Final Report: NXTFolio

• Team members and roles

- o Chuqi Zhang
- o Cong Fu
- o Haiyang Yu
- o Kehan Meng
- o Shurui Gui
- o Zhao Xu (Product Owner)
- o Zihan Wang (Scrum Master)

Links

- o GitHub repo: https://github.com/zihanwang1819/match-my-fashion-public-CodeCreators
- o Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2535985
- o Heroku: https://fashionnxt-2021.herokuapp.com
- o Poster & Demo video: https://www.youtube.com/watch?v=Ukgva1hD5oM

Project summary

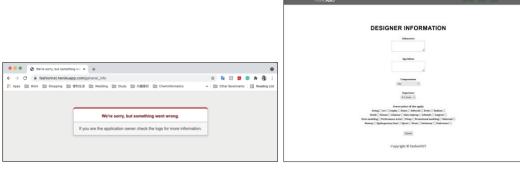
This project is initiated by our customer Mr. Prasenjit Tito Chowdhury who is the Executive Producer of FashioNXT. As a fashion industrial company, FashioNXT aims to not only hold the fashion week and provide agency services but also release a product named NXTFolio that functions like LinkedIn and indeed for people who involved in the fashion industry. Stakeholders of this project involves the FashioNXT company, Mr. Prasenjit Tito Chowdhury, future users, and development teams.

The main customer needs include registration for new users, create user projects with images uploaded, display user information and user projects, search user profiles, etc. As a legacy project, previous teams have already built the basic structure of this application. Our implementations and enhancements include: 1. Improve the user interface for the landing page; 2. Complete the registration pipeline; 3. Improve the user profile page; 4. Improve the user homepage. Detailed implementations can be found in the section of user stories. We meet the most needs of the customer and implemented more features than what we proposed in iteration 0. As the application is not perfect yet, next development team can continue to work on the remaining needs such as advanced searching function.

• User stories

1. Fix a bug in the registration pipeline (2 points)

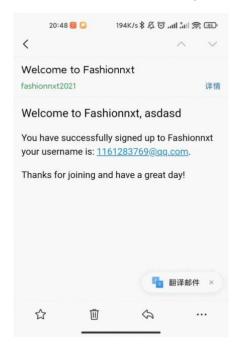
Description: The legacy code already has the registration pipeline, but there is a bug causing the registration procedure interrupted by an error page showing "something went wrong". After we fix this error, the user can successfully move on to next page to fill out the professional information.



Before After

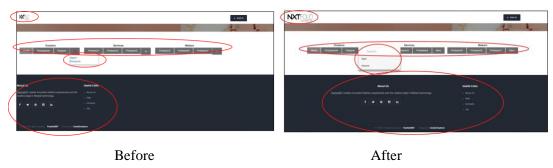
2. Send email for successful registration (3 points)

Description: After referring to the example website provided by the customer, we register a Gmail account: fashionnxt2021@gmail.com, and implement the function to send confirmation and welcome email to new users who have registered successfully.



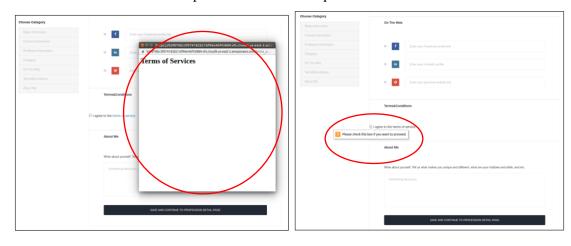
3. Improve landing page user interface (3 points)

Description: As one of the most important pages of the application, the customer wants to have a well-designed landing page so that users will have a good impression about the application. Hence, we increase the logo size and the logo image resolution. Also, we center not only the category bars, but also company information and copyright in footer. Moreover, we add a search function to allow user type specific categories, but we deprecate this search function because the customer prefers to use arrow bar and list all category options.



4. Ask user to agree terms and conditions (3 points)

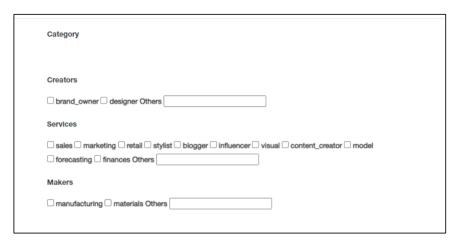
Description: Our customer wants to clarify terms and conditions and have new users to agree on that before being a registered member. Therefore, we implement this feature in the registration pipeline. Term details will be displayed by clicking the "term of services". And the new user is not allowed to proceed unless this required box is checked.



5. Check options of field category details (3 points)

Description: The customer wants users to select their own field categories so that users can be better grouped, filtered, and searched. To achieve this goal, the first step is to ask field

categorical options from users. Therefore, we add a new section in the registration pipeline to collection information from new users, and then save this information into the database.



6. Improve profile page user interface (2 points)

Description: The customer wants to improve the user interface of the profile page so that users can have better experience when browsing the profile pages of other users who they are interested in. Hence, we improve the background and improve the display when putting the mouse on a project.



Before After

7. Improve the footer of landing page (1 points)

Description: We enrich the footer of the landing page, so that users can easily see clear and rich information about the customer's company FashioNXT. All information is linked to corresponding address. However, the customer does not like it. Hence, we deprecate this feature and revert it back to the previous version.



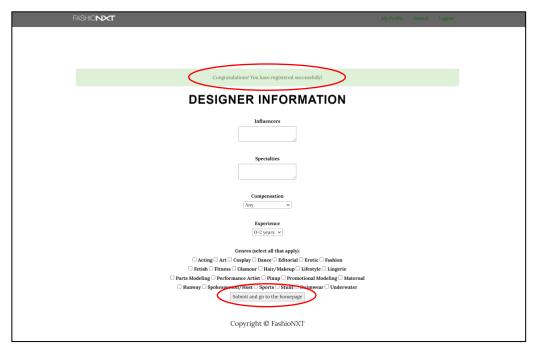
8. Add project by clicking a plus sign placeholder (3 points)

Description: Previous team already implemented the function of adding project, but the customer wants to make the first project before all existing projects as an empty placeholder with a plus sign, so that users can click this placeholder to add new projects. We implement this feature as the customer needs.



9. Complete registration message and direct to user homepage (2 points)

Description: In the registration pipeline, professional information is optional to fill. To make the registration procedure clearer, we add a complete registration message in the professional information. By clicking the "Submit and go to the homepage" button, we direct the new user to their own homepage to start adding projects.

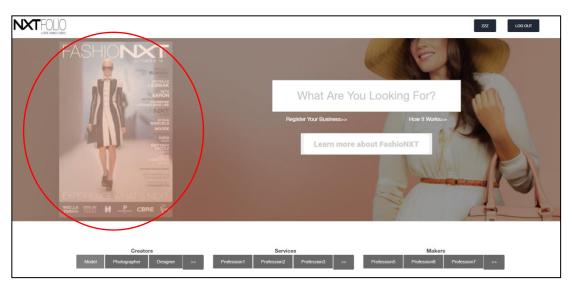


10. Add advertisement (3 points)

Description: Doing advertisements at proper locations on webpages is an important way to make profits for the web owner. The customer wants to have advertisements on the searching page at the first, but we find the searching page created by the previous team has some technical issue to implement this feature. Therefore, we implement it on the landing page. We implement a fancy popup window for the advertisement at first, but the customer does not like that. Hence, we deprecate it and put an advertisement image as the customer wants.



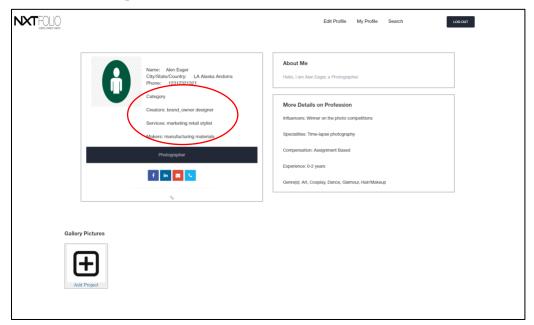
Design 1



Design 2

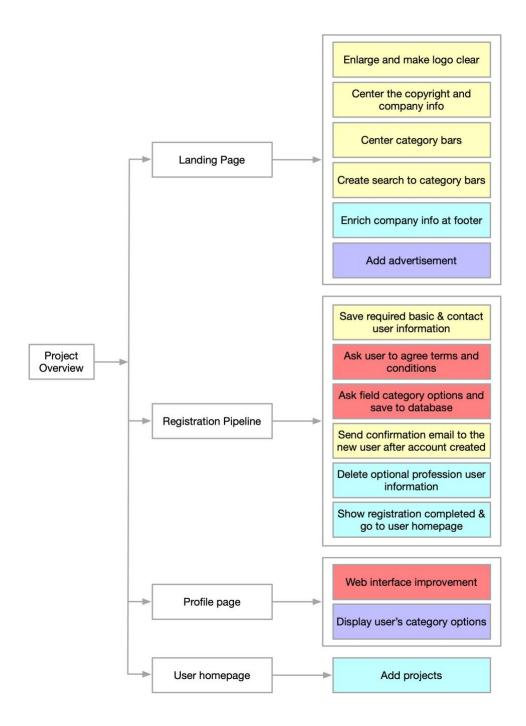
11. Display categorical options on user profiles (2 points)

Description: As we have implemented to feature to collect users' categorical options during registration procedure, the customer wants to display this important information on user profiles. Hence, we implement this feature as the customer needs.



• Design diagram

Yellow items are completed in iteration 1, red items are implemented in iteration 2, blue items are implemented in iteration 3, purple items are implemented after iteration 3.



• Legacy project strategy

This project is a legacy project aiming to build a professional social network like LinkedIn for the fashion industry, and the project is based on Ruby. To better understand the existing code passed from previous developing teams, our first step is to run the legacy program and troubleshoot all problems we meet. We finally set up the working environment by updating the rails version from

5.0 to 6.1.4.1, fixing the environment of the development branch, updating the file storage to the Active Storage. Then, we read existing code to get familiar with essential components including model, controller, view and database. Then, we have a detailed picture of what have been implemented by previous teams, how they are implemented, and what can be added or improved by us. During the development of this application, we complete 11 user stories as described in previous section. Since the password of Heroku is not received from the previous team, we deploy the application to a new link.

• Scrum iteration accomplishment

- Iteration 0: We discuss the general picture of the application with the customer, understand needs of the customer, and propose 6 initial user stories covering various components of the application.
- Iteration 1: We fix the bug in registration pipeline, implement the "send email for successful registration", and improve user interface of the landing page. (User stories 1-3)
- Iteration 2: We implement "agree terms and conditions" and "check options of field category details" in the registration pipeline and improve user interface of user profiles.
 (User stories 4-6)
- o Iteration 3: We improve the footer of the landing page, add project by clicking a plus sign placeholder in the user homepage. At the end of the registration, we add a complete registration message and direct to user homepage. (User stories 7-9)
- o Iteration 4: We implement advertisement on the landing page and display categorical options on user profiles. (User stories 10-11)

• Customer meetings

- 2021/10/20, 4:00 5:30 PM, Zoom; The customer introduces the general idea of the application, and we discuss features needed in this application.
- 2021/11/1, 11:30 AM 12:10 PM, Zoom; We show completed user stories of iteration 1 and get feedback from the customer.
- 2021/11/17, 4:00 PM 5:00 PM, Zoom; We show completed user stories of iteration 2 and get feedback from the customer.
- o 2021/12/1, 4:00 PM 5:00 PM, Zoom; We show completed user stories of iteration 3 and get feedback from the customer. The customer asks to implement more after iteration 3.
- o 2021/12/8, 4:00 PM 4:50 PM, Zoom; We show additional completed user stories after iteration 3, and summarize all completed works of our team.

• Test

For features involving important functions, we conduct unit BDD/TDD unit test, and expect all steps passed for corresponding scenarios. Codes and log files have been uploaded to the feature folder under our GitHub repo (https://github.com/zihanwang1819/match-my-fashion-public-CodeCreators/tree/develop/features).

For works related to user interface of webpages, instead of writing code to test the function, we simply observe and check the effect of modifications.

• Configuration management approach

For development, we usually work individually to develop user stories and then commit to the develop branch. After completed all features at the end of the project, we merge it to the master branch. We utilize commit to control our versions and development.

• Issues on Heroku & AWS Cloud9 & tools/GEM

In general, we deploy our codes on Heroku after each iteration and we do not meet serious issues with deployments. Note that in the final version, we deprecate features that are implemented by us but not appreciated by the customer. Although we claim these deprecated features in our user stories as our work, we do not deploy them with respect to the customer's need.

We develop the application on AWS Cloud9 and we do not meet any issues. And we follow the previous team to build the bucket to store the pictures uploaded by website users. We generate and the ID and keys in config/credentials.yml.enc and config/master.key, but we do not push it to the GitHub as they are confidential. Next team may have their own ID and keys.

We also use tools such as omniauth, omniauth-facebook, omniauth-google-oauth2 to enable facebook and google authentication, because this gem handles authentication processes, failures, and redirections. And we use omniauth-rails_csrf_protection to mitigate CRSF vulnerability when using omniauth on rails app.

GitHub repo description

We push codes and documentations to the GitHub repo. Both develop branch and master branch are available with our latest code. Please refer to README under these two branches for detailed instructions.

• Challenges & future works

For the User story 6 that is about improving the user interface design of the profile page, in addition to what we have implemented, the customer also desires to enlarge the size of the project and shrink the gap among projects. However, we find it is a big challenge for us to achieve this need, because all images are stored in the AWS bucket, and it requires more complicated operations than we can handle. Next team is encouraged to work on this unsolved need.

In User story 5, we implement the feature to collect categorical options from every registered user. Based on this feature, the customer desires to implement a filter feature on the landing page. As categorical options are shown in the landing page, the customer expect that clicking a specific categorical option can filter out mismatched user profiles, and only display matched users on the landing page. Due to the time limitation, we have not started working on this feature. As the customer emphasizes this is a high-priority feature in the last meeting, we encourage the next team to work on this feature.