



# **PayAbility**

## **Medium-Fi Prototype**

**Team: ThisAbility**  
**Presentation by Musila Munuve**

# Value Proposition:

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

## Problem/Solution Overview:

**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.

## **Simple Task: Set a budget**

The user wants to set a budget so that they can stay within budget and avoid overspending.

## **Medium Task: Compare prices**

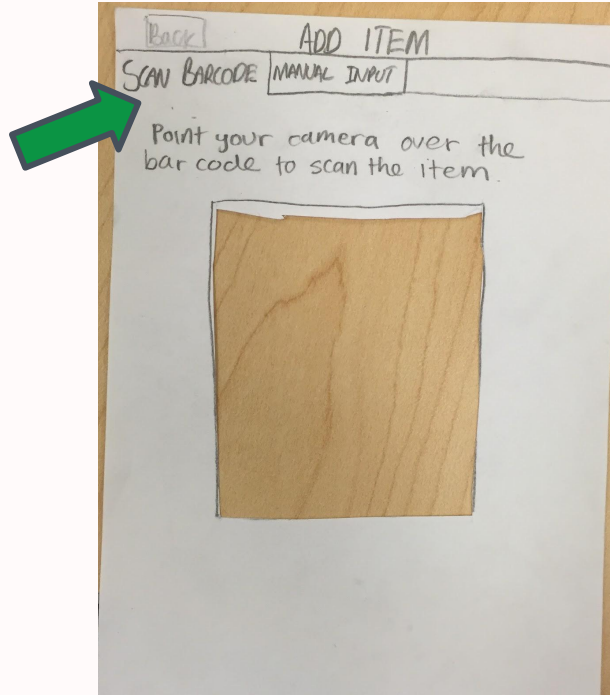
The user wants to compare the price of two items to determine which item is cheaper.

## **Complex Task: Pay with exact change**

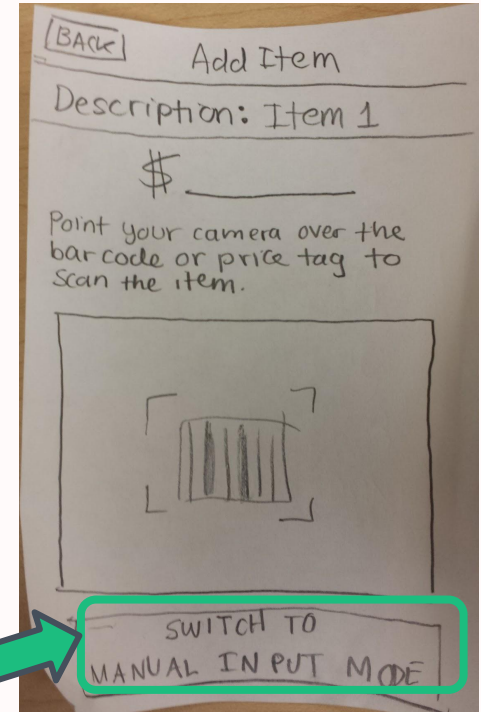
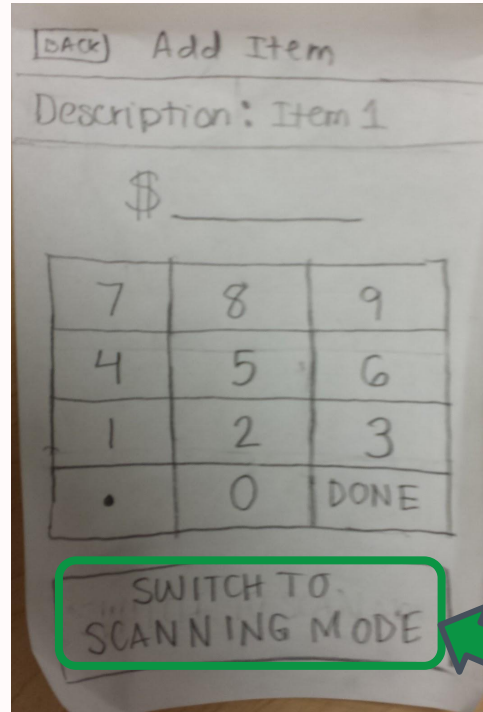
The user wants to know exactly what bills and coins to take out of their wallet in order to pay for their purchase.

# Design Change Price Input

Before:



After:

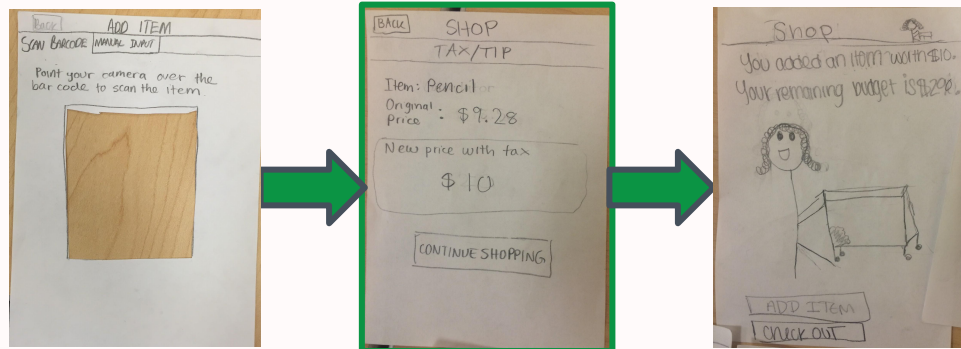


# Design Change Tax and Tip Flow

Before:

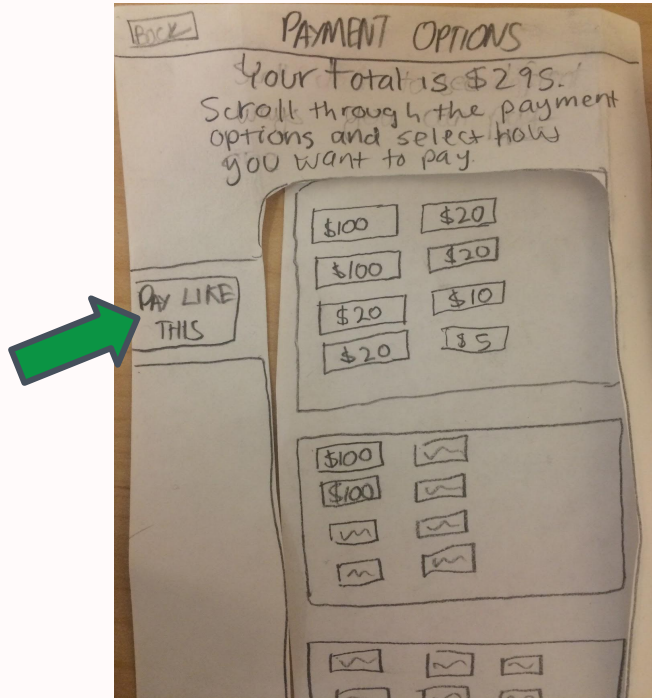


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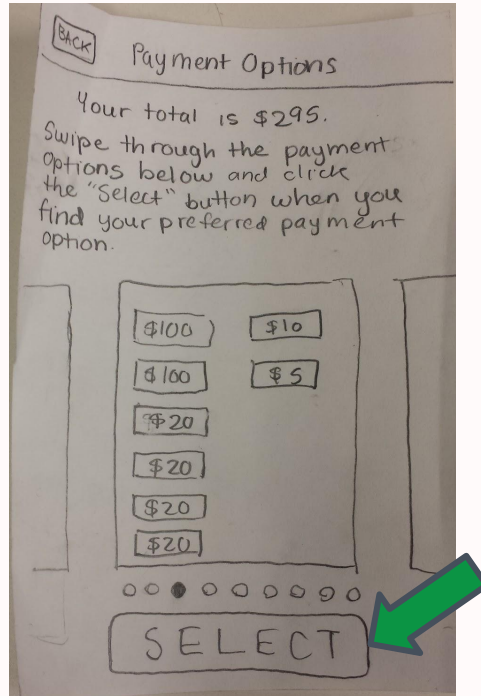


# Design Change Payment Options

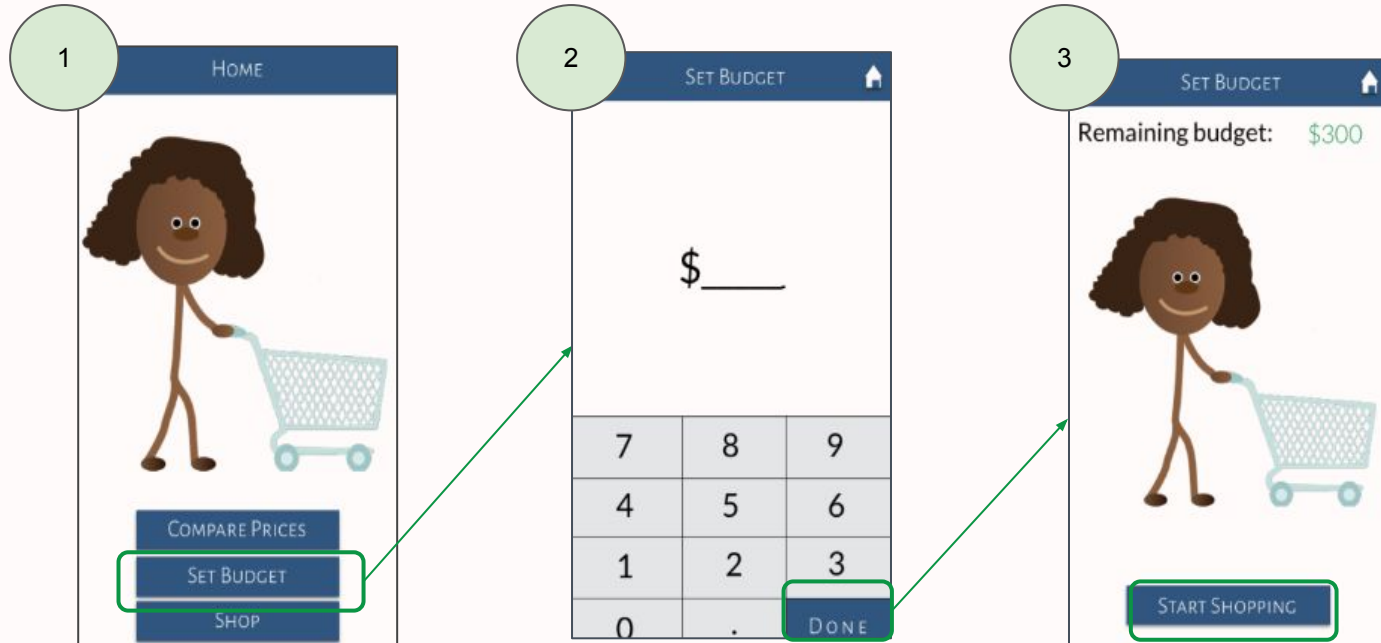
Before:



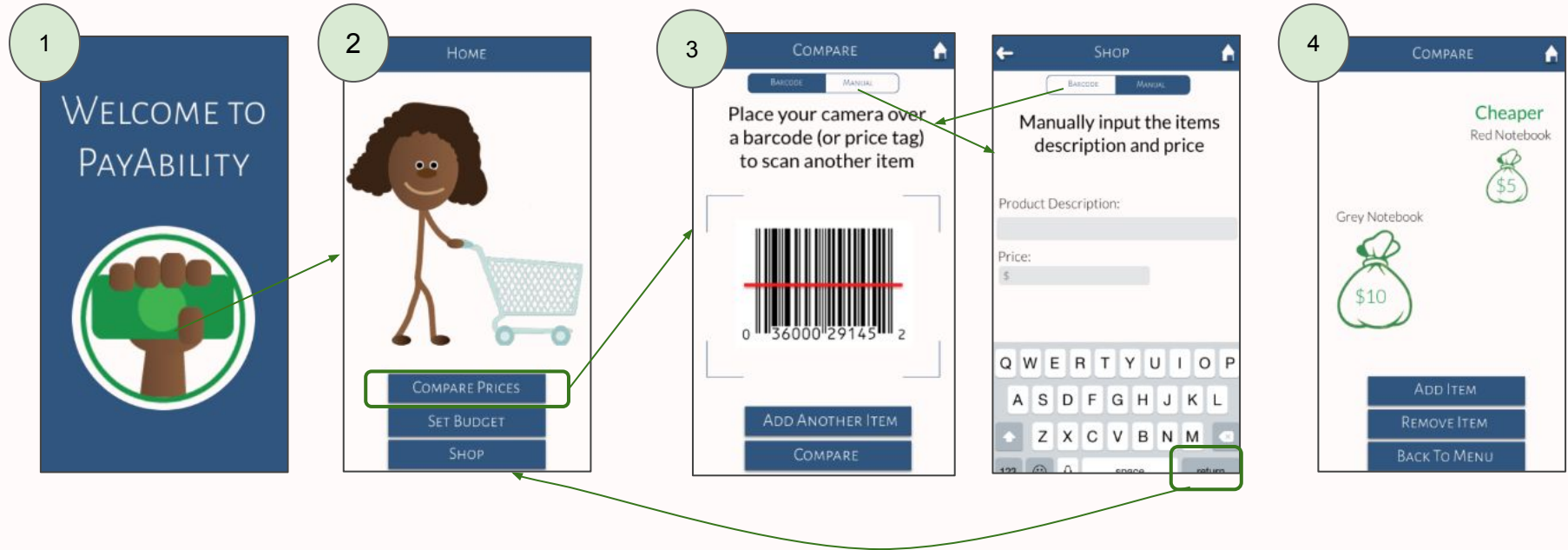
After:



# Task Flow Set A Budget

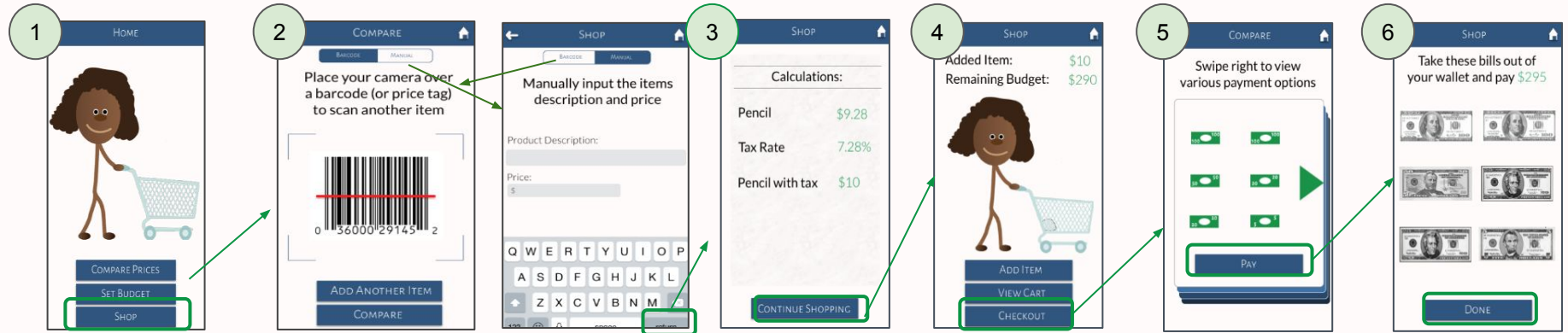


# Task Flow Compare Prices





# Task Flow Pay With Exact Change



# Prototyping Tools

## Sketch and Marvel



### Pros:

- low learning curve
- iOS template in Sketch
- smooth transitions in Marvel
- more realistic look, feel, and flow

### Cons:

- no online collaboration
- time consuming
- could not simulate the backend functionality
- could not simulate advanced features (e.g. using the camera to scan barcodes)
- limited screen usability

# Limitations & Tradeoffs

- Cannot display dynamic cartoon animations
- No access to camera or GPS data
- Can only work with a specific set of items in a specific order



# Wizard of Oz & Hardcoded Features

## Wizard of Oz

- Pretend we can translate final price into the correct set of bills and coins
- Pretend we can recommend the best item to remove if the user goes over budget

## Hardcoding

- Budget amount and item prices
- Items to be purchased
- Order of items
- User's current location



**Thank You!**