**Functional Requirements**

1. There shall be a registration process for new Shoppers to create a profile.
2. The registration form shall contain the required fields as shown below:
   1. First Name
   2. Last Name
   3. Username
   4. Email
   5. Password
   6. Confirm Password
3. The registration process shall submit the user’s information when they click the submit button.
4. The registration form shall have the following requirements
   1. Username shall be unique
   2. Email shall be unique
   3. Email shall contain an @ symbol
   4. Password shall be at least eight characters
   5. Password and Confirm Password fields shall be equal
   6. All required fields shall be filled out
5. All requirements listed in functional requirement four shall be fulfilled in order for registration data to be submitted to the database.
6. If any of the requirements listed in functional requirement four are not fulfilled, the information shall not be submitted, but instead shall place a red marker next to the missing fields.
7. Upon clicking the submit button and proper submission of registration information, the website shall send a verification email.
8. There shall be a link that when clicked, shall verify the user’s account within the verification email.
9. When the user clicks the verification link, there shall be a change made in the database denoting that the account is verified.
10. A registration link shall be displayed on the login page and should lead to the registration page.
11. Upon registering, there shall be an onboarding screen.
12. The onboarding screen shall display common products, brands, or tags that describe products.
13. The Shopper shall be allowed to add these tags to their profile to denote their preferences.
14. A login button shall be displayed on the homepage and should lead to a login page.
15. The login form shall contain the following fields:
    1. Email
    2. Password
16. There shall be a submit button on the login page that should lead the user to the home page when proper credentials are entered.
17. If the information entered in the login fields does not match the information found in the database, the user shall not be permitted to login.
18. Upon rejection of logging in, the following message shall be displayed “the entered username or password are incorrect”.
19. Users shall be required to login to have access to pages other than the login page.
20. There shall be a logout button that logs the Shopper out of their profile.
21. Shoppers shall have the ability to edit their profile information.
22. The edit profile page shall have the first name, last name, and username fields.
23. There shall be a submit button on the edit profile page that when clicked will make the proper changes to the Shopper’s information in the database
24. The login page shall contain a link for users who forgot their password.
25. The “forgot password” link shall take the user to the reset password page.
26. The reset password page shall contain a field to enter the Shopper’s email address.
27. Upon submission of the email address on the reset password page, an email with a link will be sent to user.
28. When the link is clicked, the user shall be taken to the change password page.
29. The change password page shall contain a password and a confirm password field.
30. The home page shall contain a channels panel and a recent channels panel.
31. The channel panel shall contain the top 5 channels and an other link.
32. The recent channel panel shall contain the top 5 recently visited channels.
33. Upon visiting a channel, the channel will now be added to the recent changes panel within the home page.
34. A Channel view shall have a name that describes the type of products that generally will appear within its feed.
35. Channels shall present one image of a product at a time.
36. There shall be a like button for the Shopper within the Channel view.
37. There shall be a dislike button for the Shopper within the Channel view.
38. Within the Channel view, there shall be a left arrow.
39. Within the Channel view, there shall be a skip arrow.
40. Upon clicking the skip button, a new product shall be shown to the Shopper.
41. There shall be a way to change to Shopper’s password safely.
42. On the change password page, there shall be a current password, new password and verify password field.
43. The password shall not be changed if verify password and new password fields are not the same.
44. The password shall not be changed if current password does not match the password saved in the database.
45. There shall be a profile page that displays the Shopper’s information and allows the Shopper’s to access the editing functions.
46. There shall be a way to change to Shopper’s email safely.
47. On the change password page, there shall be a current password and new email fields.
48. The email shall not be changed if current password does not match the password saved in the database.
49. There shall be an onboarding screen when a Shopper registers.
50. The onboarding screen shall have 20 tags displayed for the Shopper.
51. When clicked, the tags shall become red, indicating the Shopper likes that tag.
52. When the Shopper clicks submit, the tags shall be saved with the Shopper’s profile.
53. The selected onboarding tags shall be used as a basis for the Shopper’s preferences for the selection algorithm.
54. There shall be a “liked products” page that can be reached from the Home page.
55. The “liked products” page shall contain every product that the Shopper has clicked the like button on.
56. Upon clicking the like button by the Shopper, the product that was liked will now be added to the Shoppers profile under the liked products tab.
57. Upon clicking the dislike button by the Shopper, the product that was disliked will never be shown to the Shopper again.
58. Channels shall present a new product to the Shopper on the input of liking, disliking or skipping the image shown.
59. The selection algorithm shall use input from the Shopper to customize the products it presents.
60. There shall be an unsubscribe button that removes a channel from a Shopper’s profile.
61. Based off the Shoppers likes, dislikes and preferences, the selection algorithm shall update the Shoppers profile in order to better select products in the future.
62. There shall be a way for a Shopper to follow another Shopper.
63. There shall be a search bar in the side panel where the Shopper can search for channels.
64. When a Shopper clicks on a product, the Shopper will be lead to the more information page.
65. The more information page shall contain the following information:
    1. The brand of the product
    2. The manufacturer of the product
    3. A link to where the product can be purchased
    4. A description of the product
66. There shall be a search bar in the side panel where the Shopper can search for other Shoppers.
67. Upon clicking the left arrow, it shall return the Shopper to the previous product shown.
68. There shall be a tab with the label “Following” on each Shopper’s profile.
69. When the Following tab is clicked on, the Shoppers a Shopper follows shall be shown.
70. There shall be a tab with the label “Channels” on each Shopper’s profile.
71. When the Channels tab is clicked on, the Channels a Shopper subscribes shall be shown.

**Non-Functional Requirements**

1. All pages must load within five seconds of being requested.
2. Passwords shall be hashed and salted for security.
3. Webpage shall display across Chrome, Safari, Firefox.
4. Shopper information shall be stored in a relational database.
5. The database shall be properly updated upon request within five seconds.
6. The website shall be accessible 95% of any given day.
7. The website shall allow no more than five failed attempts at logging in before suspending the user’s rights to log in.
8. A verification email shall be sent within five seconds of a user finishing registration.
9. A product shall be suggested within 3 seconds of input.
10. Product information shall be stored in the relational database.
11. Tags about products shall be stored in the relational database.
12. Upon input, such as like, dislike or skip, there shall be a new product presented within 3 seconds.
13. Upon liking a product, the liked product shall be shown on the liked products page within 3 seconds.
14. Upon clicking the previous arrow, the previous product shall be shown within 3 seconds.
15. Upon clicking the unsubscribe button on a channel, the channel shall be removed within 3 seconds.
16. Upon following another Shopper, the followed Shopper’s username shall appear on the users panel within 3 seconds.
17. Upon typing a word into the search bar, search results shall be shown within three seconds.
18. Upon clicking on a product, the more information page shall be shown within three seconds.
19. Upon clicking the previous product arrow, the previous product and the input associated with that products/Shopper shall be shown within three seconds.
20. Upon clicking on the Following tab, the usernames of Shoppers being followed by that Shopper shall be shown within three seconds.
21. Upon clicking on the Channels tab, the channels that the Shopper subscribes to shall be shown within three seconds.

**User Stories**

1. As a user, I can register for a profile so I can have a profile.
2. As a Shopper, I can verify my email so I can log into my profile.
3. As a Shopper, I can sign into my profile so I can access the website.
4. As a Shopper, I can sign out of my profile so my account is protected.
5. As a Shopper, I can edit my profile so I can edit my personal information.
6. As a Shopper, I can reset my password so I can access my account if I forgot my password.
7. As a Shopper, I can change my email so I can access my account with a new email.
8. As a Shopper, I can change my password so I can protect my account.
9. As a Shopper, I can open a channel so I can browse through suggested products.
10. As a Shopper, I can skip a product so I can get a new suggestion.
11. As a Shopper, I can view my profile so I can see my profile information.
12. As a Shopper, I can view the home page so I can view the channels panel and channel view.
13. As a Shopper, I can see a photo of the present product so I can see if I like it.
14. As a Shopper, I can enter my preferences on the onboarding screen so I can receive better suggested products.
15. As a Shopper, I can like a product so I can see it later and update my preferences.
16. As a Shopper, I can dislike a product so I can update my preferences.
17. As a Shopper, I can view the liked products page so I can see the products I have liked.
18. As a Shopper, I can unsubscribe from a channel so I will no longer see that channel.
19. As a Shopper, I can follow another Shopper so I can see their profile.
20. As a Shopper, I can go back to a previous product in the channel so I can change my input on it.
21. As a Shopper, I can search for a new channel so I can subscribe to channels.
22. As a Shopper, I can view more information on a product so I can see if I want to buy the product.
23. As a Shopper, I can search for other Shoppers to follow so I can see what products they like.
24. As a Shopper, I can review the channels I have subscribed to so I can see the categories of products I have subscribed to.
25. As a Shopper, I can review the Shoppers I have followed so I can managed the Shoppers I can see.