

PayAbility **Hi-Fi Prototype** **Midpoint Presentation**

Team: ThisAbility

Value Proposition

PayAbility aims to empower people with math learning disabilities to compare prices, stay within budget, and pay with exact change.

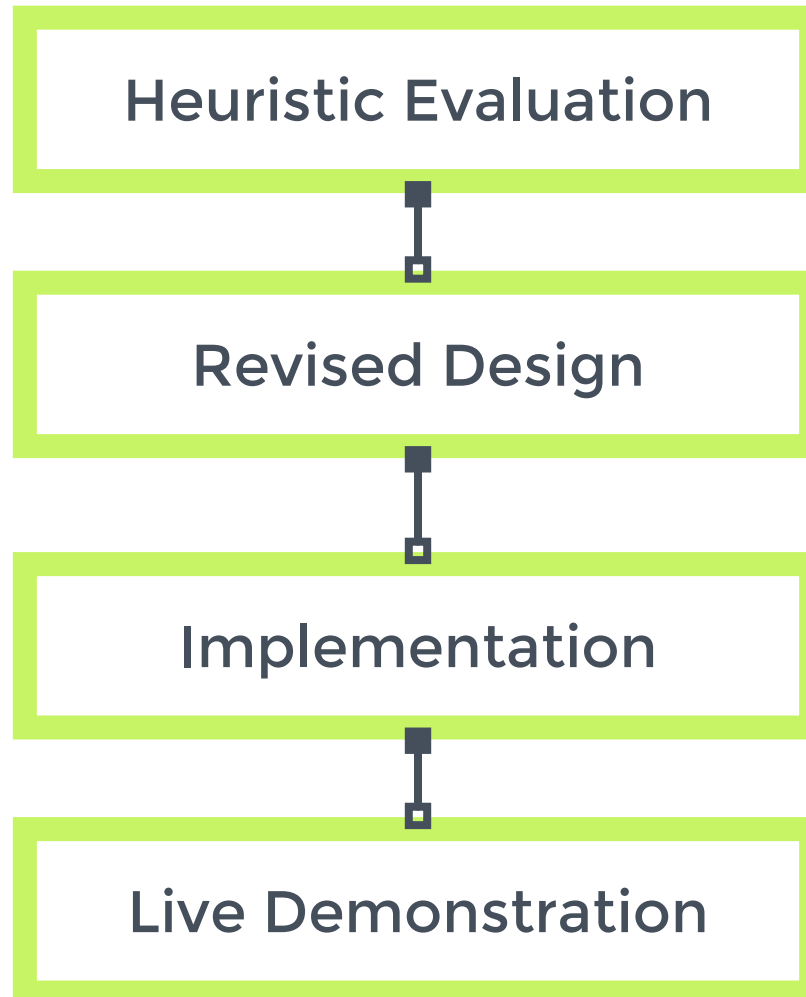
Problem

Over 5% of people have disabilities such as nonverbal learning disorder and dyscalculia, rendering them unable to do basic math calculations. In daily life, this makes it difficult to compare prices and pay for things while shopping.

Solution

To make paying easier and less stressful, the PayAbility app helps users compare prices, stay within budget, and pay with exact change.

Today's Presentation



Heuristic Evaluation Results

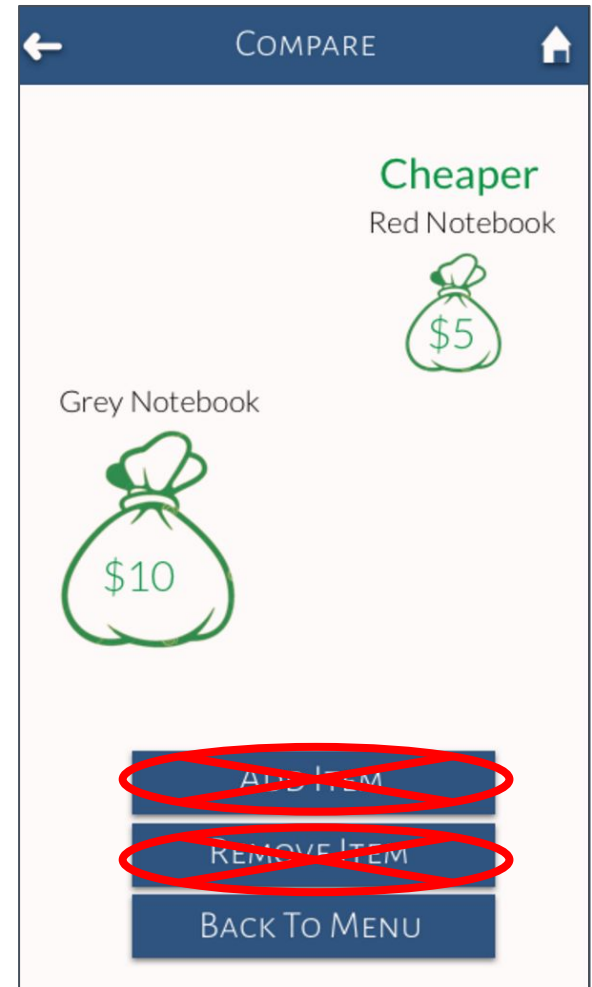
| Heuristic Violation | Severity |
|--|----------|
| Compare items task flow seems to go in a loop | 3 |
| Unclear what “Add Item” button in “Compare Prices” screen does | 3 |
| “Remove” button in “Compare Prices” screen seems unnecessary | 3 |
| No way to store user's information with login | 3 |
| No backspace option when setting budget | 4 |
| No “Cancel” option when adding an item | 3 |
| Overwhelming number of payment options | 4 |

New sketches: <https://marvelapp.com/hifh9i>

Design Changes

“Compare Prices” Task Flow

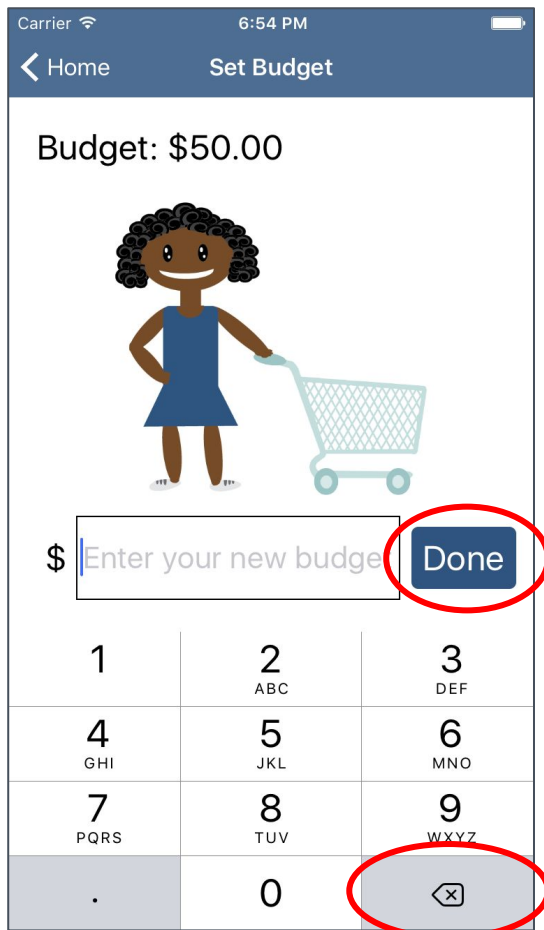
- Getting rid of the “Remove” button
- Getting rid of “Add Item” button and changing money bags to buttons to add items to cart
- Explicit instructions stating you can only compare up to two items



Design Changes

User Control and Freedom

Redesign of calculator



Cancel item after scanning




Design Changes

Overwhelming Payment Options

HOME

Is this bill in your wallet?




YES

NO

CONTINUE

HOME

Are these the bills and coins you have in your wallet?



ADD

CONFIRM

- User inputs the types of bills and coins they have before shopping
- Then we only need to show a couple of payment options at checkout

Implementation

iPhone Application

Tools Used

- Objective C
- Xcode
- Parse framework

Issues

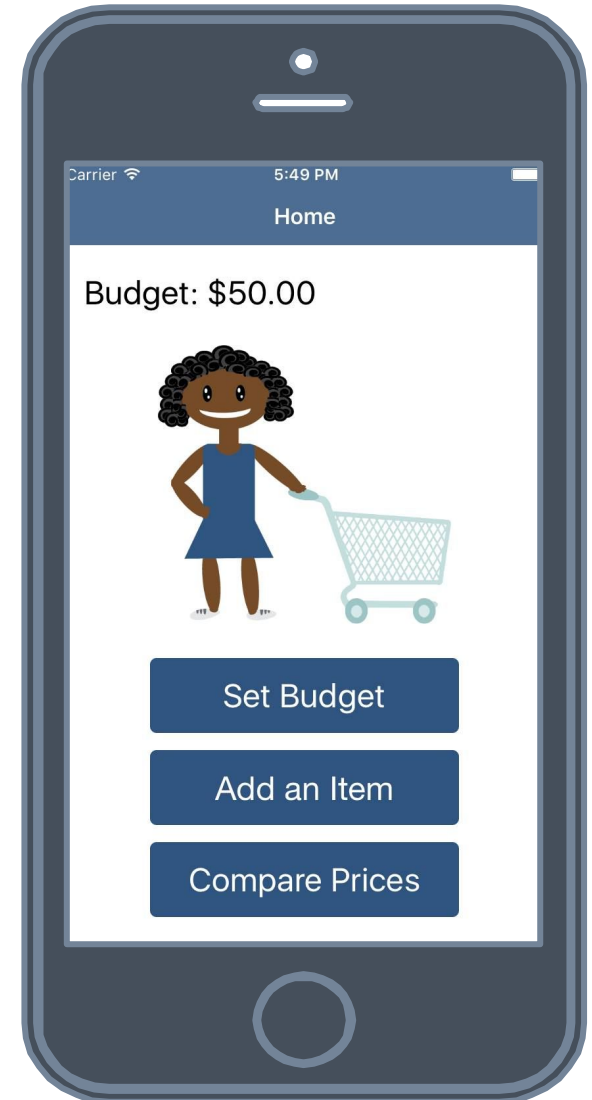
- Xcode only available on Mac
- Collaboration on Xcode is difficult



Implementation

Currently Implemented Features

- Launch screen
- Home screen
- “Set Budget” task
 - Price input keyboard
 - Zero budget and full budget images



Implementation

Missing Features

- “Compare Prices” task
- “Add An Item” task
 - manual input
 - barcode scanning/
OCR
 - payment options
screen



Implementation



Plan to Finish

1. Work during Thanksgiving break
2. Focus on core functionality first
3. Use Wizard of Oz and hard coding for difficult-to-implement features

Implementation

Wizard of Oz

- Barcode scanning & OCR
- Selecting the bills to show in the payment options screen

Hard Code

- Specific set of items and their prices



Live Demonstration