# Window High-Fidelity Prototype

## Installation Requirements

Simply download the .ipa file and you're good to go.  Note that this .ipa file will only be able to be installed on authorized devices (CS147 professor and TAs).  If you are interested in trying out our app and don't have an authorized device, check out the installation instructions in our [Github repository](#).

You will also need to print out a marker for the clothing items to be rendered above.  The marker we used can be found [here](#).

## Operating Instructions

The first screen shown uses a "wizard of oz technique" to scan a store name. Instead of using an OCR, we display a red box that if tapped will turn green to mock the recognition of a store name and allow you to start shopping.  Clicking the "Start Shopping" button will take you to a selection of clothing items available at the store, displayed using AR.

On the AR screen, 3D models are rendered into the view above the marker. For marker and object rendering we are using the ARToolKit SDK. We downloaded the source code and rewrote some of the methods to better fit our needs. Swiping left and right will move the models in the view.

Double tapping on a model will bring it up in the detail view. Clicking detection is done with halves on the screen in conjunction with the currently centered model. This means that we do not detect clicks on the surface of the 3d object, instead we use a "wizard of oz" technique where the top of the screen will correspond to the top piece of clothing and the bottom part of the screen will correspond to the bottom piece of clothing.

The top right of the AR view has a filter button that allows the user to specify gender, style, color, sizing, and price range. Selecting filters will display only the models that the user desires to see. Note that we did not implement every possible filtering combination. We implemented the ones necessary to complete our tasks as well as some additional filters.

On the bottom right is a share button. This takes a screenshot of the current page and will format a text message containing this image to send to someone in your contacts. On the top left is a "home" button that will pull up a menu. From this menu a user can view their profile, begin the scan-store process again, view stores nearby, and view settings. Note that the profile, stores nearby, and settings all contain mock information.

## Limitations

A big limitation is the quality of models we were able to use in this prototype. The models are all downloaded from the web and are here to display functionality. Higher quality models would be used in production and would enhance the user experience.

As noted above, filtering is not fully complete as we hard coded the filtering. In actuality, filters would be choosing and creating the .dat files to render not just loading in prewritten .dat files.