

# **ShopwithStella.com**

## **Functional Specification**

**Version 0.2.2**

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**- CONFIDENTIAL -**

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# 1 Overview

ShopwithStella.com is a web service that provides users with an interactive platform for browsing clothing online. Features include clothing recommendation, bookmarking, and sharing with friends. Bookmarking features are expanded into a closet, which users can customize to their liking.

ShopwithStella.com will be released in two preliminary versions, before the final version is complete;

The first version is a private Beta, in which users will require an invitation from 'Stella' in order to create an account and begin using the service.

The second version will be an open Beta in which users can interact with the service at a basic level prior to creating an account. This serves as a test-drive mechanism for users who are curious but not yet committed to creating an account.

The reasoning behind preventing this test-drive functionality in the private Beta is to limit the number of users that are viewing a less than complete service and as a result detracting from their experience.

## **Disclaimer**

This spec is in no way complete, and should not be regarded as such. The figures included represent a second iteration of wireframes discussion with The Mechanism, most of which are deprecated. They are pending a third iteration of Wireframes.

The graphics and layout of the pages as depicted through wireframes are shown merely to illustrate the underlying functionality of the site, and are not suggestive of any designs.

This spec does not discuss the algorithms used by the recommendation engine, which will be discussed in the technical specification. It simply discusses what the user sees when they interact with ShopwithStella.com.

## 2 Scenarios

Scenarios are what we use to demonstrate a few specific users to the website. In this way, we can validate our product as a real-world product with real-world usage.

### **Bobby**

Bobby is an overweight, but intelligent, high school teenager. He likes to play video games and competes for the monthly prize on “PWNAGE.com”. Unfortunately, Bobby has no interest in fashion, or what he looks like, as he has made peace with his geeky demeanor. Regardless, he stumbles across ShopwithStella.com one day while perusing a “TechCrunch” article, and decides to answer the first question out of curiosity. He is presented with a collection of female clothing items, at which point he realizes that he is clearly at a female oriented website. However, Bobby is curious enough to experiment with the interface and decides to browse through clothing by clicking the right arrow button on the recommendation carousel. Finally, he sees a dress that looks gorgeous on the model wearing it, and decides to upvote the dress.

**Open Issue** More scenarios are to be created in the near future.

### **3 Non-Goals**

- A sophisticated social networking platform that attempts to rival Facebook.
- To implement a search engine for clothes.
- To create the equivalent of a video game involving clothing.
- A retail store with inventory and user payment information.

## 4 Flowchart/Diagram

There are two figures depicting the ShopwithStella.com public beta and private beta flowcharts.

The public beta represents the website's eventual goal to be realized, and final form. All features of the site are enabled, most notably the ability to try out the service.

The private beta, on the other hand, will limit the number of users on the service by means of an invitation only service. As a result, some pages needed to be added, as well as removing the ability to test-drive the site without an account.

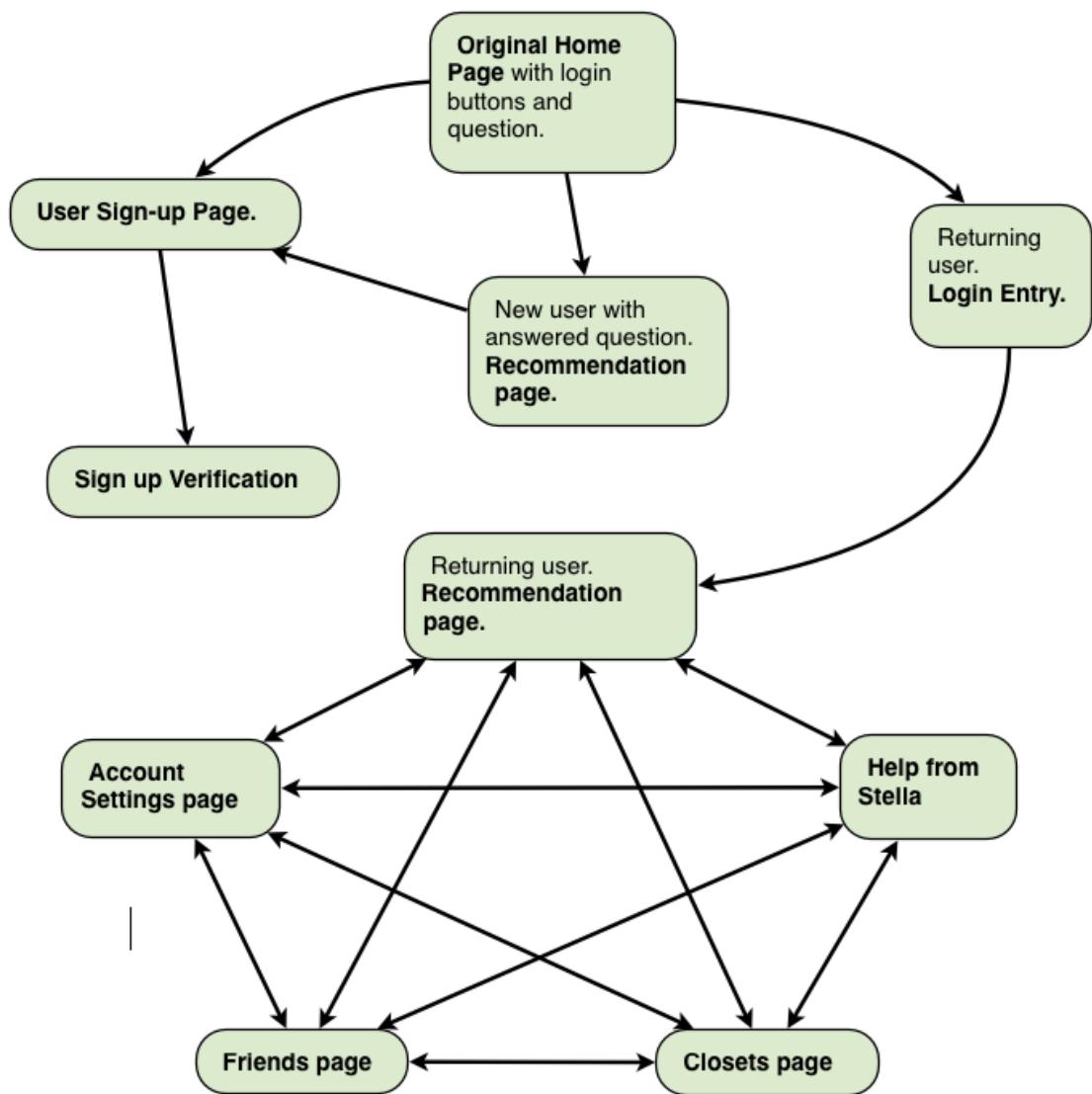


Figure 4.1: Public Beta Flowchart

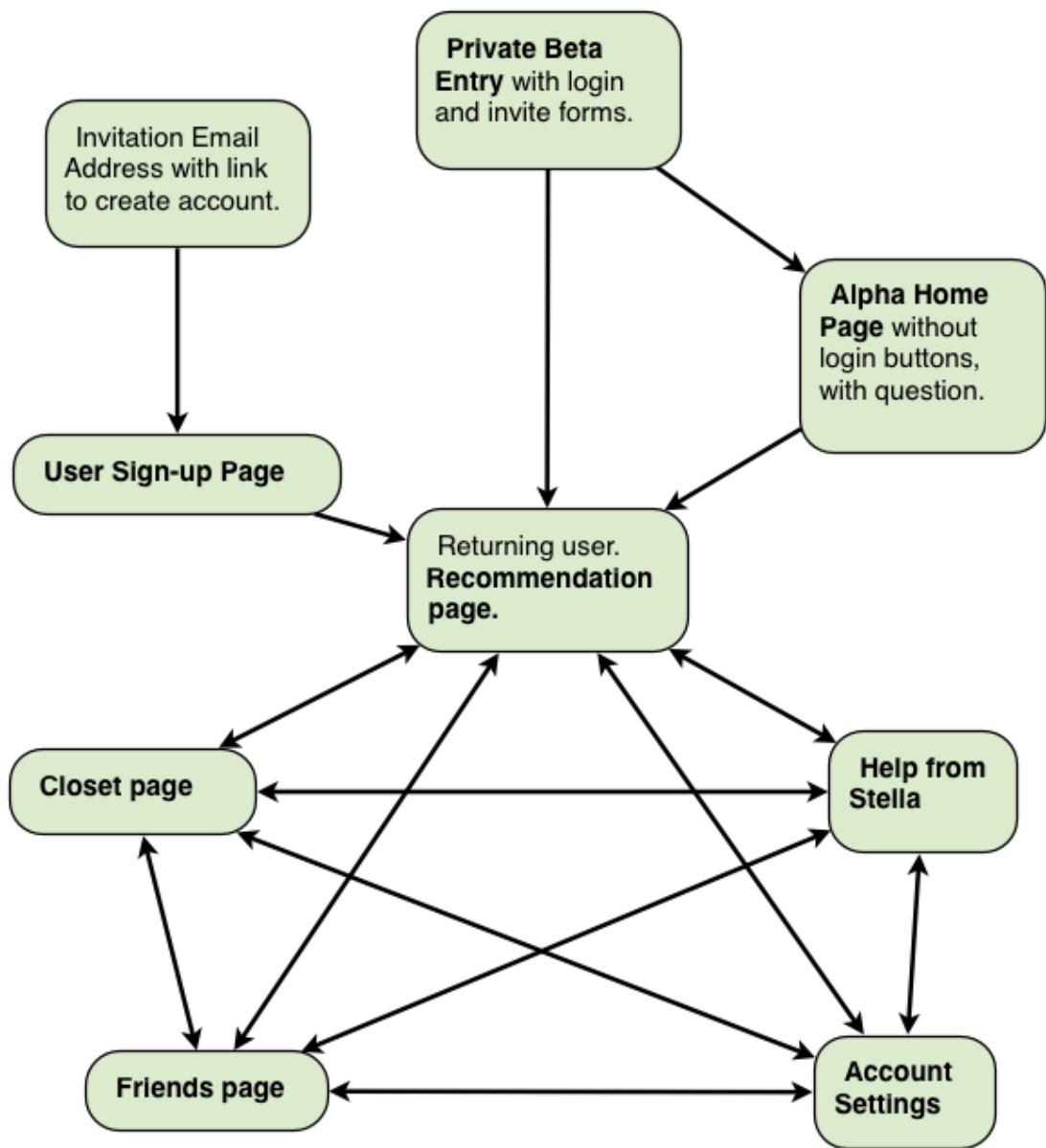


Figure 4.2: Private Beta Flowchart

# 5 Page-by-Page Specification

This will outline each page in detail

## 5.1 Home Page



Figure 5.1: Home Page Wireframe

The purpose of the home page is:

1. To introduce the web service to new users via informative text.
2. To allow existing users to sign in with their credentials.
3. To allow new users to create an account.
4. To allow new users to give the service a test drive by immediately answering the first question.

This is where everybody starts, whether they have registered or not. An elegant navigation panel resides atop the screen, where users will be able to navigate to the different sections of the website. These are:

- Home (“Stella”)
- Closet
- Friends
- About

The *About* pages will display static text to be determined by management, and is beyond the scope of this spec. They will not have to change very often.

Clicking on the link that says “Create Account” directs the user to the *Account Creation Form*. Clicking on “Login” brings up the *login page* allowing the user to sign in.

In addition, the panel will provide links to follow the company’s Facebook, Twitter, and Youtube profiles. Each link will open a new tab to the corresponding social network profile page.

Apart from the title banner “Shop with Stella”, the content of the page will display introductory text, that will draw users in like bees to honey. The text should be informational, yet ‘snazzy’.

**Open Issue** The content of the text, as well as title, is yet to be determined.

**Alpha** On the alpha release of the site, the *login page* is always displayed with accompanying “sign up for an invite” text. If a user is returning, they are redirected to the *recommendation page* after signing in. If they are signing in for the first time, the modal simply disappears and they return to the *home page* to answer the jeans question.

At the bottom of the page, a question, currently set to “Who makes your favorite pair of jeans?” will be displayed with an answer box. The box will autofill answers as users begin to type, of popular and supported jean designers that will effectively introduce them to the recommendation page. If the user mistypes a designer name, the autofill will not autocorrect, but hopefully this will clue them in to the fact that they are misspelling it. If an incorrect answer is supplied, the page reloads with an error message to the right of the question box saying “invalid designer name”.

**Open Issue** Wording of error message.

**Technical Note** If a user is already registered, a cookie may be placed on their computer which could forward them directly to the *Recommendation Page*.

**Technical Note** The answer to the question will fish a set of items that are to be recommended to the user at the start. Please refer to the technical specification for more information on this.

**Technical Note** Jean designers that do not exist in the database will correspond to existing ones instead, so that they are paired with the closest matching jeans available to seed a recommendation stream.

## 5.2 Login Page

This page allows users to sign in with their username and password.

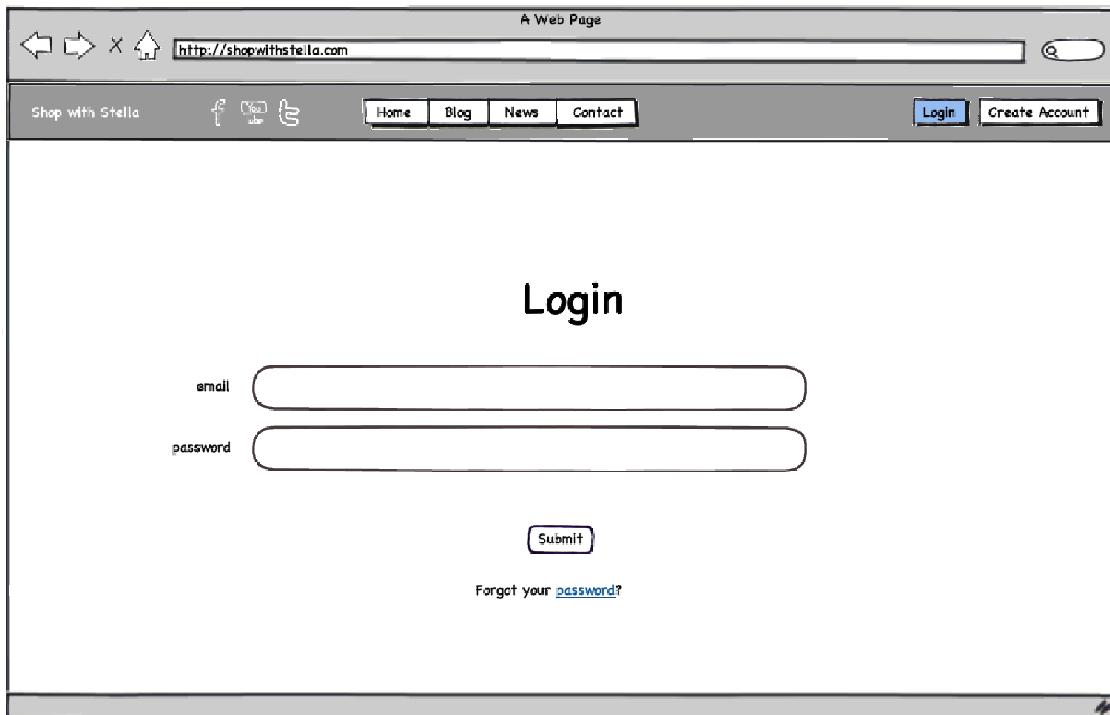


Figure 5.2: Login Page

The server performs validation checks on the sign-in fields after they have been submitted by the user. If something doesn't match up or is incorrect, the server returns the *Login Page* where the user can try to log-in again. This time, a red error message is inserted to the right of the applicable form box and is populated with the appropriate error message(s).

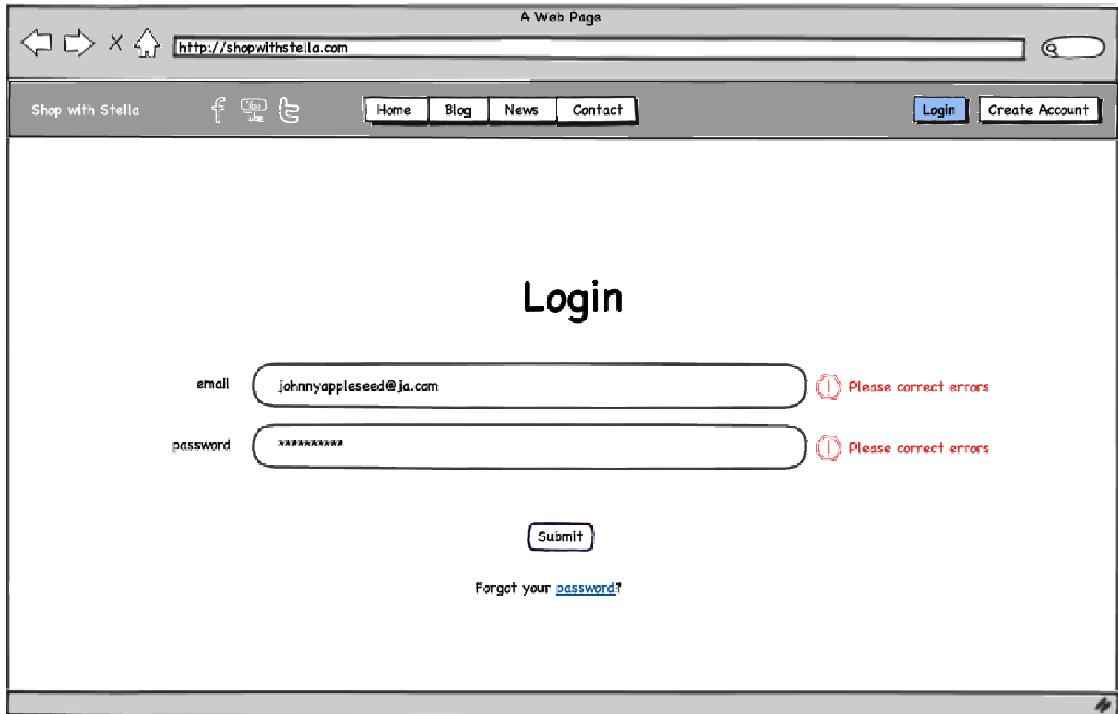


Figure 5.3: Login page with errors

When a user clicks “Login”, the server performs the following checks:

1. If the email address provided cannot be a real email address because it is not formatted correctly.
2. If the email address was provided, but it does not correspond to a registered member.
3. If the email address was provided, and it does correspond to a registered member, but no password was provided.
4. If the email address was provided, and it does correspond to a registered member, and a password was provided but it is incorrect.

For 1 and 2, “invalid email address” appears to the right of the email field. For 3 or 4, “missing or invalid password” appears to the right of the password field.

The page also includes a “Forgot your password?” link, allowing the user to reclaim their missing password. If clicked, a modal appears with a single field labeled “email address” and a submit button. After clicking on the submit button, the server validates the existence of a user with that email address. If that user does not exist, the modal refreshes with the incorrect email address and an error message displaying “invalid email” next to the form box. If the user does exist, an email is sent to the user by the server with their password, and the modal refreshes to display a message confirming the sending of the email.

**Open Issue** Wording of the error messages, and the confirmation text is TBD.

## 5.3 Private Beta Entry Page

This page will be used to limit the number of users in the private beta launch of the site. It includes a log-in component with email and password fields, as well as an invitation component. The invitation field titled “Request an Invite” allows users to submit their email addresses if they are interested in participating in the private beta.

## 5.4 Account Creation Pages

### 5.4.1 Account Creation Page

This allows new users to create an account on ShopwithStella.com. It should be very simple.

The screenshot shows a web browser window with the URL <http://shopwithstella.com>. The page title is "Create an Account with Stella!". Below the title is a descriptive note: "Form elements will be determined at a later date. Initial Form should be super simple, with a small amount of information required and the request for more details on login on the person's account page." The form itself consists of several input fields: "First Name" and "Last Name" (both in separate input boxes), "email" (in a single input box), "Zip Code" (in a single input box), "Age Range" (in a dropdown menu), "password" and "re-type password" (both in separate input boxes), and a "Submit" button at the bottom.

Figure 5.4: Account Creation Form

The page contains a title and accompanying description text.

**Open Issue** Title and description text yet TBD.

Information required by users to create a new account are:

- First name
- Last name
- email address
- Confirmation of email address
- Zip Code (Optional)
- Age range (Optional)
- Password
- Confirmation of password

The email box allows for up to 60 characters to be typed. The password box allows for up to 12 characters to be typed and will require a minimum of 6 characters. To disguise them and prevent hacking, as the user types in the box, asterisks (\*) will appear instead of the characters they type. An asterix will appear next to all fields that are optional, with text indicating this at the top of the page.

The server performs validation checks on the fields after they have been submitted by the user. If something doesn't match up or is incorrect, a red error message is inserted next to the applicable form boxes and is populated with the appropriate error message(s).

When the user clicks "Submit", the server performs the following checks:

1. Checks that the two email addresses are identical. If not, displays "email addresses do not match" next to the 'confirm email' form box.
2. Checks that the email addresses are correctly formatted. If not, displays "invalid email address" next to the appropriate email form boxes.
3. Checks that the email address is unique amongst the existing user base. If not, displays "user already exists" next to the email form box.
4. Checks that the passwords are identical. If not, displays "passwords do not match" next to the 're-type password' field.

If all the checks are successful, the server sends the user a verification email to their email address, and redirects them to the *Account Confirmation Page* page.

**Open Issue** Wording of error messages can be changed.

**Technical Note** The functionality behind email verification and sending emails to users can be found on the technical spec.

#### 5.4.2 Account Confirmation Page

This page displays a congratulatory message to the user informing them that they need to check their email before creating an account.

\* Wireframe of static info page.

Figure 5.5: Static Information Page

The page uses the static information page template for basic design of a heading and paragraph.

**Open Issue** The wording of the page title, page heading, and paragraph text has yet TBD.

**Alpha** This page is not used in the private beta as email invitations are self-validating.

## 5.5 Main Recommendation Pages

The recommendation application has two states, or versions: one that is provided to unregistered users and one that is provided to registered users once they are logged in. The unregistered version implements a smaller feature set of the application as a whole in order to tease the user into signing up by offering full features.

Returning users that are arriving after a period of absence will be presented with the *Help Stella Modal* before proceeding to the *Recommendation Page*.

**Open Issue** Functionality differences between the registered and unregistered versions have yet to be finalized.

**Alpha** The unregistered version of the application will be disabled for the private beta release of the live site, so as to limit the number of users that are able to use the service at all, and regain a level of exclusivity. This also prevents them from viewing only part of a partially finished site, which is not something we want to show off just yet.

**Technical Note** The implementation of unregistered → registered will be similar to extending a Django application.

### 5.5.1 Help Stella Modal

The Help Stella Modal allows users to provide feedback about their personal tastes to 'Stella', the recommendation engine. This helps the system learn more about each user in a slow, but non-intrusive manner. Users can click on the 'X' button to exit the modal without answering the question.

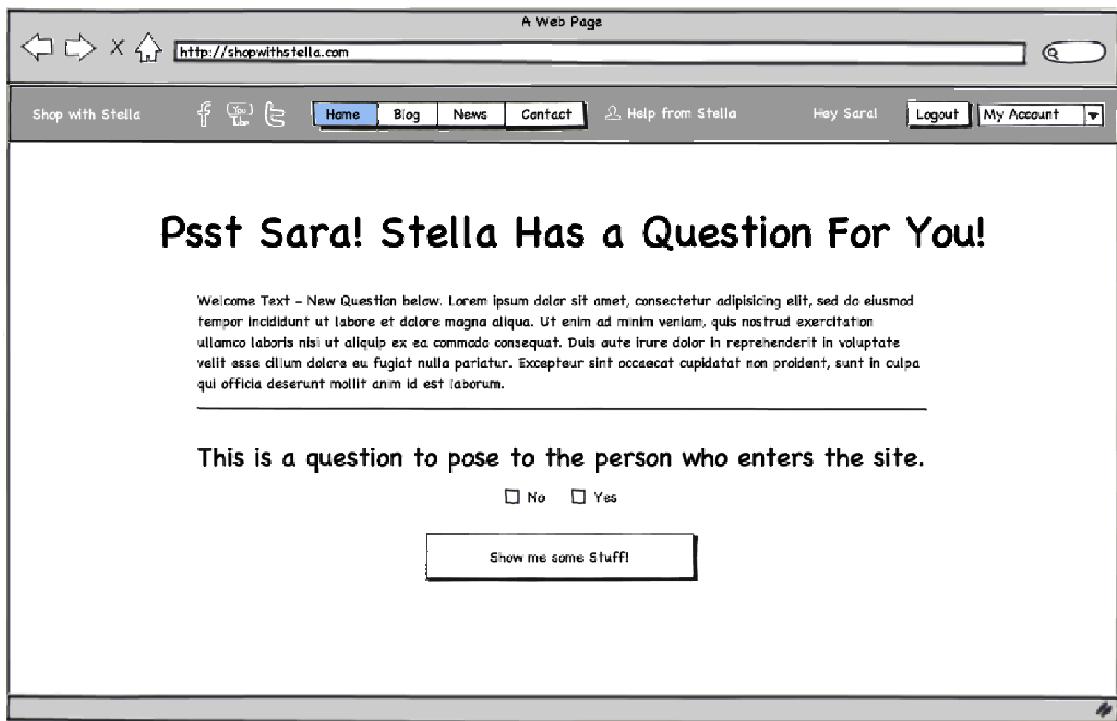


Figure 5.6: Help Stella Modal (Incomplete)

### 5.5.2 Recommendation Page

This is the main application page seen by (returning) registered users.

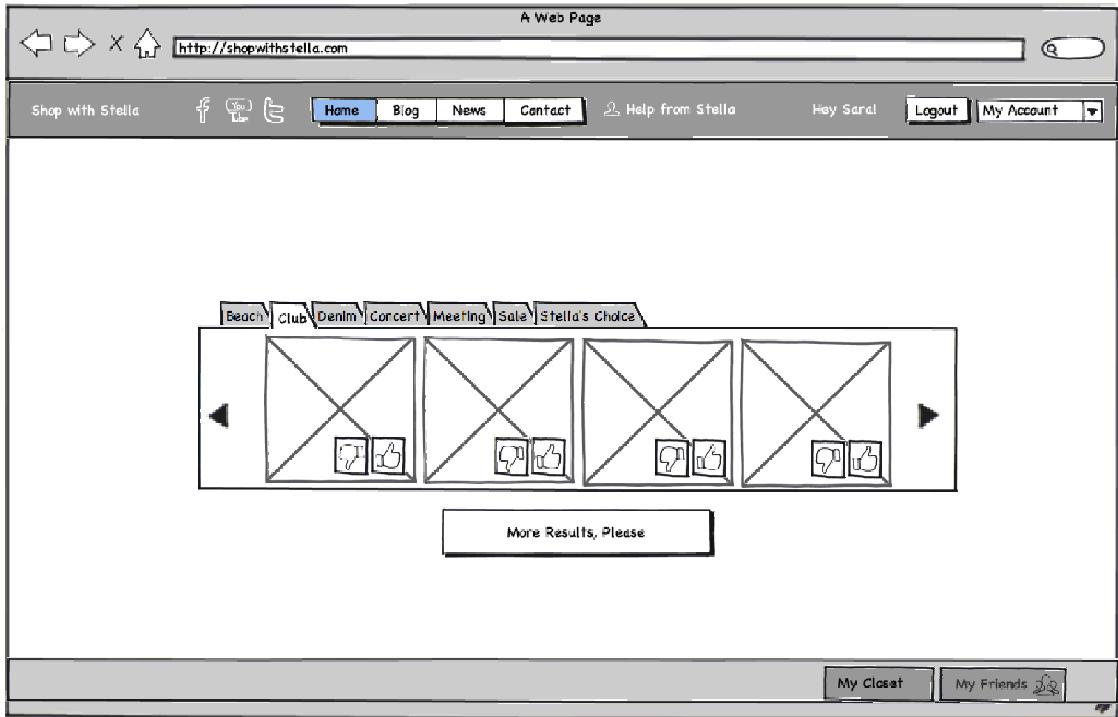


Figure 5.7: Recommendation page main view

#### 5.5.2.1 Navigation Bar

The top navigation bar adapts to the logged in user, updating the right user account settings region. Beginning from the standard navbar items and links, the following new links are introduced on the right half of the navbar :

- “Help from Stella”, which directs users to the *Help from Stella Page*.
- The user’s name which directs the user to their personal *Account Settings Page*.
- The logout button, which will log the user out and return the *Home Page*.

#### 5.5.2.2 Recommendation Carousel

Each category of items is organized into sets, such as Tops, Sweaters, Dresses, Denim, etc... These sets are represented by the tabs in the wireframe above. Users will initially only be able to browse through the predefined category sets. These sets are not removable by the user. When a user browses through a set, they will only be able to see items of that category.

The predefined sets (categories) are:

- Denim

- Tops
- Sweaters
- Pants
- Dresses
- Shorts
- Skirts
- Jackets
- Coats

Users will be able to browse through items in a left-to-right fashion, on both sides. At the beginning of a session, the left scrolling ability is disabled, as the user has not browsed (scrolled right) through any items yet, and the first item is represented as the leftmost in this setting. Users will not be able to create new sets from the carousel. The carousel will be scrollable from left-to-right by traditional mouse scrolling on a mouse or trackpad, when a user's mouse is positioned over the carousel element, as well as by using the right and left arrow buttons to the right and left of the carousel respectively.

"Stella's Choice" represents a set of clothing that is exclusive to power users of the site. To regular users (i.e. new users), it will display text describing the set of clothing offered, and how to gain access to it. Users will be provided with a link to share with friends, and once that link has been followed by 3 new users, the original user will be granted access to "Stella's Choice." 'Stella' will alert the user of this update via message in the user's inbox.

**Open Issue** The "Stella's Choice" set represents ideas for supplying users with rewards for continued use of the service. In this specific example, the set provides users with 'hot' or otherwise desirable items that would normally not be granted to 'average' users, or something along those lines. This has yet to be finalized.

**Technical Note** Tracking the link will involve some extra email machinery on the server. For more details see the technical spec.

Item images represent the item in this setting. Each image is of the same size, and is equipped with a 'thumbs up' and 'thumbs down' button, representing the user's ability to provide feedback. When the user clicks on the 'thumbs up' or 'down' button, it changes color to represent a highlighted selection. Feedback of this action is sent to the server, and the user profile is updated to reflect new tastes. This feedback is not used to update the current set that is being browsed, but the next one that is created for the user.

**Open Issue** The usage of the 'thumbs up' or 'down' icons vs. text.

**Technical Note** Image size has yet to be determined but will almost surely be rectangular and long. Current progress suggests Shopbop.com will dictate the size.

**Technical Note** The feedback loop and re-recommendation of items is discussed in detail in the technical specification.

### 5.5.2.3 Refining Results

The region directly beneath the ‘carousel’ is used to refresh the set of items that is currently being displayed. The “More Results, Please” button is the simplest implementation of this, in which a new random, user-defined set of items is pulled from the server and populates the set. This removes all older items and replaces them with the newly pulled items from the server.

**Open Issue** Further expansion of this “Re-rack” functionality has yet to be explored. Currently, this seems quite dry.

### 5.5.2.4 Bottom NavBar

The bottom NavBar appears on this page to aid the user in managing their closet and friend lists while remaining on the recommendation page. The bar expands to reveal the appropriate application screen for “My Closet” or “My Friends” when they are clicked on by the user.

### 5.5.3 Item Modal

The item modal allows the user to find out more about the item they clicked on.

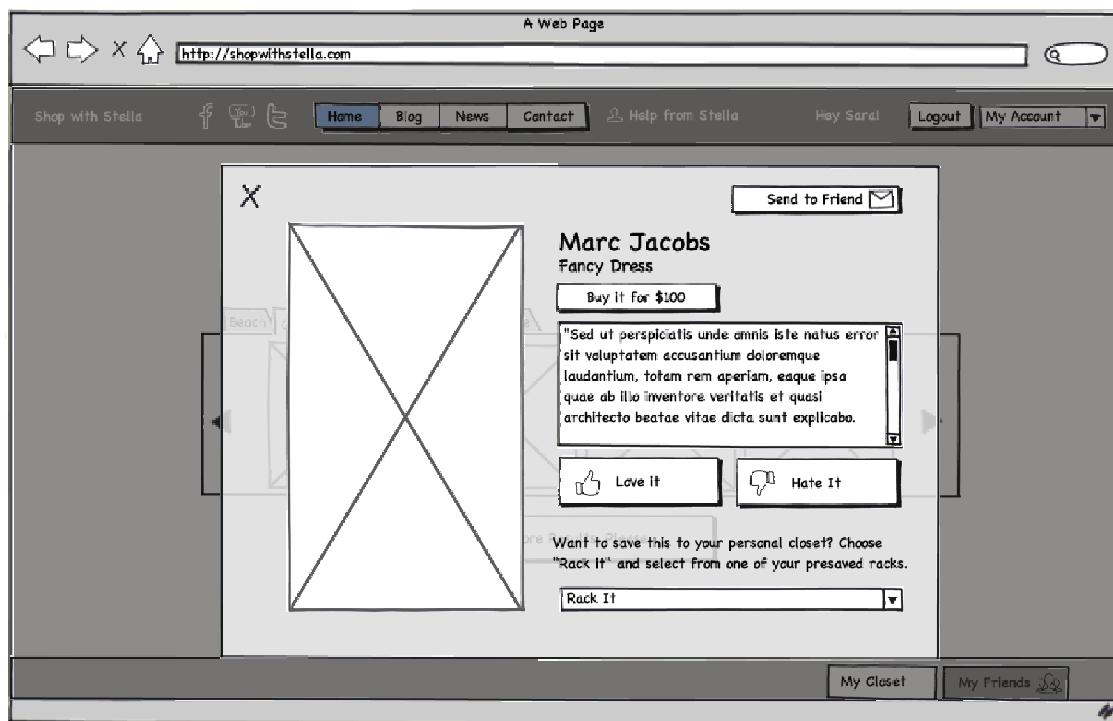


Figure 5.8: Item Modal

When the user clicks on one of Stella's fancy dresses, they are presented with the item modal. This provides them with the highest level of detail about the item available on this site.

The modal title and subtitle are item brand and item model respectively. There is also a description box that provides a short description of the item to the user. This box is character limited, and does not scroll.

Clicking on the top-left 'X' closes the modal, returning the user to the *Recommendation Page*. The same happens when they click outside the modal, represented by the dark sections of the screen in the above wireframe. The "Send to Friend" button will close the item modal, and present the user with the *Share Item Modal* modal.

A drop-down menu under explanatory text allows users to place the item in one of their custom racks. Since items are pre-categorized into the default racks, this feature should only be used by users with custom racks. By default, a custom rack named "Custom" is selected if the user has not created any yet. Otherwise, the last updated custom rack is pre-populated in the drop-down. The drop-down also includes a "New Rack" option, which when selected, will prompt the user for a rack name via pop-up modal with a text field and confirmation and cancel buttons. Users can add the item to their closet by clicking the "Rack It" button, to the right of the drop-down menu.

#### 5.5.4 Share Item Modal

This modal appears when a user decides to share an item with a friend. They should be able to share an item with someone who they are following, or send an email to a friend who is not registered on the site. This is facilitated by form field boxes for recipients and the message to be sent. The message is character limited.

**Open Issue** The number of characters to be limited in the message has yet TBD.

#### 5.5.5 Unregistered Recommendation Page

This page's purpose is to introduce the user to the service by allowing them to try out the recommendation engine.

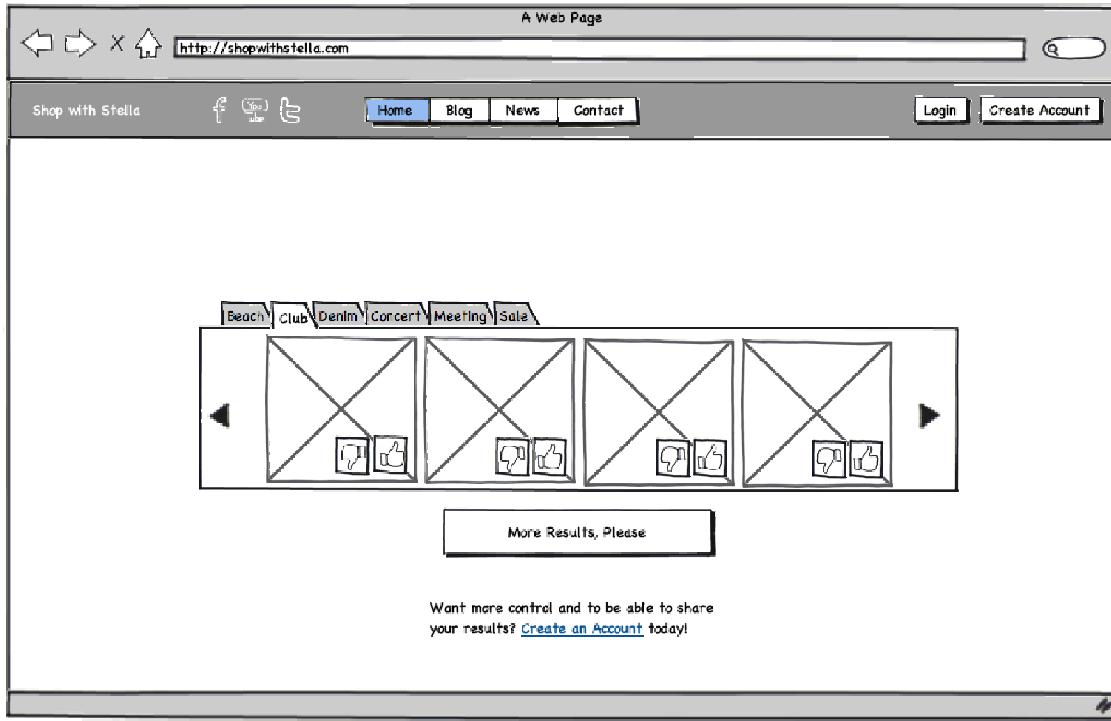


Figure 5.9: Unregistered Recommendation Page

The page functions similarly to the registered version, except for the missing elements. The page does not include the following functional elements:

- Closet
- Friends
- Account-enabled navigation bar

The page includes some text offering the user more features by providing a link to create an account. Clicking on the link redirects the user to the *Account Creation Form*.

**Open Issue** Wording of text has yet TBD.

**Open Issue** Functionality differences have not been finalized.

### 5.5.6 Unregistered Item Modal

This is the modal that appears when an unregistered user clicks on an item.

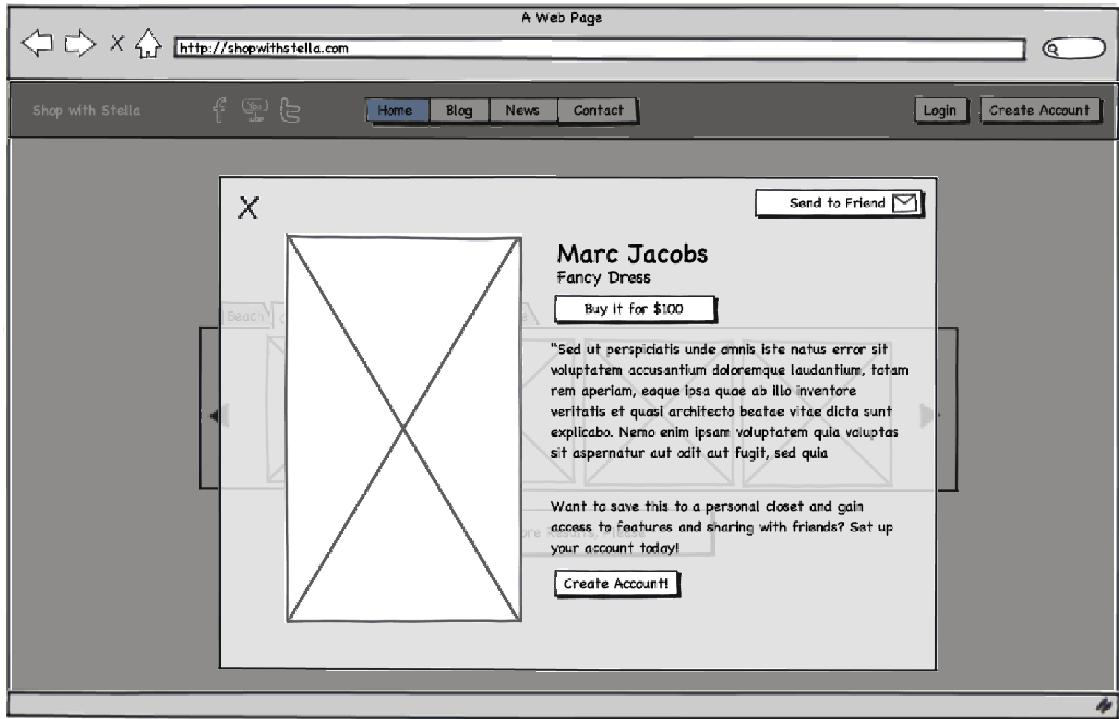


Figure 5.10: Unregistered Item Modal

The item model very closely resembles that of the registered version, except for some missing functional elements. The following functional elements are not included:

- The ability to add the item to a rack in the user's closet.
- The ability to share the items with friends.

The modal includes some text offering the user more features related to the item, such as saving it to a personal closet. It is accompanied by an account creation button, which, once clicked, will redirect the user to the *Account Creation Page*.

**Open Issue** Wording of text yet TBD.

**Open Issue** The differences in functionality have not been finalized.

### 5.5.7 My Closet - Embedded

Registered users will be able to access their closet from the recommendation page by clicking on the "My Closet" button in the bottom toolbar.

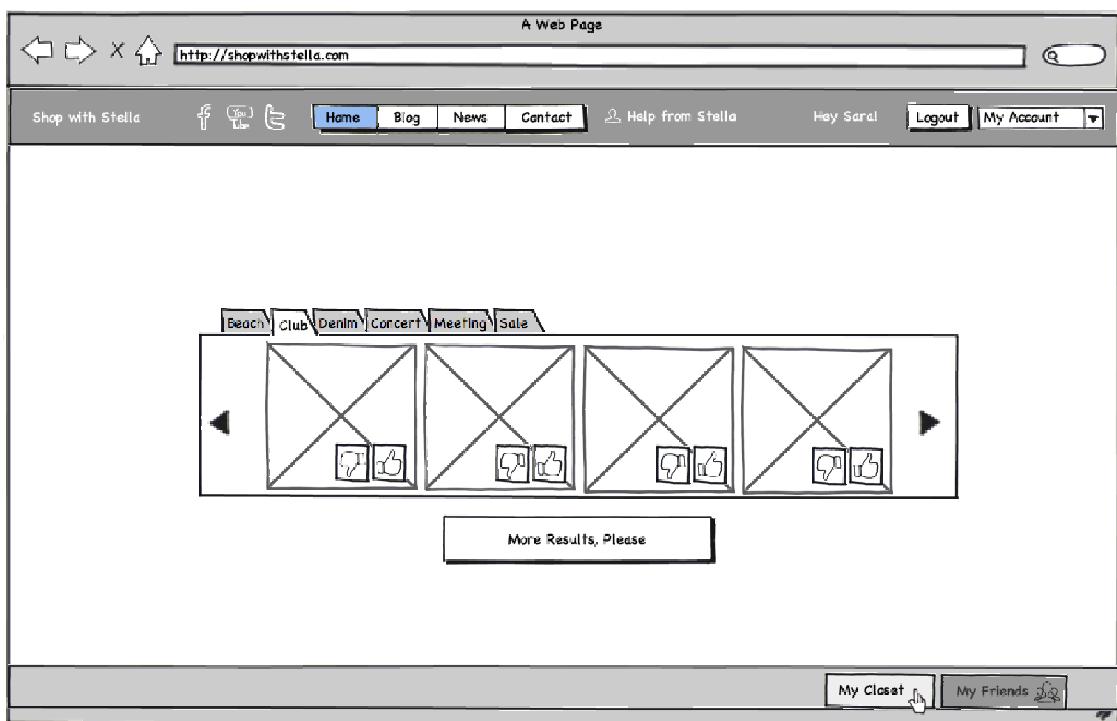


Figure 5.11: Clicking on the Closet Button

After clicking, the closet section expands to full view and reveals the current 'rack'.

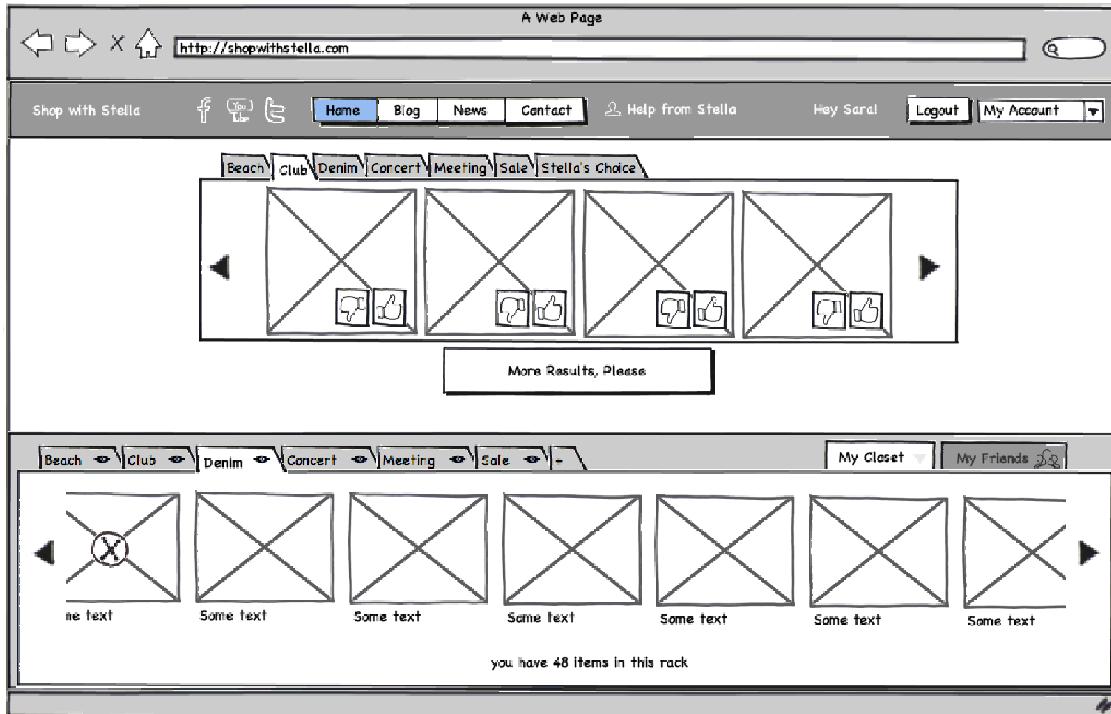


Figure 5.12: Basic View of Embedded Closet

The user's closet is organized into sections called racks. Each rack corresponds to a particular fashion category similar to the organization of items in the recommendation carousel. Clicking on each rack name displays the items that reside within that category.

Rack items are organized in a similar fashion as the recommendation carousel, and are left-right scrollable. They display the name of the item in text underneath or around the item. Clicking on an item brings up the *Item Modal* which displays detailed information on the item, and provides familiar functionality such as sharing the item with friends. The rack also displays how many items the user is currently storing within it.

**Open Issue** Wording of various texts has yet TBD.

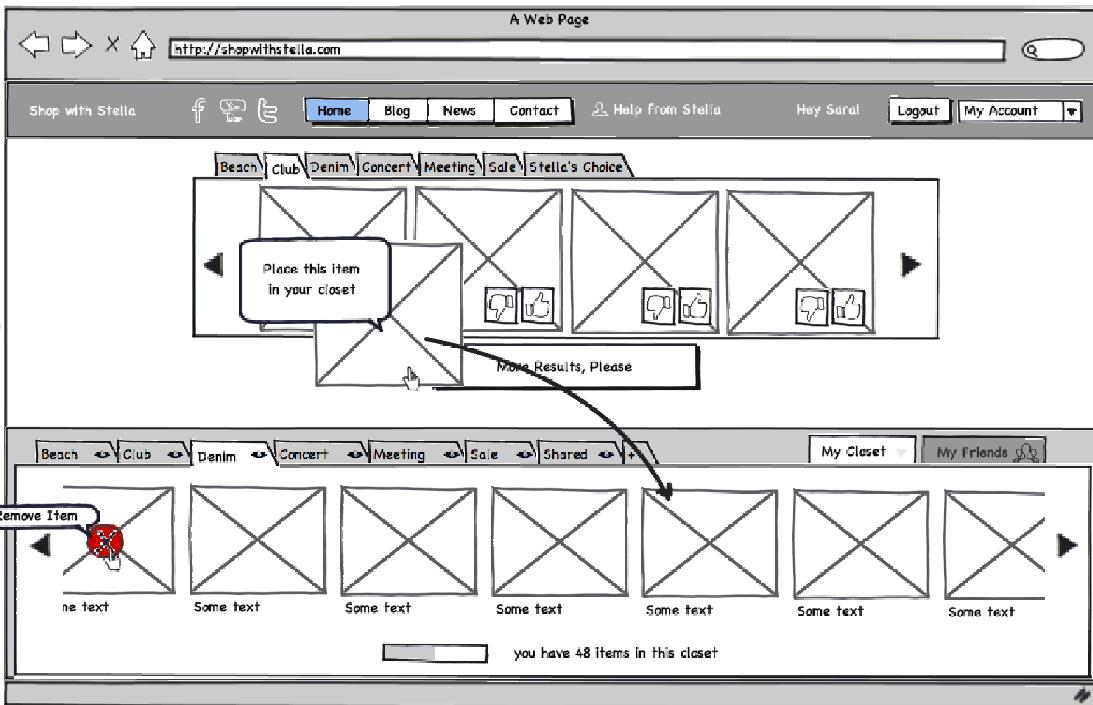


Figure 5.13: Interacting with the Closet

Users can add items to their closet by selecting the rack they want, and then dragging the item from the recommendation carousel to the rack below. To remove an item, users hover over an item which displays an 'X' that can be clicked, deleting the item from the rack.

When an item is dragged to the closet, it disappears from the recommendation carousel and is replaced by another item. It is automatically rated with a “like” or similar indication of preference to be used by ‘Stella’.

## 5.6 Closet Page

The closet page allows users to browse through their racks in a full-screen view without the recommendation carousel in the way. It also provides the ability to add, remove, and edit certain racks. Users will not be able to edit the default category racks however.

## 5.7 Friends Page

When a user has shared items to view, they can access it by clicking on the “Sharing” tab from the navigation bar described above. It is split into two sections; browsing friends

and viewing their closets, and looking through items that have been shared by others to you.

**Open Issue** The feature set of this page is not finalized.

## 5.8 Help from Stella Page

This is the modal that appears when a user first returns to the site after a period of absence. It allows them to quickly and unintrusively provide more information for "Stella", the recommendation algorithm, to learn them better.

The "Help from Stella" button provides the user with further questions to find out more about what they are interested in, in order to provide them with better results. Clicking on it will make the Modal appear.

**Open Issue** The functionality of clicking on "Help from Stella" has yet TBD.

**Open Issue** There is confusion here as to whether the "Help from Stella" link should direct users to an informational page, or prompt them with a question.

**Technical Note** Answers to questions must be verified if text is entered and updates user app tables in database.

## 5.9 Account Settings Page

This page is the user's control panel for their ShopwithStella.com experience. It is very likely that more functionality will be added to this section in the future.

The page allows the user to edit their personal information as well as submit further information about themselves. It also provides a way for 'Stella' to get more information from users about their preferences and tastes by having them answer "Help Stella" questions.

A Web Page

http://shopwithstella.com

Shop with Stella    f    t    Home    Blog    News    Contact    Login    Create Account

General    Friends    Racks    Messages

## My Account

Name: Sara Smith    User's icon is pulled from <http://en.gravatar.com/>

Email: sara.smith@yahoo.com    [edit](#)

Zip Code: 10018    [edit](#)

Change Password:

Repeat Password:

**Help Stella give you better results**

Answering more questions will help Stella return more accurate results.

Question #1:

Figure 5.14: General Information and Settings (Unfinished)