Personas

The following personas represent our primary and secondary stakeholders:

Anna Stewart

Anna is a 25-year-old graduate student, majoring in Environmental Science, at Northeastern University. Ever since High School, she has been a staunch eco-activist. As such, she is aiming to be consumption-conscious and reduce her ecological footprint. She has volunteered at many environmentally focused non-profit organizations. She is fond of the saying 'Waste not, want not', and tries to live by this. She uses the web every day, spending most of her time being active on environmental forums, reading articles regarding environmental science, doing her assignments, etc.

Edward Dunn

Edward (prefers to be called Ed) is 21-year-old undergraduate student, majoring in Computer Science, at Northeastern University. He is passionate about computers and aims to start up his own company after graduating from Northeastern. He loves to host coding/gaming marathons at home. He is a typical broke college student who looks for ways he can get things for second hand and cheap. He is an experienced computer user and spends every day on his laptop or smartphone, doing assignments, coding personal projects, learning new concepts, playing games, etc.

Elsa Stewart

Elsa is Anna's elder sister. She is in her mid-30's, working at a prestigious law firm in Manhattan, New York. She has never studied in Northeastern University. She is in Boston to visit her little sister. Elsa doesn't share Anna's passion for the environment but she is supportive Anna's beliefs.

James Flynn

James is 22-year-old undergraduate student, majoring in Psychology, at Northeastern University. He is doing his co-op under a reputed psychologist. He is Ed's best friend and knows him from his high school days. He is working in Boston and is Ed's roommate as well. As he loves to observe people, he is tolerant of Ed hosting his marathons at home.

Interaction Scenarios

1. Create post

As Anna's sister Elsa is coming for a visit, Anna wants to obtain an airbed in return for her blender. She visits the Swap Pal homepage and clicks on *Create Post* button. As she is not logged in, she is directed to the Login page. Since she is a member, she enters her NEU email ID and password and clicks on Login button. She is redirected to a new web page, titled Create Post. On this web page, she enters the Title and Description. Since she doesn't have the Airbed on her profile wishlist, she does not check the *Import wishlist from Profile* option. She enters 'Airbed' in the first textbox under the Wishlist section. Since she doesn't want any other item, she decides to leave the rest of the textboxes blank. In order to upload the pictures, she clicks on + button in the picture box next to the Title. A familiar file-browsing dialog box appears and she selects the image files of the Blender from her local machine and presses the *Upload* button. Now that all the required fields are complete, she clicks on *Post* button.

2. Review a post scenario

Anna has swapped her blender for Edward's airbed. Anna really liked the sturdy airbed and re-visits Swap Pal to take down her post and add a review. Anna clicks on the *User Profile* icon on the homepage header where she is redirected to the login page. Anna fills out her NEU email and password and clicks on the *Login* button. After she logs in, she is redirected to her profile page where she selects the *My Posts* tab to view all her posts. Anna clicks on the *Complete* button corresponding to the blender post to remove the post.

After the post is removed, a pop-up appears asking Anna to rate and review the transaction with Edward. She clicks on the fifth star to give Edward a five star rating and also leaves a comment in the description box about the sturdy and well maintained airbed and clicks on the *Submit* button at the bottom-right of the pop-up window submitting her review.

Edward logs back in to Swap Pal after couple of weeks. As the post is marked as complete by Anna, a pop-up appears asking him to rate and review the transaction. Edward clicks on the fifth star to give Anna a five star rating too and just clicks on the *Submit* button without leaving any comment in the textbox.

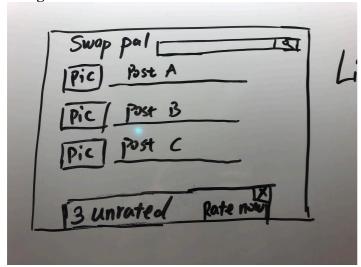
3. Contacting the post owner

As Ed's blender is not working anymore, he decides to check out Swap Pal to see if anyone has a blender. He visits the Swap Pal homepage and types 'Blender' in the search bar and clicks on the search icon. He is directed to a web page containing all the posts related to 'Blender'. Scrolling through the list of posts, he finds Anna's post. He clicks on her post. He is taken to a new web page, where he can see the details of Anna's post, such as - Anna's profile picture, her name, her ratings, the post title, the image gallery of the Blender that she wants to give away, the description, and her wishlist. He also notes that there is a *Report* button and *Contact* button. He likes the images and decides to check out her wishlist. He clicks on the wishlist tab, and the tab opens to reveal Anna's wish list, which is an 'Airbed'. Since he has an airbed that is in a pretty good condition, he clicks on *Contact* button. As he is not logged in, he is directed to the Login page. Since he is a member, he enters his NEU email ID and password and clicks on *Login* button. He is directed to the page containing Anna's post details. Now, in place of *Contact* button, he can see Anna's email ID that he can use to contact her.

Design Options

As mentioned in P2, the review system is important to enhance trade safety and increase the trust between the users. If items on our platform contain lots of fake information or extravagant price, it would break out the user experience, or even worse, too many bad experience may cause our users leaving from our platform. Thus, reviewing system is needed to help users identify their potential trading object. So in this section we are going to design and compare 3 review pages, then select the best plan which would solve the trust issue in our swapping platform.

Design 1



This was our first approach. We thought to make a small rating banner at the bottom of the screen with an option to close the banner. The rating banner would also display the number of unrated posts. Once user logins the website, the rating banner would pop up from the bottom, user could click on the banner, then a pop-up appears, looking similar to Design 3 but it has a close button to dismiss the pop-up. The different part from Design 3 is this banner would not block any user's operation on the platform, user can even close the banner any time by clicking the cross button

Design 2



This was our second approach. We thought of placing the rating process in the User Profile page. In order to rate their transaction, the user would have to first go to their Profile page, click on Unrated tab. There, they will be presented with a list of unrated posts, which they can choose to rate or not.

Design 3



This was our final approach and we chose this as the best design for our system. When the user logs into their account and if there is some unrated post that is related to the user's transaction, they are prompted to rate their swap experience. This pop-up will block the contents of the Swap Pal web page and force the users to rate their experience before letting them use our system. This is done in order to build a trust system within Swap Pal. We believe that if we give an option for the users to not rate, then many users will just not rate and we will not be able to effectively build a trust system. Besides, our rating pop-up will take less than 1 min to fill

In the first design, we felt that the banner does not indicate how many fields are present in the rating pop-up. This might make the users hesitate to click on it to find out. Also, the close button makes it easy for them to dismiss the prompt for rating. This makes it difficult for our system to build a trust network between users.

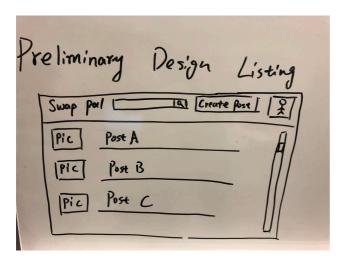
In the second design, we felt that the user will not be aware that they have to rate a transaction as it is on their profile page and might overlook this step. Moreover, just to rate a transaction, they have to navigate to a different page. This might be too much of a hassle for the users and they might just not rate it as it does not affect them anyway.

In our design, we have addressed the problems faced by designs 1 and 2. We clearly show how many controls are present on the rating pop-up in the 3rd design. We removed the close button in order to force the users to rate their swap experience. Also, unlike design 2, the users don't have to click and navigate so much just to rate their experience. The pop-up appears just as the user logs in.

Overall design

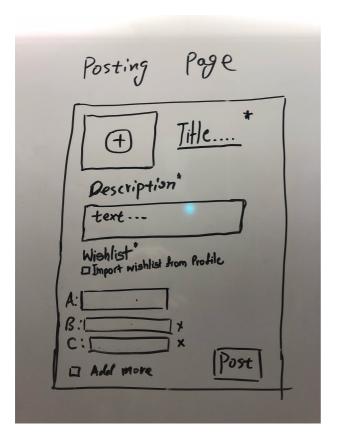
Post Listing Page

Post Listing page is our home page, which displays all the latest active posts. After user enter keywords in the search bar and click the "Search" icon, this page will display the latest posts that related to the keywords. Each list item contains at least one picture and a title, once user clicks on the picture or title, user will be brought to "Post Detailed" page. "Create Post" button is located right next to the "Search" Icon. After clicking on this button, user will be brought to "Posting" page if he/she already logged in. Otherwise, our system will bring the user to the login page. User can reach the profile page by clicking the avatar on the right upper corner of the page.



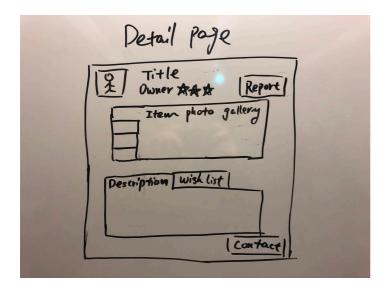
Create Post Page

This page contains several widgets such as textboxes, checkbox, buttons as shown below. The top section contains two textboxes for the title and description of the post followed by a checkbox with the label *Import wishlist from Profile*. When this checkbox is selected, the wishlist from the user profile is imported into the textboxes (labelled A,B,C,etc). By default, the checkbox isn't selected, and the user can enter the names of items the user wants to swap his/her item for, in the textboxes (labelled A,B,C). The x buttons next to each textbox (labelled B,C) deletes the particular item from the wishlist. A wishlist should have atleast one item and the user can also enter more items in his/her wishlist by clicking on the *Add More* button below. In order to upload pictures, the user can click on + button in the picture box next to the Title. A familiar file-browsing dialog box appears and he/she selects the image files of the item from his/her local machine and press the *Upload* button. After all the required fields are completed the user can click on the *Post* button to create his/her post.



Post Details Page:

The post details page contains all the information about a particular item as shown below. The top section of this page has the title of the post, the owner's name followed by his/her overall rating and to the right there is a *Report* button which can be used to report the post. On clicking the *Report* button, the user is displayed with a popup which contains a textbox to leave a comment on why they are reporting the particular post. The post details page also has a photo gallery which contains one or more pictures of the item posted. To the bottom of the page, there are two tabs, that is, the description tab and the wishlist tab. The description tab contains the description of the item and the wishlist tab contains a list of items the owner would like to swap this item for.



Review Popup Design

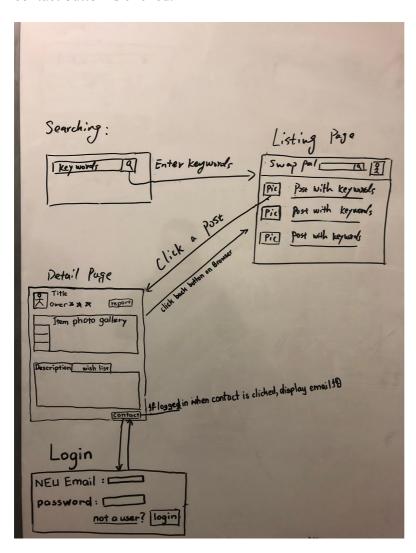
The review popup is a simple design with three widgets, that is, the star ratings, the textbox and a submit button as shown below. The users have to give a 5-point scale rating by clicking on any of the stars, 1 star being the lowest and 5 stars being the highest rating. The users can also leave a review, which is optional, in the textbox. Once the user has given the rating and the review(optional) he/she can submit the review and rating by clicking on the submit button which closes the review popup and redirects the user to the Swap Pal homepage.



Scenario storyboards

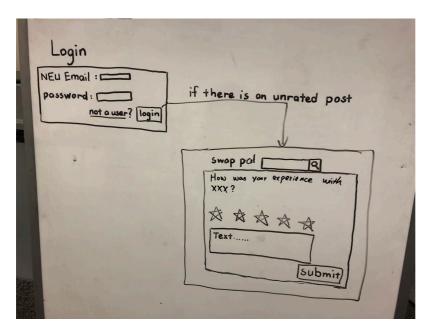
Contacting the post owner

User enter the keyword of the item in the search bar and click search, our system will bring the user to the Listing page, all posts that are related to the keywords will be displayed on the listing page. User can click on any post to be brought to the details page which can view all the information about this item. Clicking the back button on the browser will bring the user back to the item listing page. In order to see the post owner's email address, user have to login to our system first, if the user already logged in then the email address should be shown when the contact button is clicked.

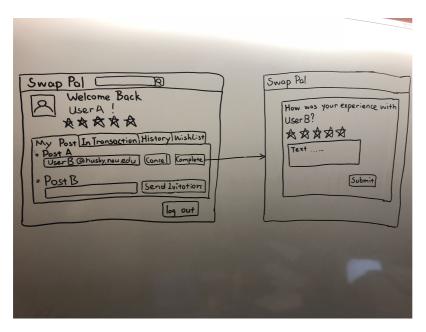


Review a post

After a user logged in, there will be a huge window with review widgets pops up if there are any unrated transactions left for this user. This review page won't go away until user finished the review. User can click on the stars to rate the other user from 1 - 5 (stars), and leave a review message if needed. After click the submit button, the review process is completed and the user will be brought to the home page (Listing page).



When transaction is completed, post author could mark the post as complete by clicking the complete button under "My post" tab in the profile page, and a window with review widgets will pops up. User can click on the stars to rate the other user from 1 - 5 (stars), and leave a comment if needed. After click the submit button, the review process is completed and the user will be brought back to the profile page



Create post

In order to create a post, user need to click the create post button at the right upper corner on the listing page. If the user hasn't logged in, our system will bring the user to the login page. User can enter his/her credential to login. For first time users we require them to register their account first by clicking "Not a user?", they will be brought to the registration page. After filling out all required information, user should, click register button located at the bottom and will be brought to the posting page. In order to create a post, user will need to upload images, write descriptions and add stuffs to the wishlist. After user created the post by clicking the post button at the bottom, our system will bring the user to the profile page, and new post will be added to "My Post" tab

