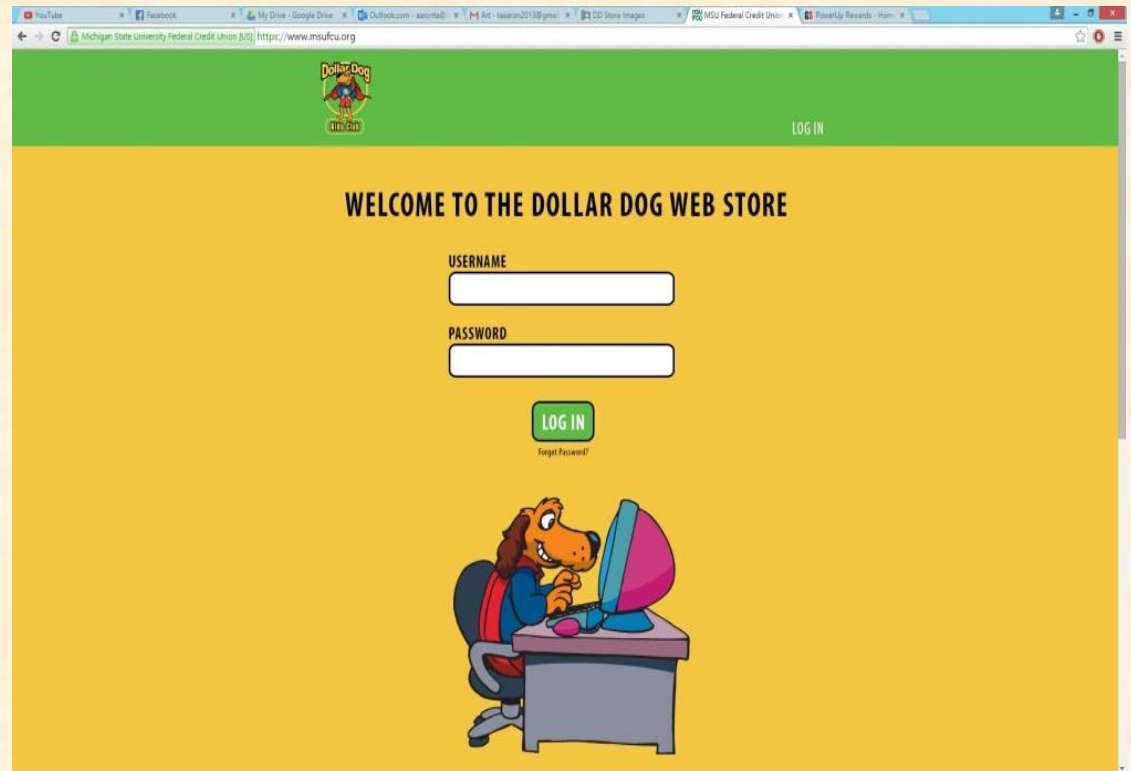


Design Specifications

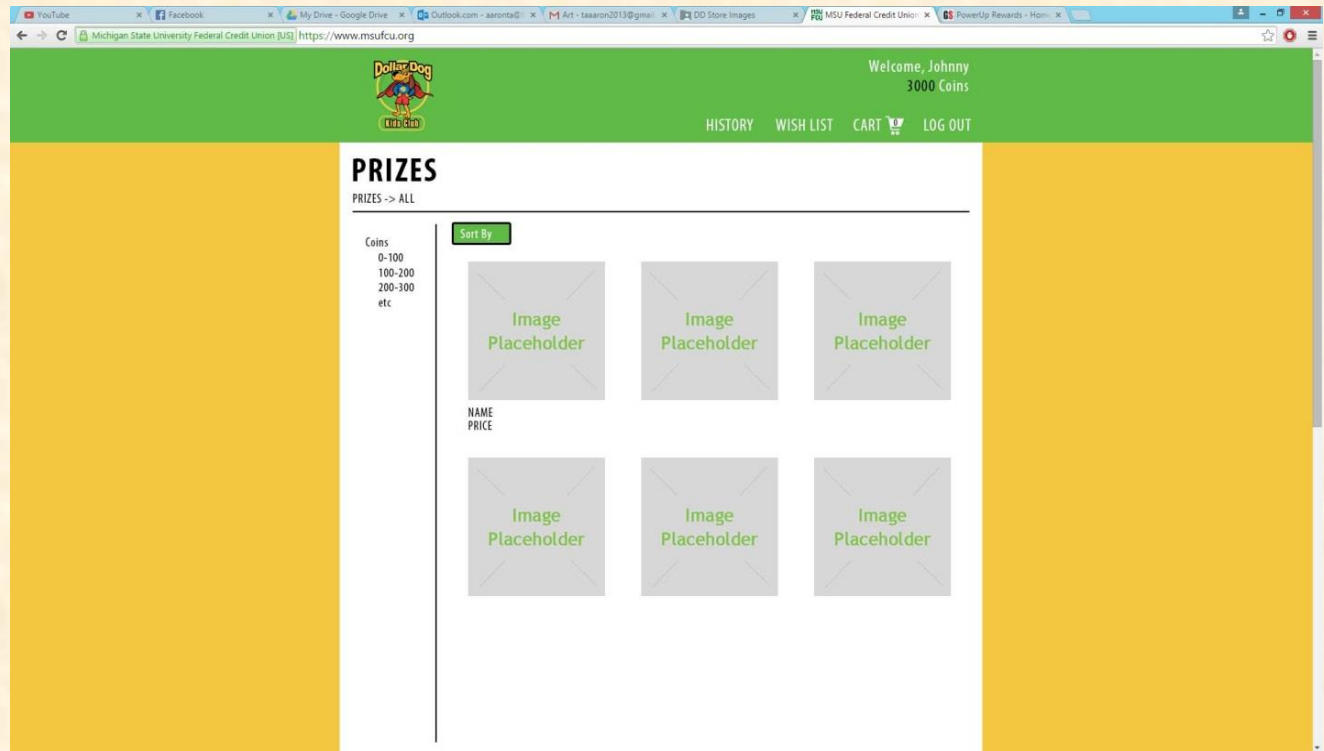
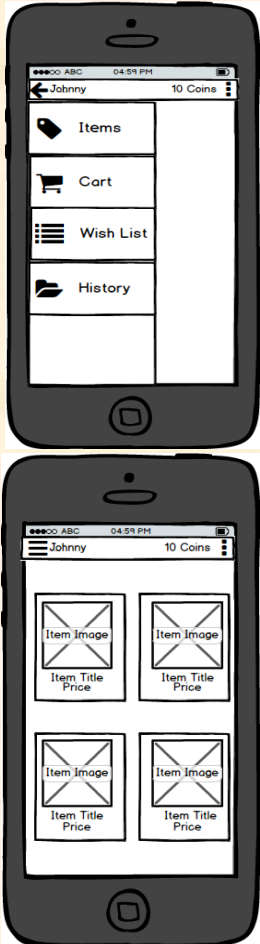
- User functionality
 - Purchase store items
 - Create a wishlist
 - Check transaction history
- Admin functionality
 - Change user coin balance
 - Update inventory and item details
- Target toward children ages 5-12
- Design should be light and kid-friendly



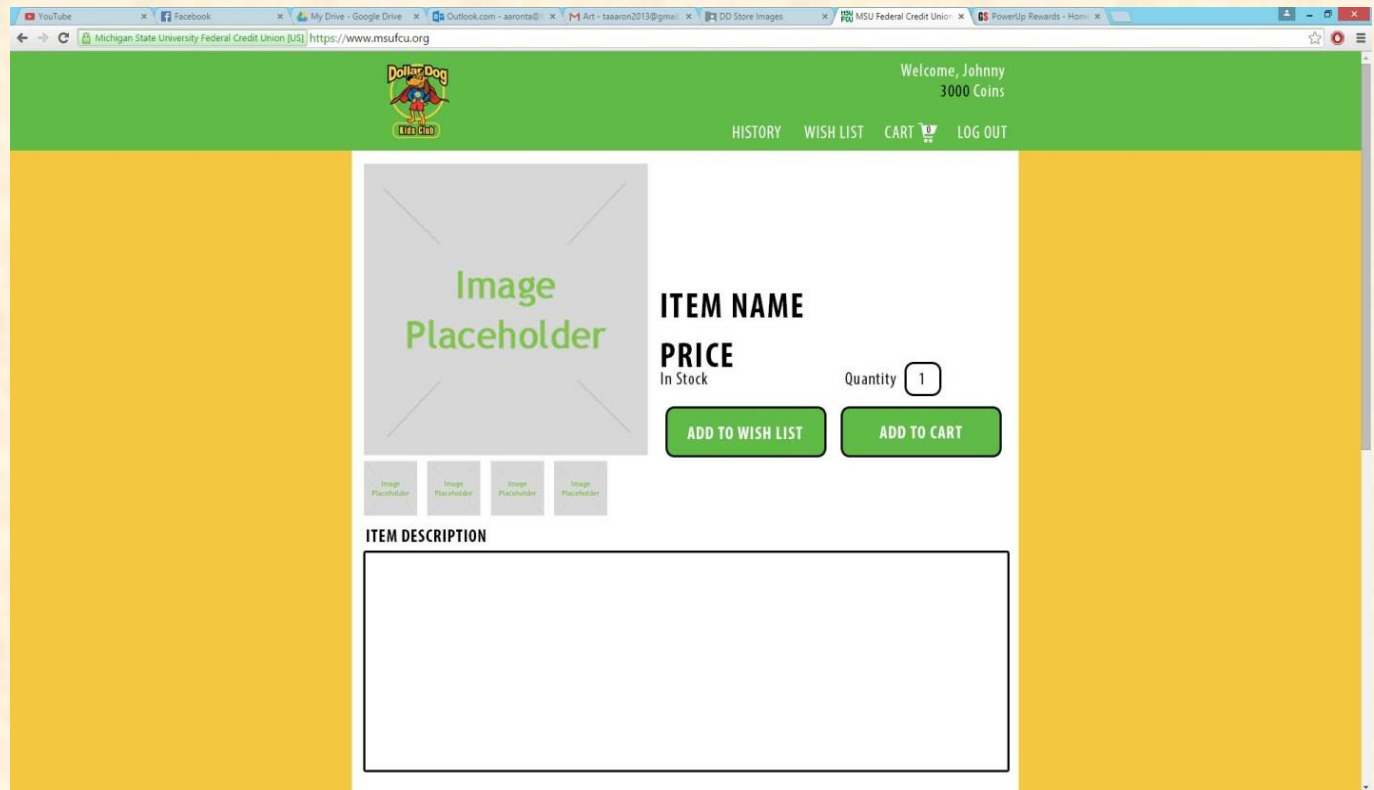
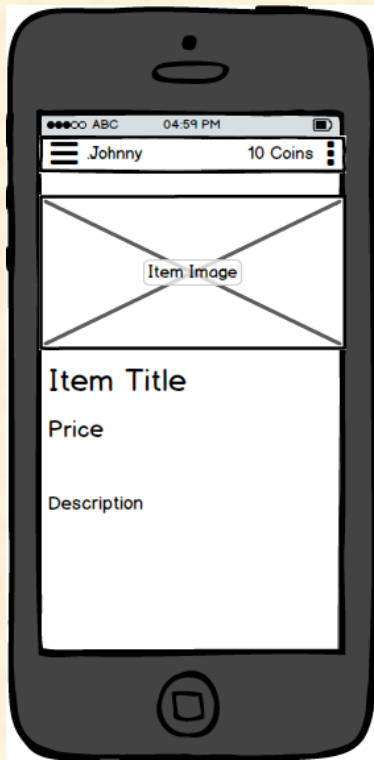
Screen Mockup: Log In



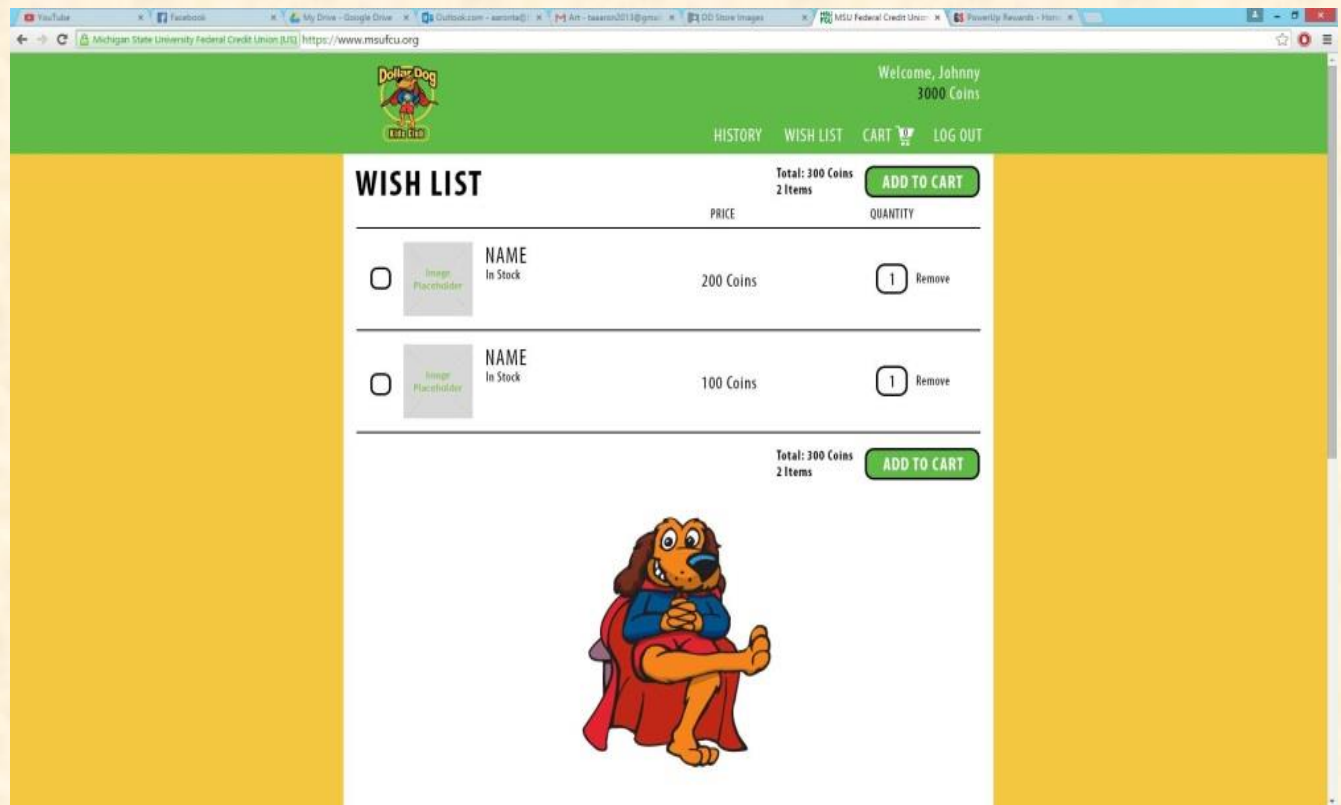
Screen Mockup: Catalog



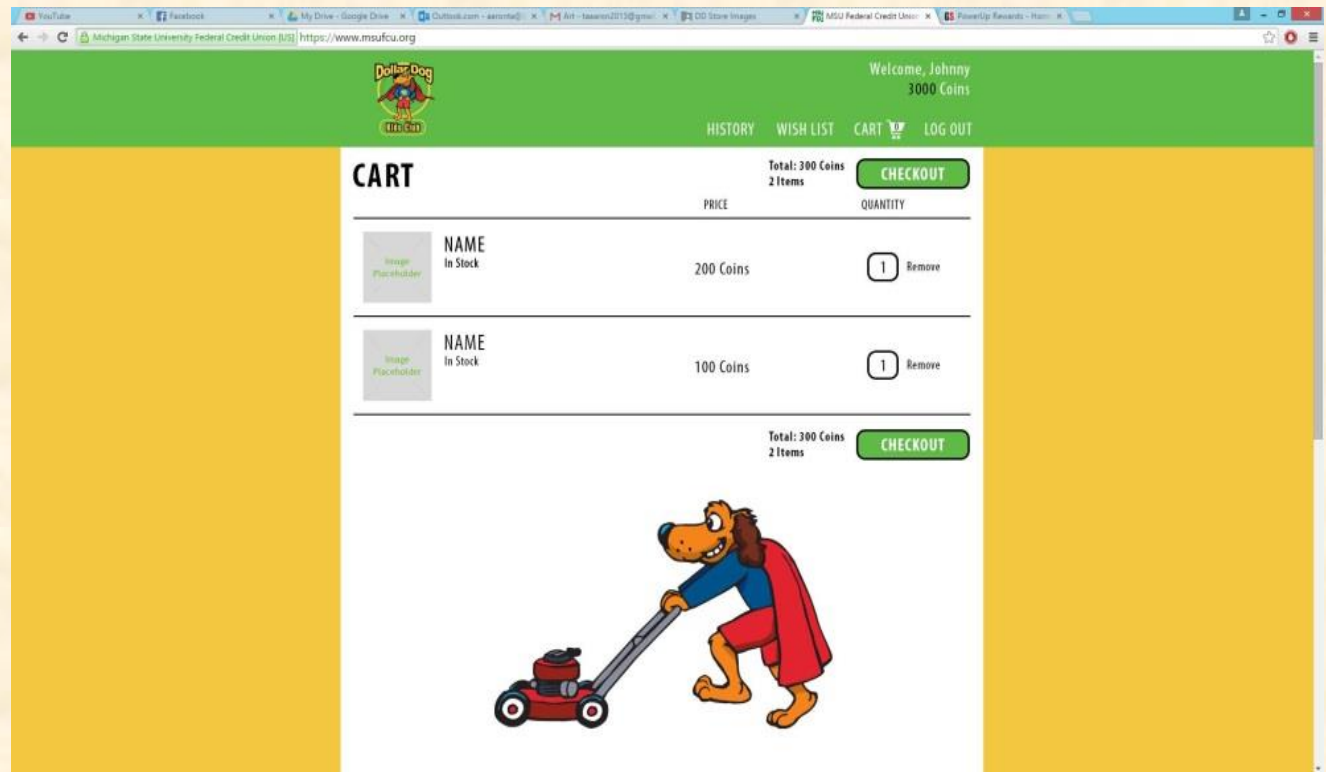
Screen Mockup: Item View



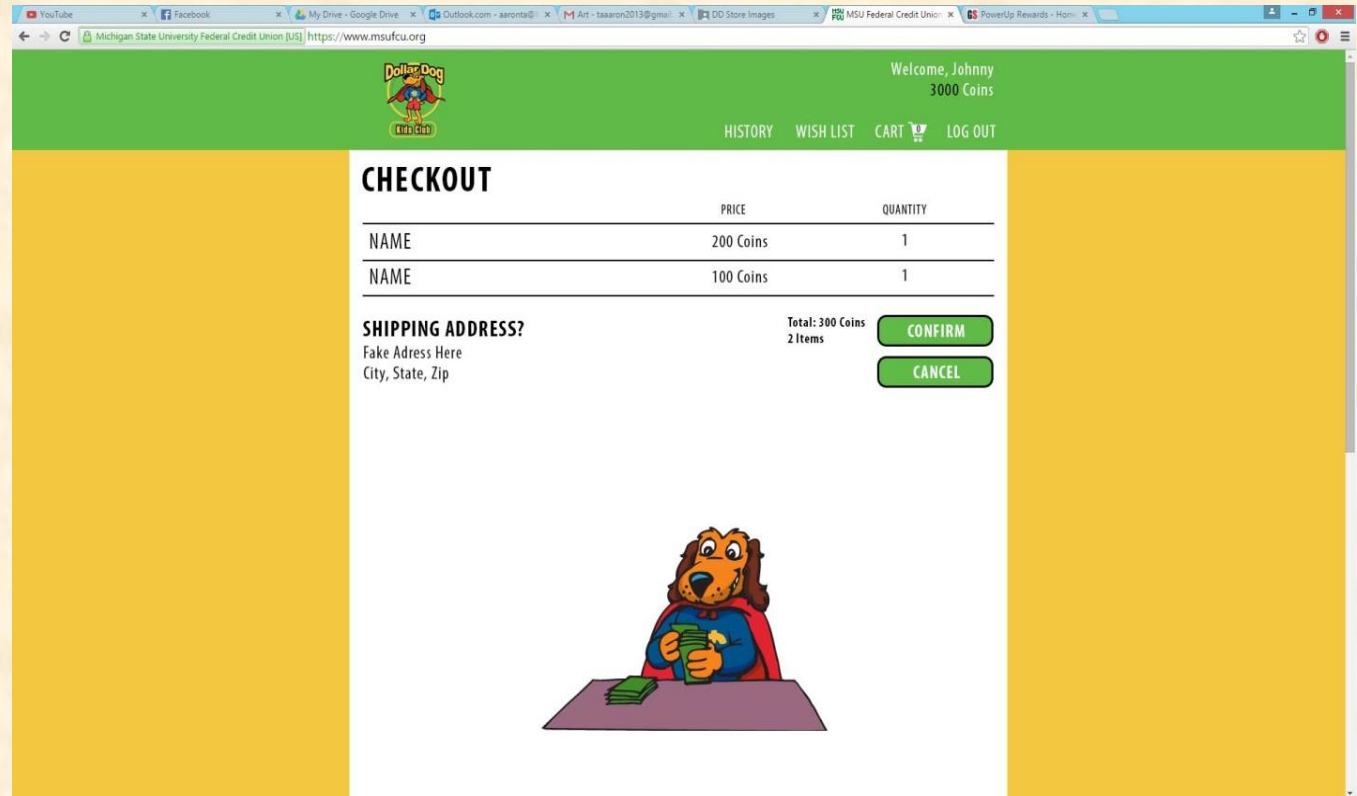
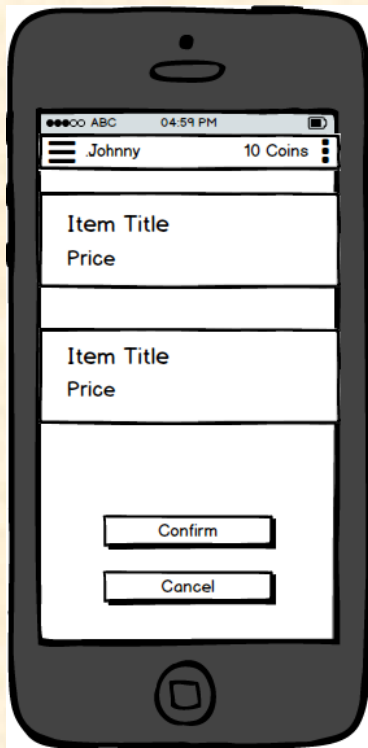
Screen Mockup: Wishlist



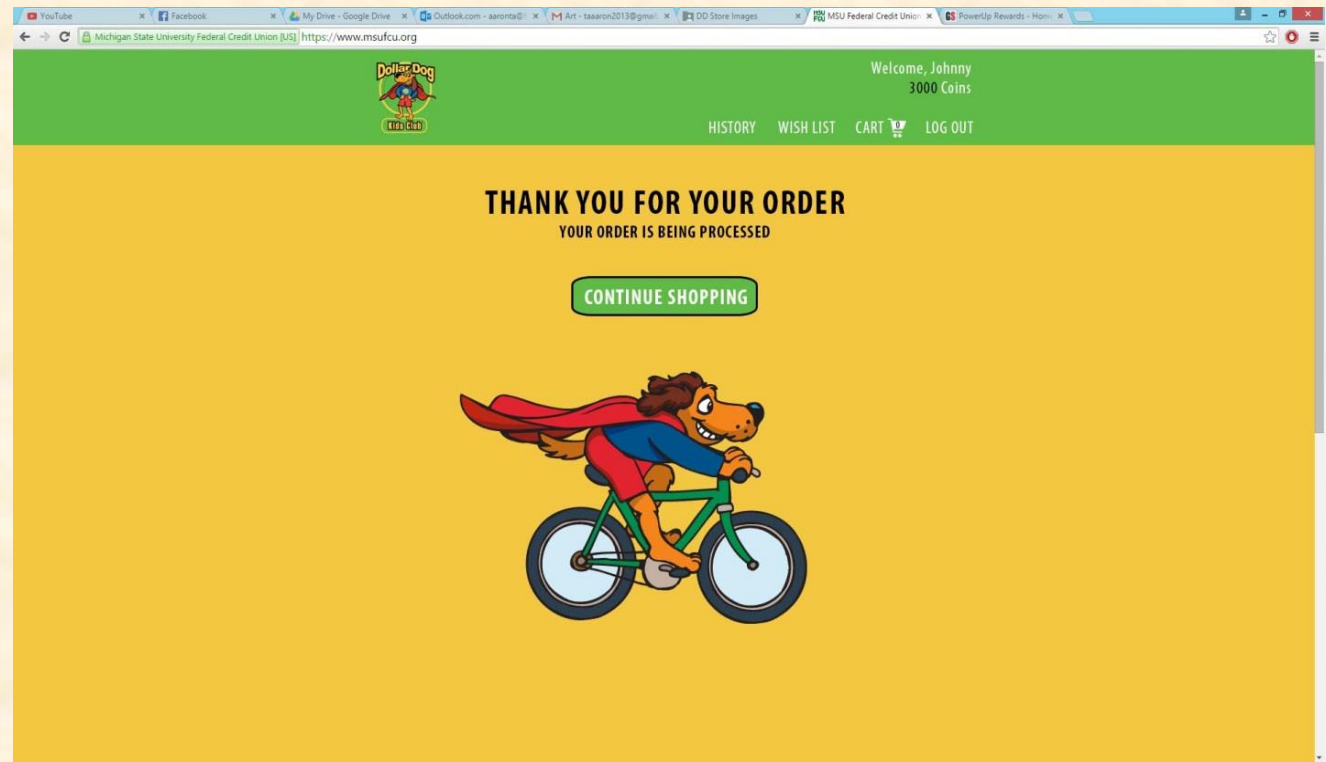
Screen Mockup: Cart



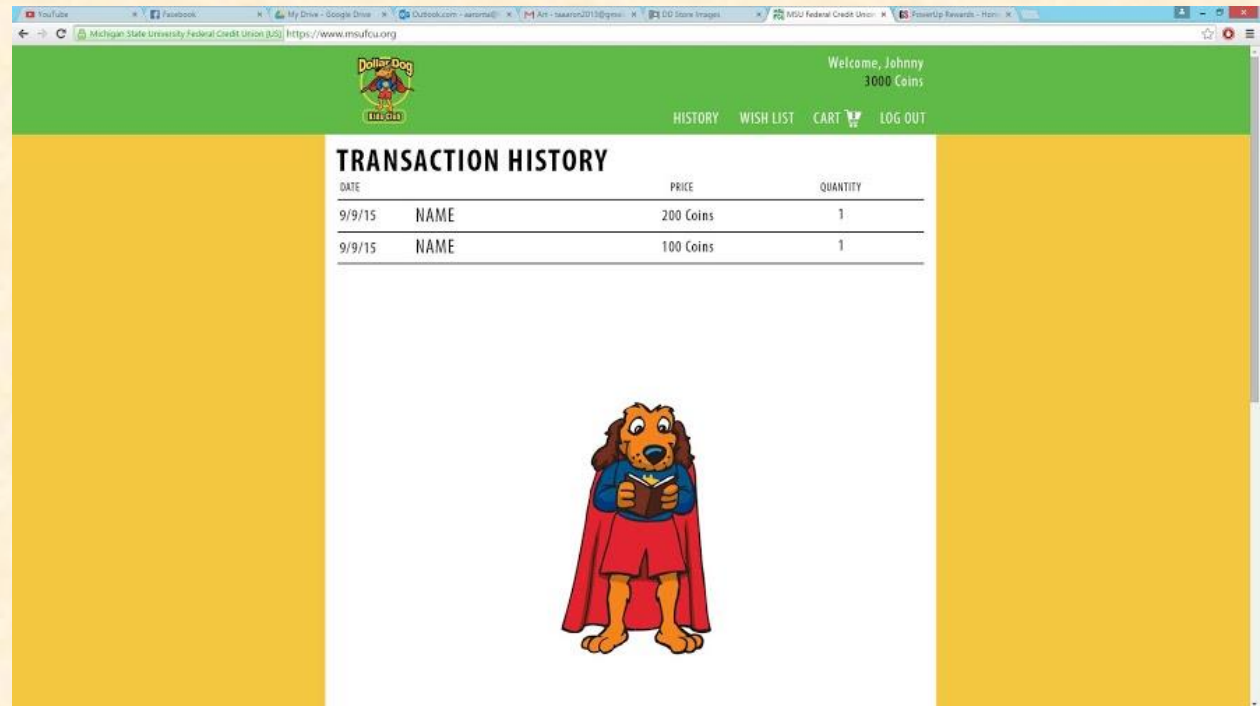
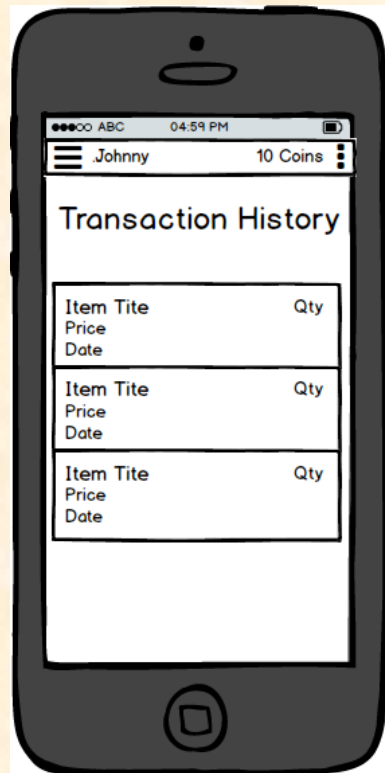
Screen Mockup: Checkout



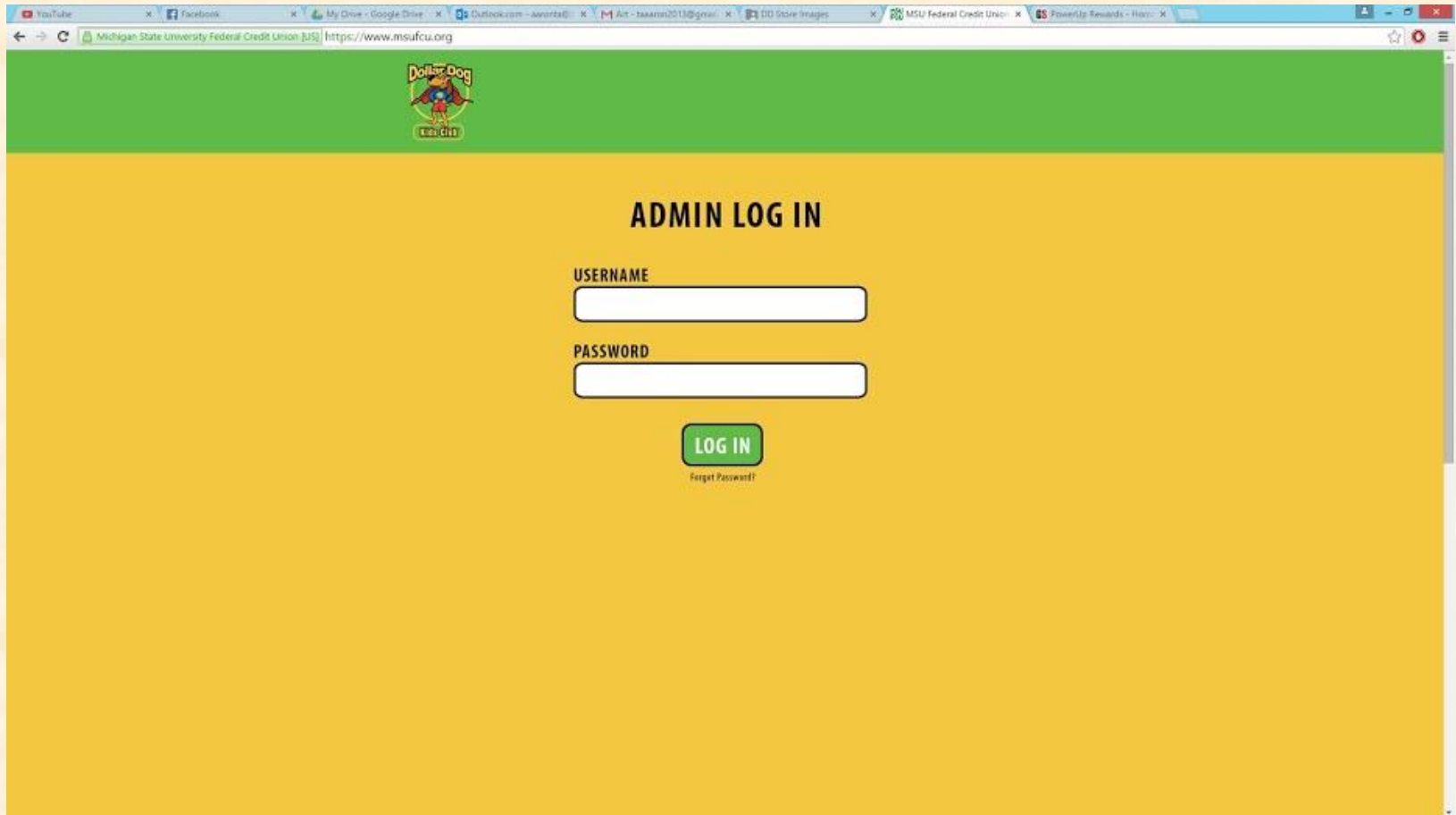
Screen Mockup: Confirmation



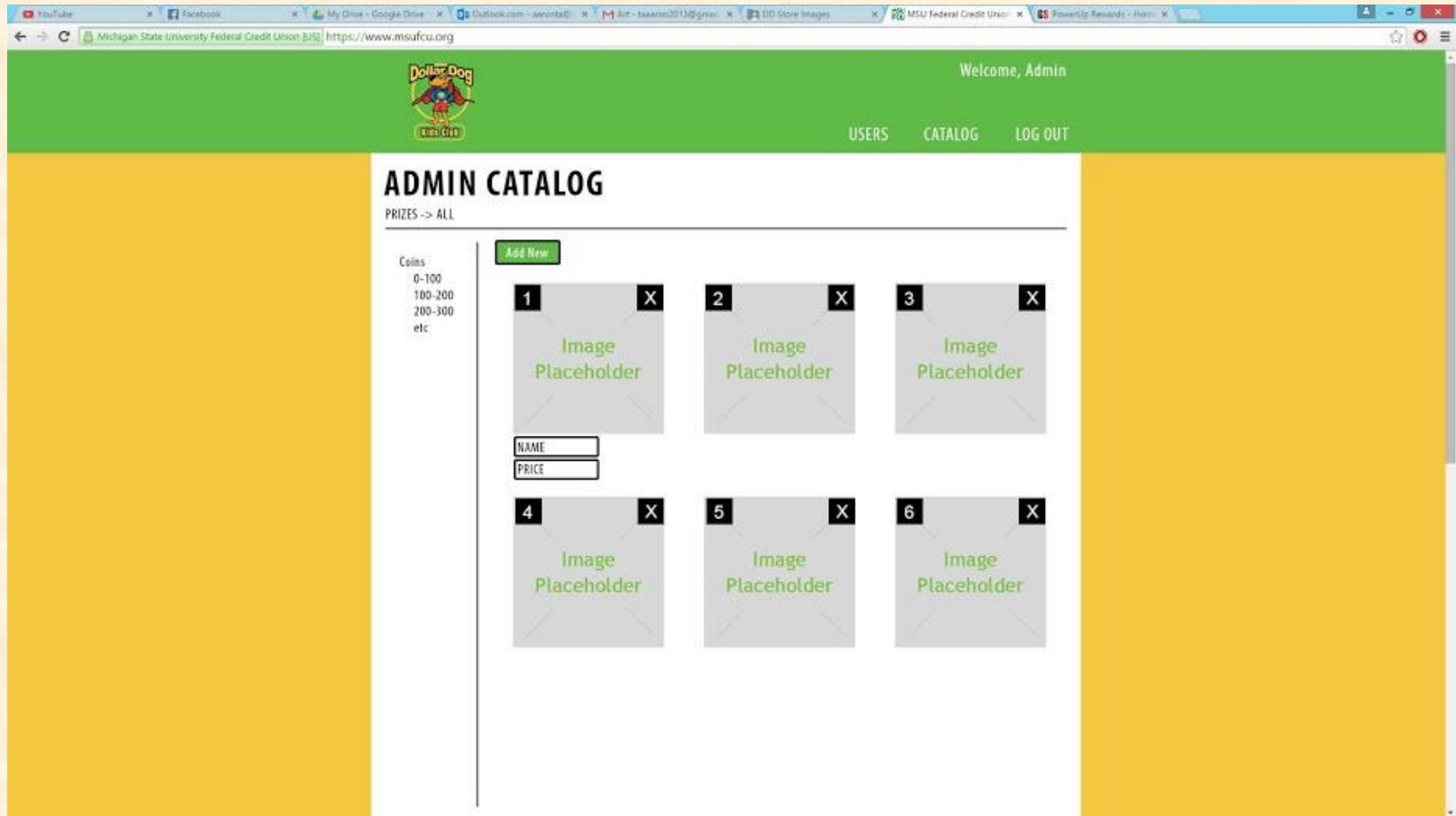
Screen Mockup: Transaction History



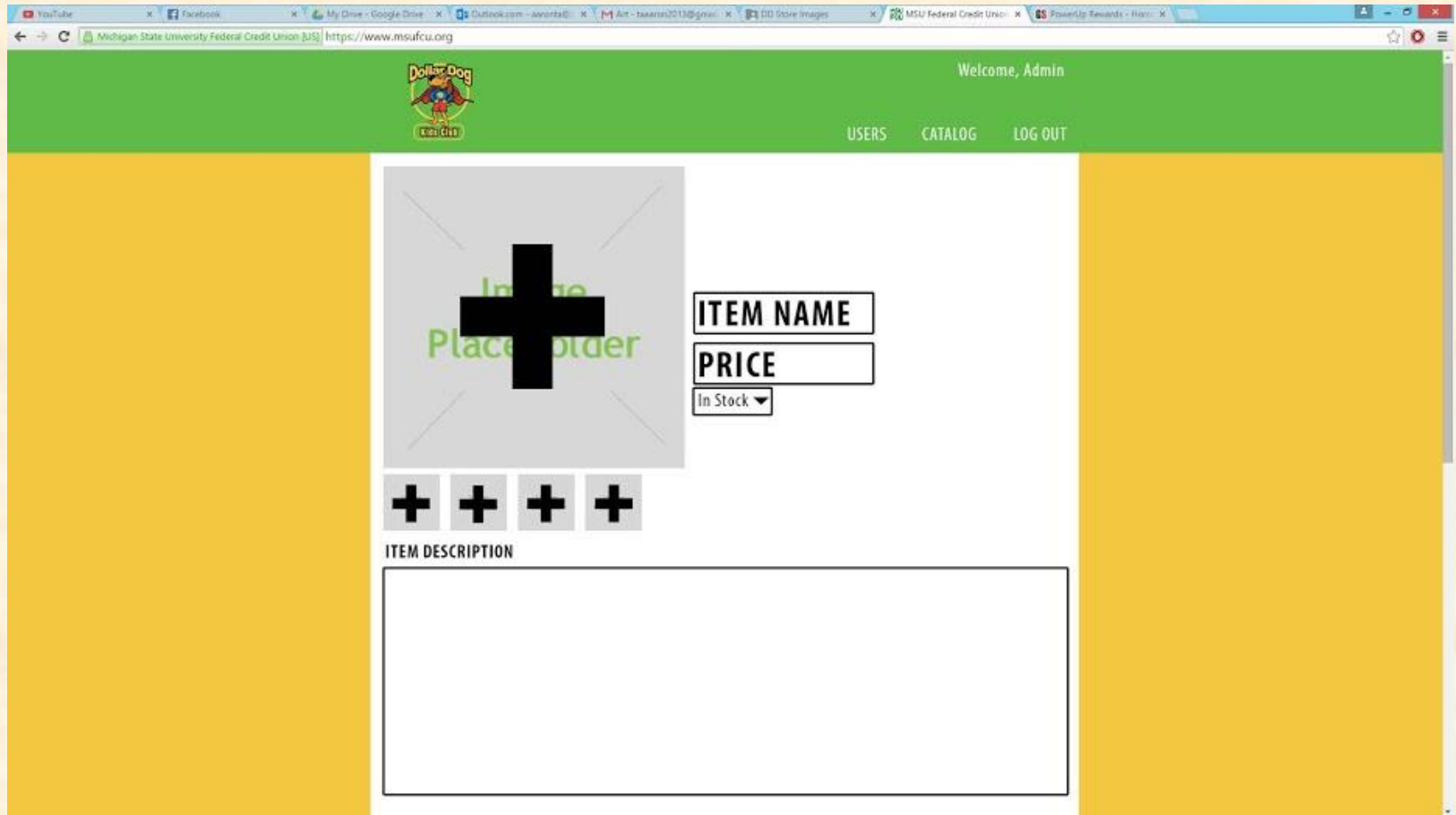
Screen Mockup: Admin Login



Screen Mockup: Admin Catalog



Screen Mockup: Admin Item



Screen Mockup: Admin Edit User

The screenshot shows a web browser window with the URL <https://www.msufcu.org>. The page features a green header with the "Dollar Dog" logo and the text "Welcome, Admin". Navigation links for "USERS", "CATALOG", and "LOG OUT" are visible. The main content area is white and contains a form for editing a user. The form has two input fields: "USER NAME" and "BALANCE". Below the form is a table titled "TRANSACTION HISTORY" with columns for "DATE", "PRICE", and "BALANCE".

DATE	PRICE	BALANCE	
9/9/15	NAME	200 Coins	1000 Coins
9/9/15	NAME	100 Coins	1100 Coins

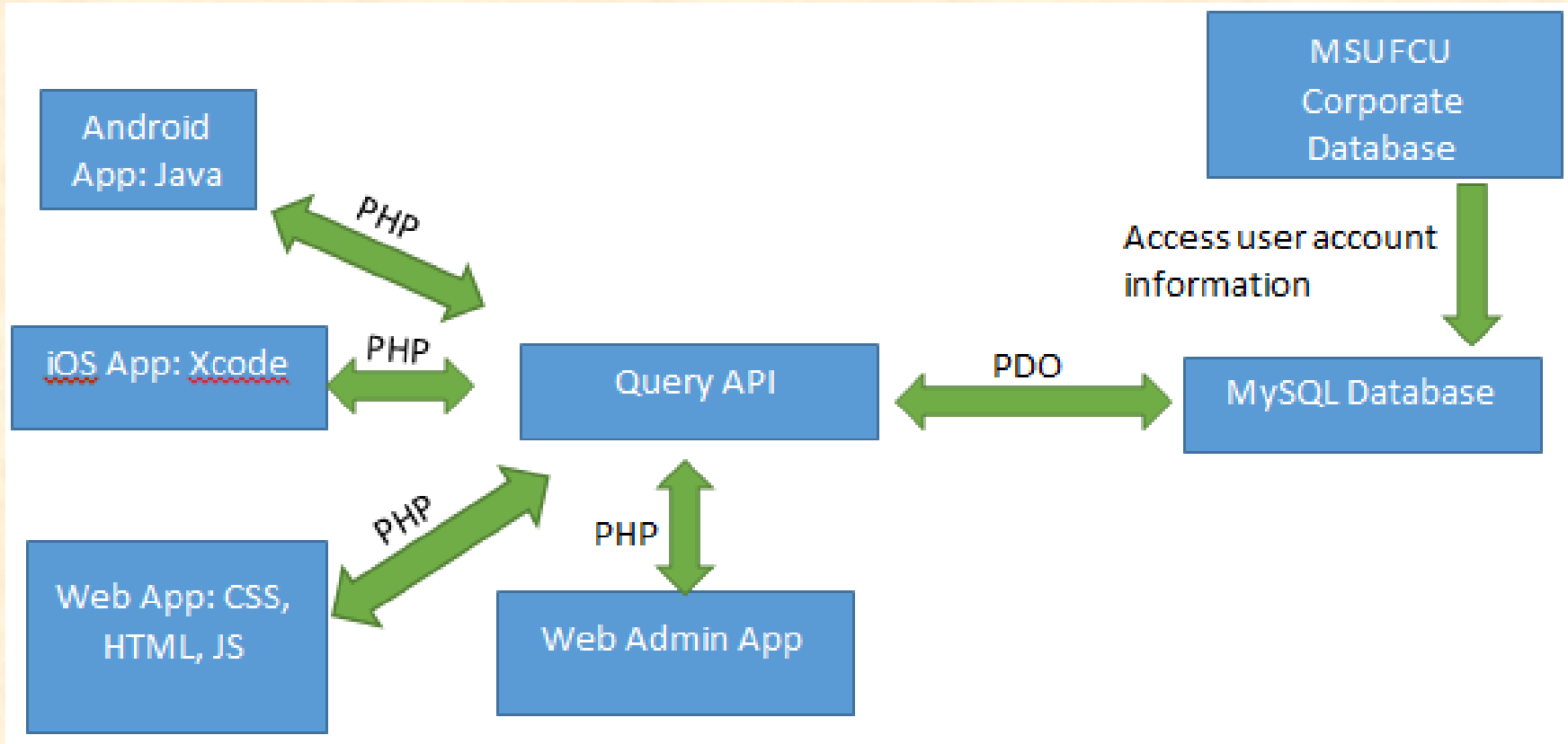


Technical Specifications

- Schema with user information
 - Filled with arbitrary values for development
 - Will connect to MSUFCU's corporate database
- Coins table, order, order items, and items table
 - Update with purchases
- Must query tables with PDO for security
- Stretch goal: Text message sending by submitting request to given HTML



System Architecture



System Components

- Hardware Platforms
 - Windows, Mac or Linux devices
 - Android devices
 - iOS devices
- Software Platforms / Technologies
 - Web
 - CSS, HTML, Javascript, Bootstrap, Notepad++
 - Android
 - Java, Android Studio
 - iOS
 - Swift, Xcode



Testing

- Continuous internal functionality testing
- After Alpha presentation, share site with team acquaintances for design and functionality feedback
- After Beta presentation, share site with MSUFCU employees for design and functionality feedback



Risks

- Risk 1: Technology
 - Description: Several issues setting up technology
 - Mitigation: Frequent contact with Angie
- Risk 2: Integrating with Existing Software
 - Description: Unclear because can't receive access to user accounts
 - Mitigation: Consistent contact with client for all info possible
- Risk 3: Consistency across platforms
 - Description: Three different platforms and separate developers
 - Mitigation: Frequent communication and assisting each other, good design
- Risk 4: Usability
 - Description: Target audience is wide and tailored to kids
 - Mitigation: Several UI reviews with client

