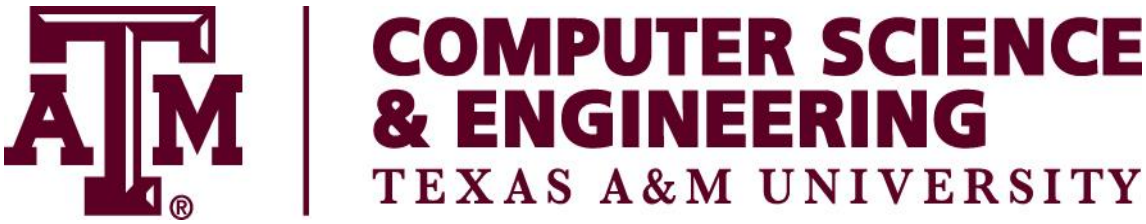

FashioNXT Web Application

CSE 606 Software Engineering

Course Project (Fall 2020)

Team: Code Creators

Prof. Duncan M. (Hank) Walker

Nov 30, 2020

By

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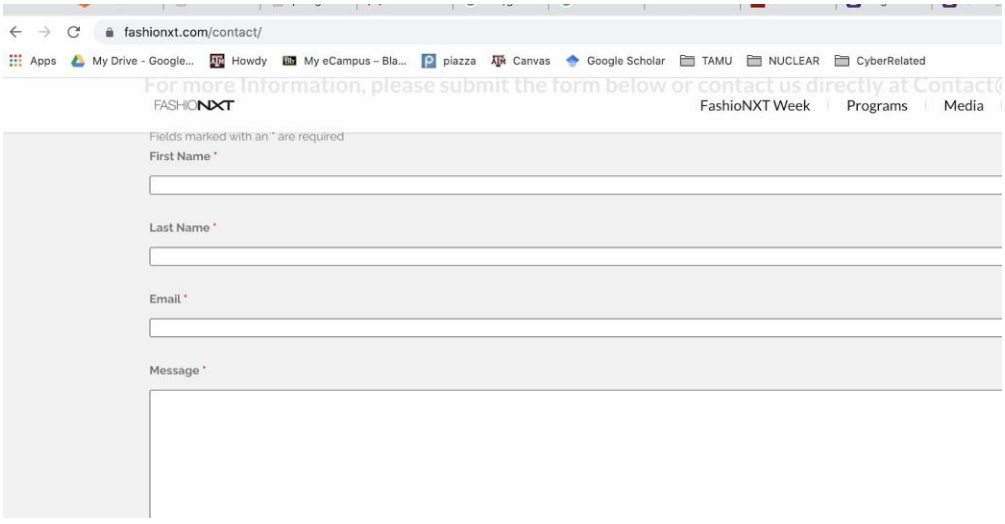
Summary

FashioNXT is a professional LinkedIn style social network targeted at the fashion industry specifically. The client, Prasenjit Tito Chowdhury, aims at making the beta version of the project live by the end of this term. This application's essential function is to provide an avenue for industry members to create their personal profiles and showcase their creative work credentials. The application also should provide other members to search for collaborators based on different criteria. The stakeholders we identified here are the client (Mr. Chowdhury)/ the company, the fashion industry professionals who are the web application users, and the future development team, if not the current one, who may take up the application add additional features.

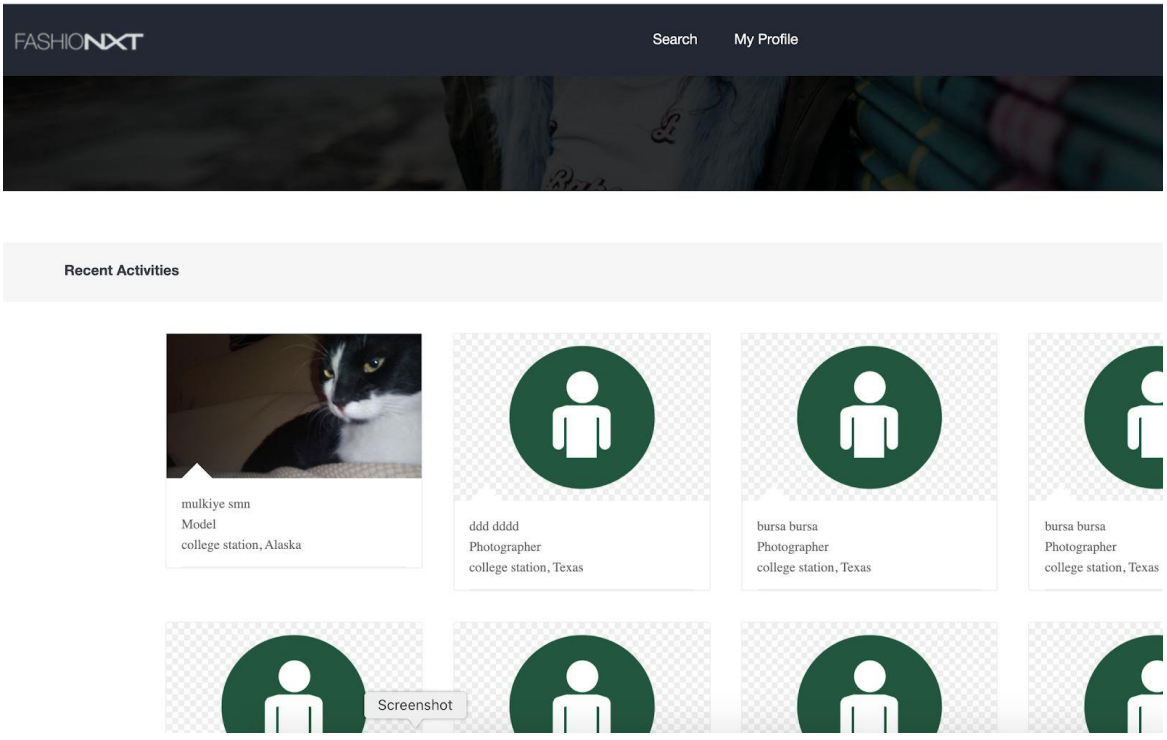
The project assigned to us is a legacy project, meaning that the site's product's efficacy, implementation, and functionality were already made available beforehand. The customer's requirements for the project are for the team; 1. Test all the necessary features and identify as many limitations encountered in the current application. 2. Fix the applications for features that are not working correctly. 3. Make UI changes to improve user experience. There are also other functional improvements requested to make the application more user-friendly. Our final iteration of the site fully implements existing features with a possibility of some new features and a focus on the improved performance of existing functionalities. The most prioritized features that the team is taking up are multiple profile creation using the same email address, email and password validation, adding units for height/weight measurements in the Edit Profile for the model, and finetuning and improvement of the search functionality using the name. The site's UI will be redesigned to look more professional and easier to use, with some feature changes. Finally, the signup and sign in functionalities' look and feel will be changed.

USER STORIES

1. *Fixing Broken links present at the bottom of pages i.e.*
    - Contact Us
    - Help
    - Job



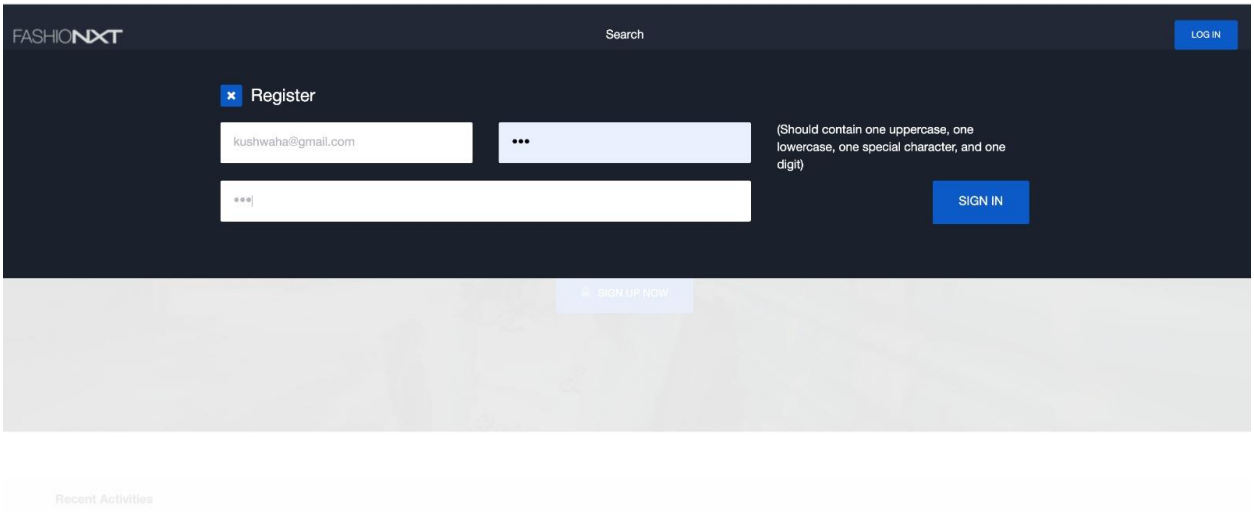
2. *Showing default avatar when user does not choose to upload his/her profile image.*



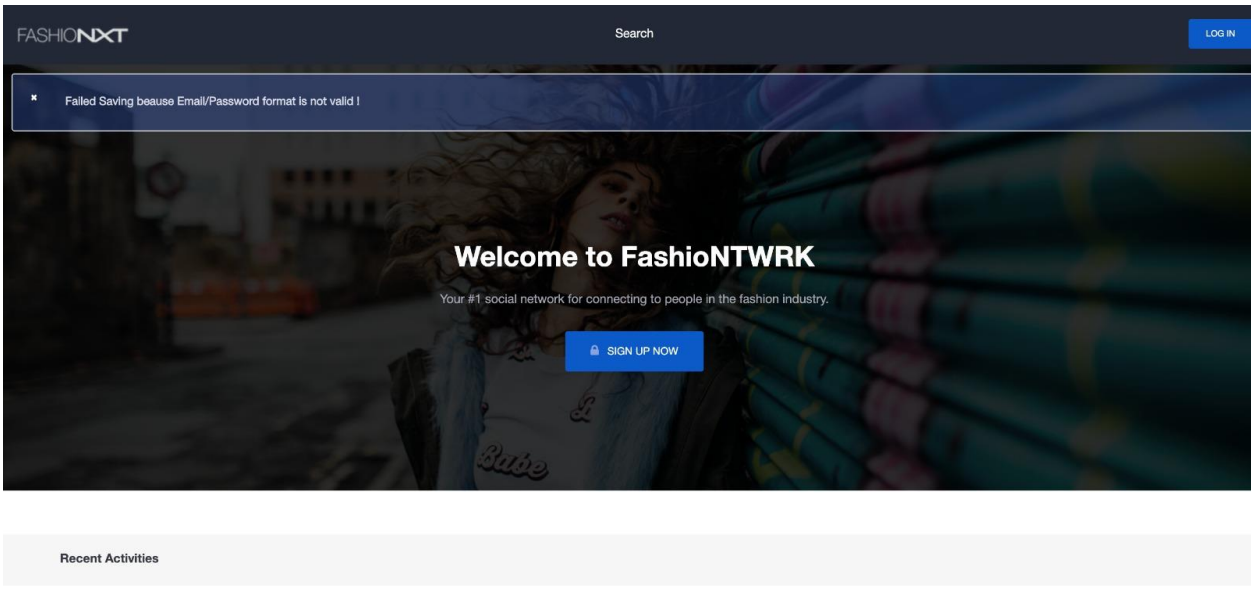
3. *Verifying the user email ID & Password strength while sign up*

The application took any string for email ID and password and didn't verify if they are valid or not. This user story verifies the email ID. It also checks for the password strength and allows only strong passwords. Checking validity is essential to avoid fake profiles and profile hacking.

The image below shows that the user entered a password that doesn't satisfy the required conditions.

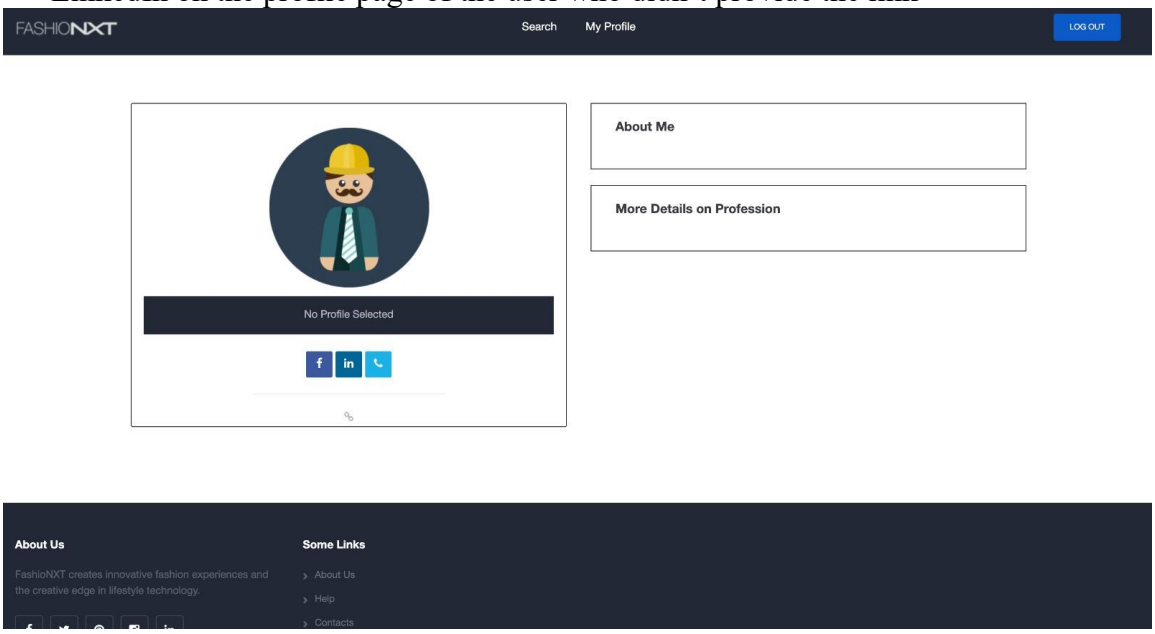


The image below shows an error message "Failed Saving because Email/Password format is not valid!"

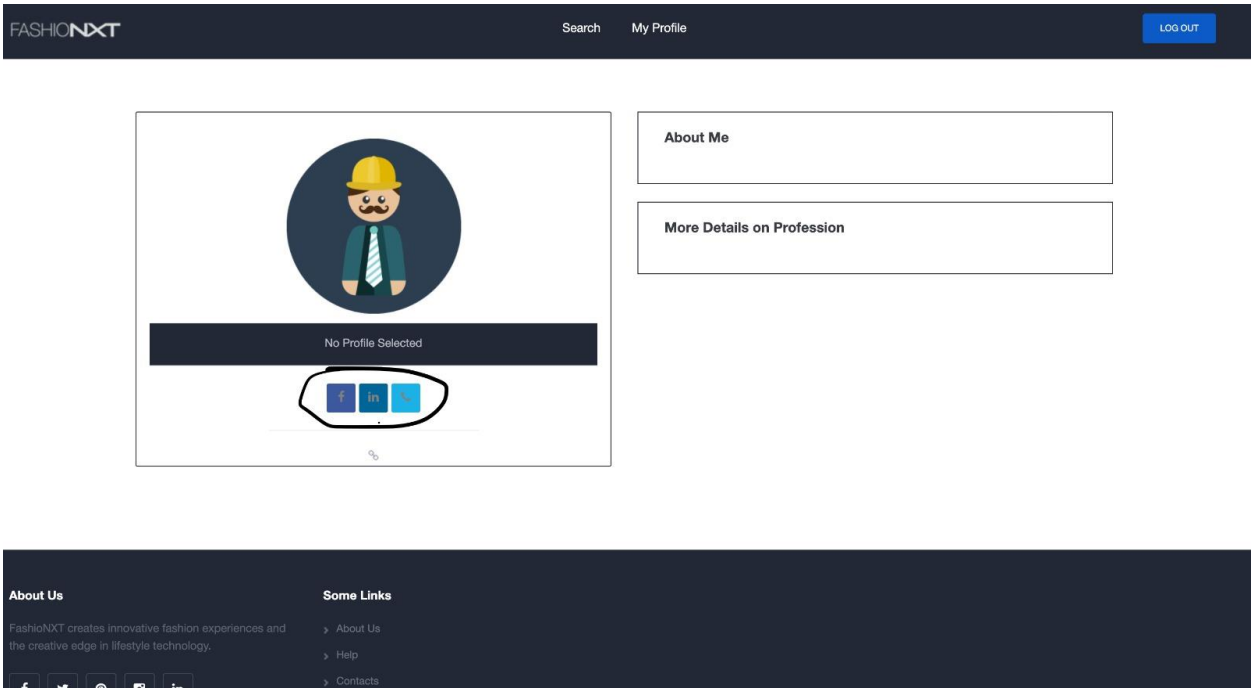


4. *Disabling the Facebook, contact, and LinkedIn icons on the profile page if the user doesn't provide the links for the respective social media pages.*

Before code change: The below image shows the icons enabled for Facebook, contact, and LinkedIn on the profile page of the user who didn't provide the link



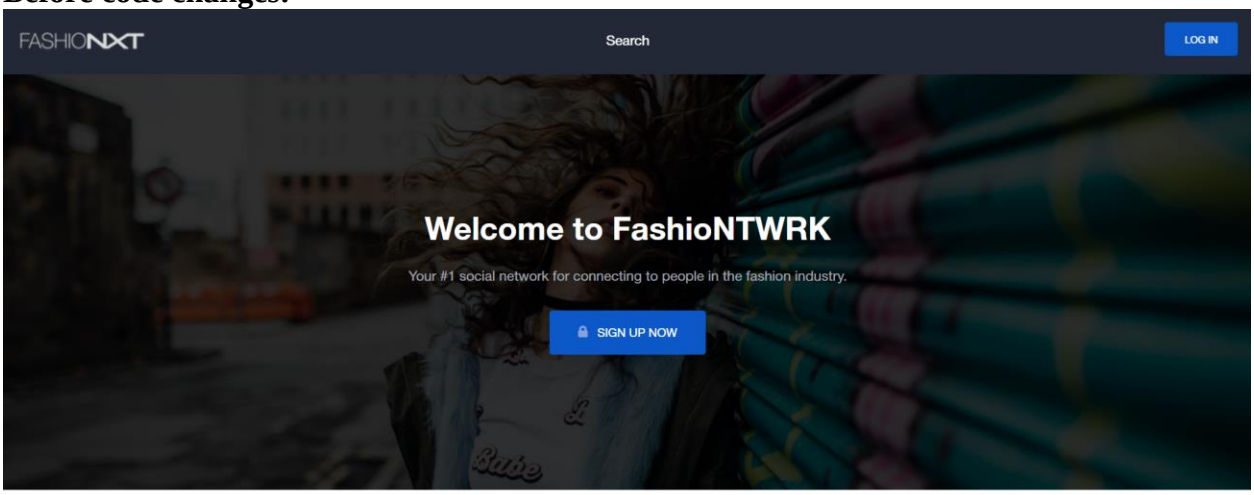
After code changes: The below image shows that the icons are disabled for the user who didn't provide the links.



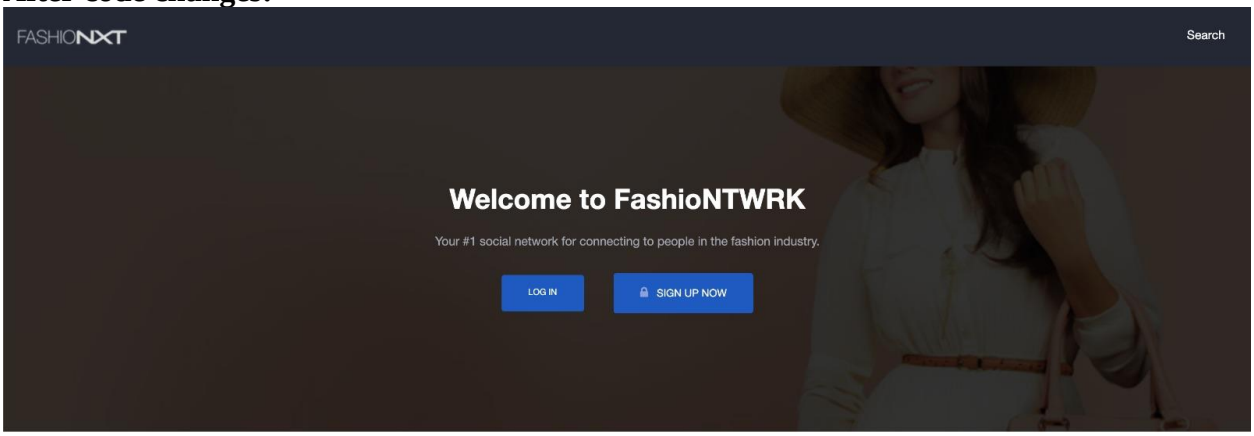
5. *Home page UI changes as requested by the client*

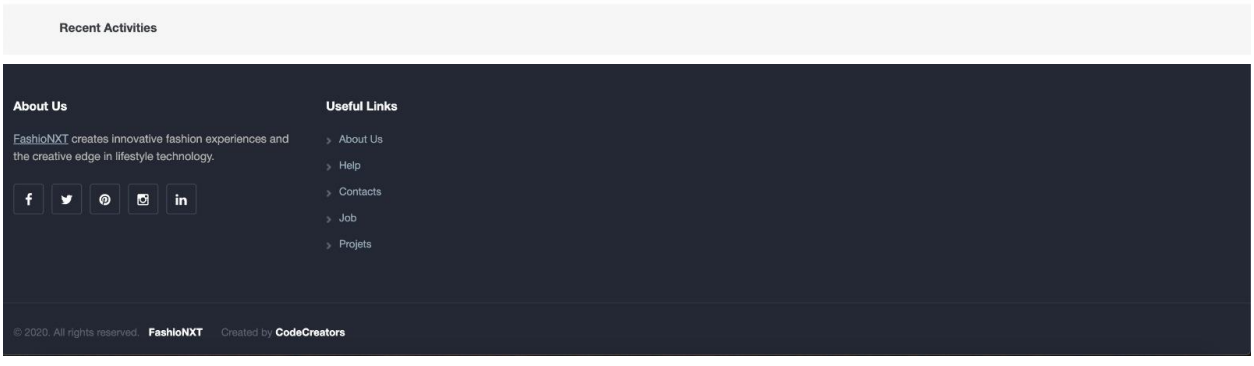
   We made changes for the background, header, Logo position, button placements, and footer information.

Before code changes:



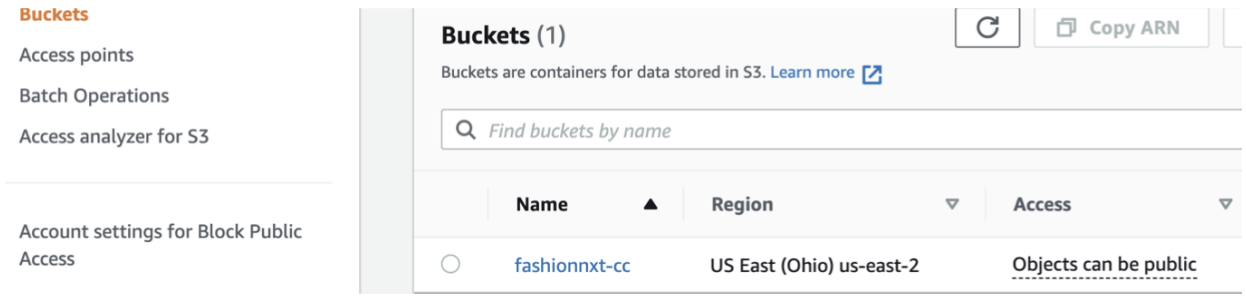
After code changes:



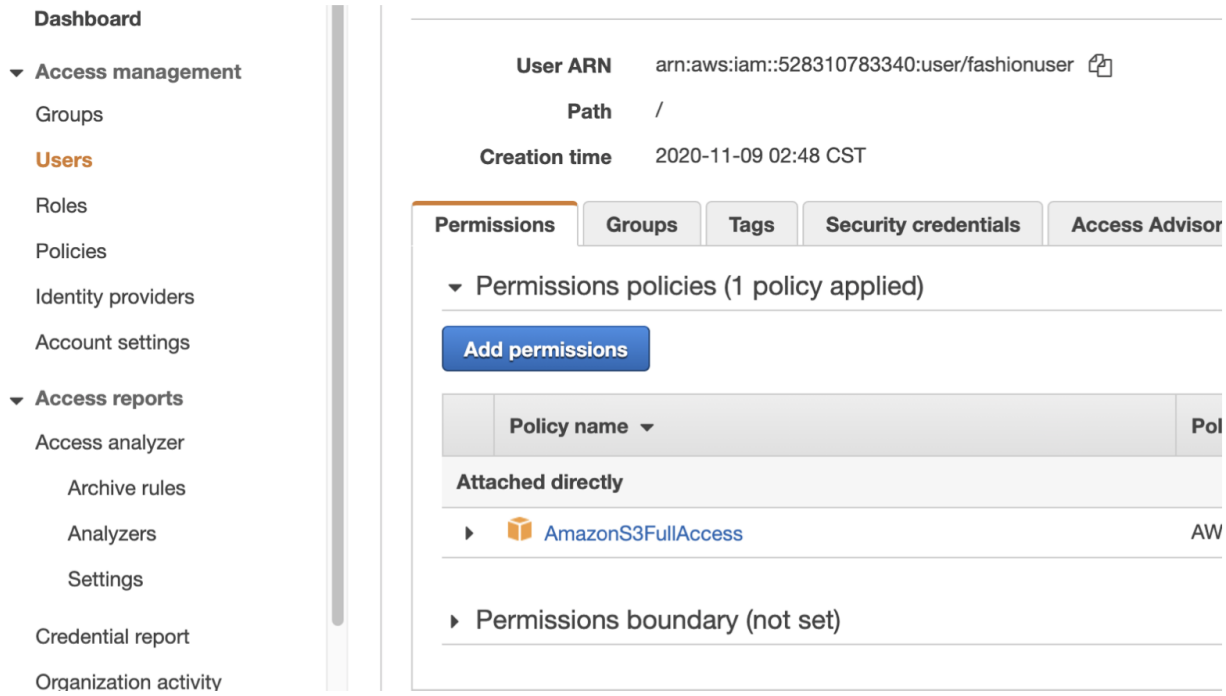


6. *Amazon AWS-S3 Bucket connection*

When Heroku dynos run, saved pictures are disappearing. So, we decided to use Amazon S3 service. Firstly, we created the S3 Bucket.



Then we created a user key id and secret key. Which has full access S3 service.

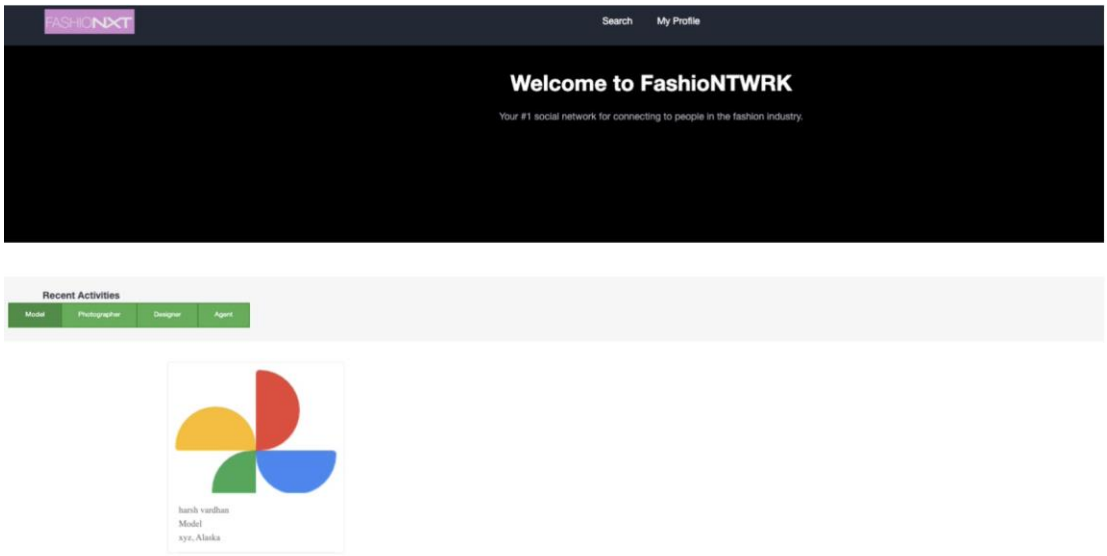


In our code section we used Carrierwave structure to communicate with AWS. Codes are checking the environment, and if there is S3_BUCKET, AWS_ACCESS_KEY, AWS_SECRET_KEY, information, Heroku deployment saves the images into S3 bucket. If there is no given information, the system saves images locally.

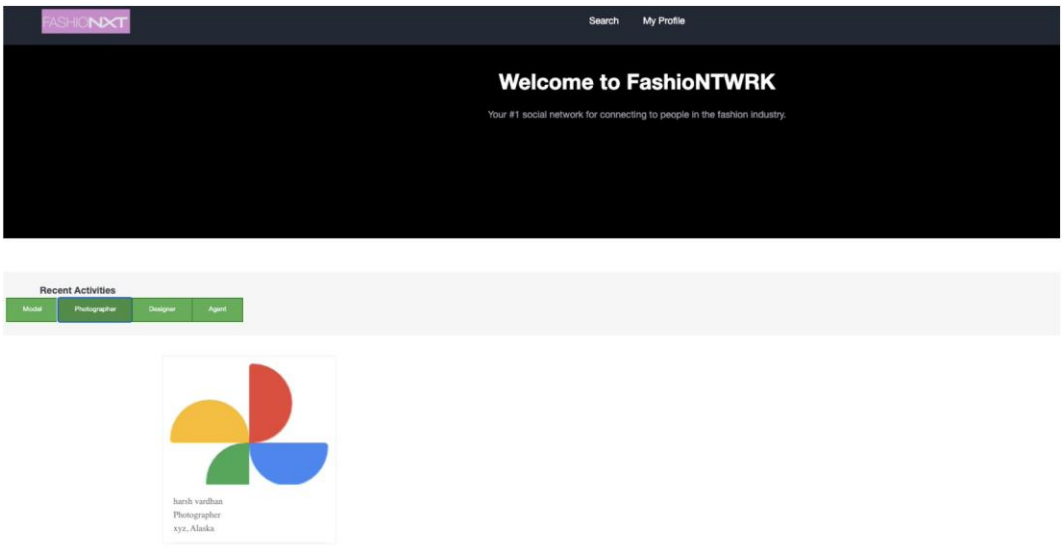
7. *Filter the users based on their profession and display them on homepage*

   This feature is requested by the client. On the homepage, the user profiles are displayed and filtered based on their profession on the click of a button.

The image below shows all the models registered when the model button is clicked.



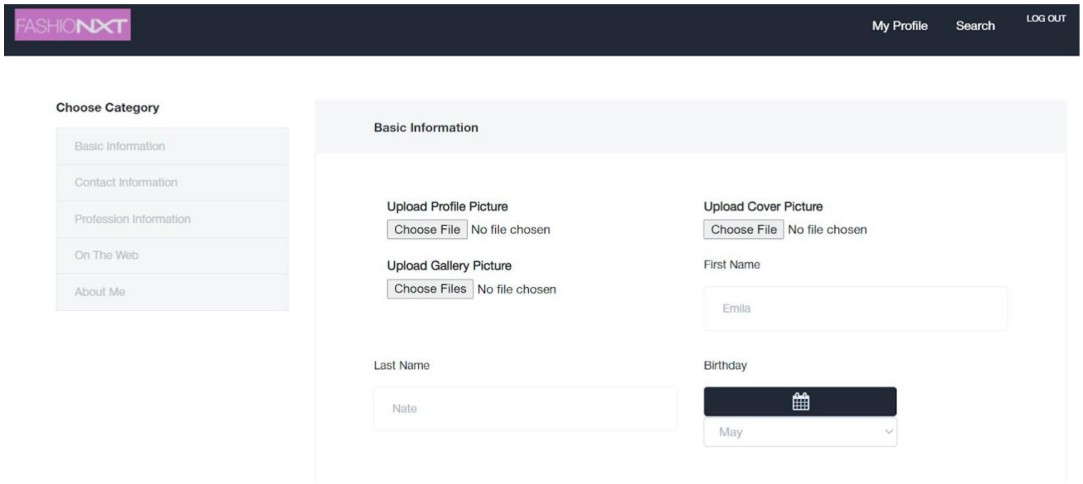
The image below shows all the photographers registered when the photographer button is clicked.



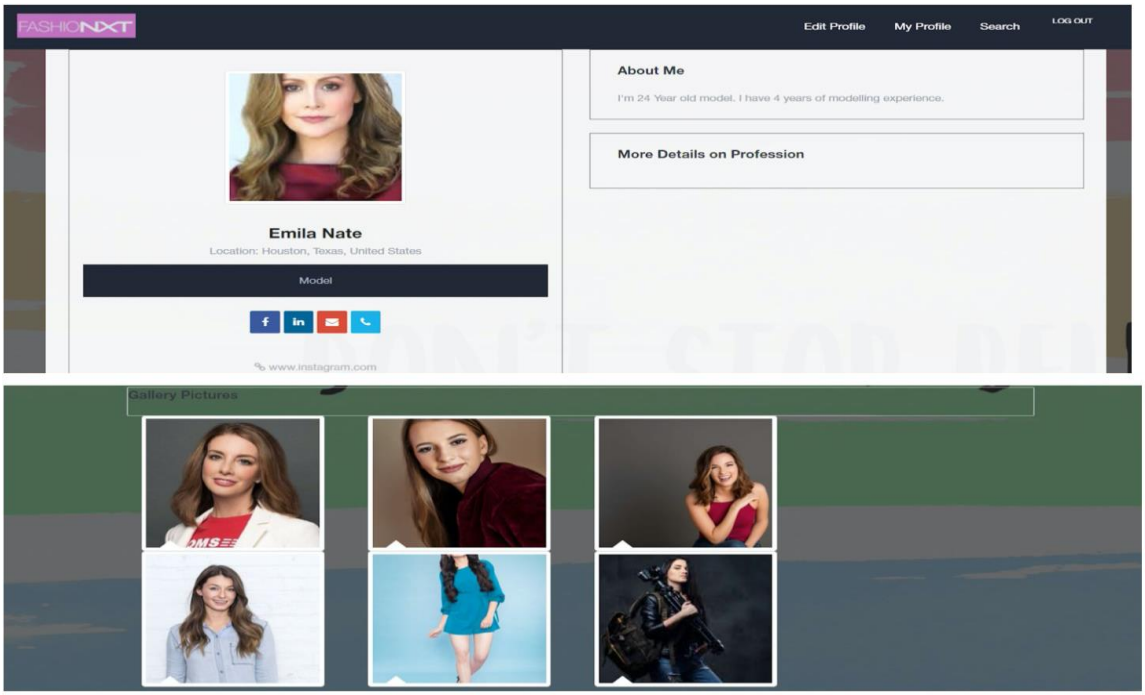
8. *Adding Gallery Images and displaying them in a square grid*

This feature is requested by the client; we have added a feature that enables users to add gallery images to their profile. There is no limit to the number of images added by the user. The images are saved in the Amazon S3 bucket and are displayed on the profile page of the user. The images are shown in square format.

The below image shows an option to upload gallery images. Users should open the Edit Profile page to be able to add gallery images.

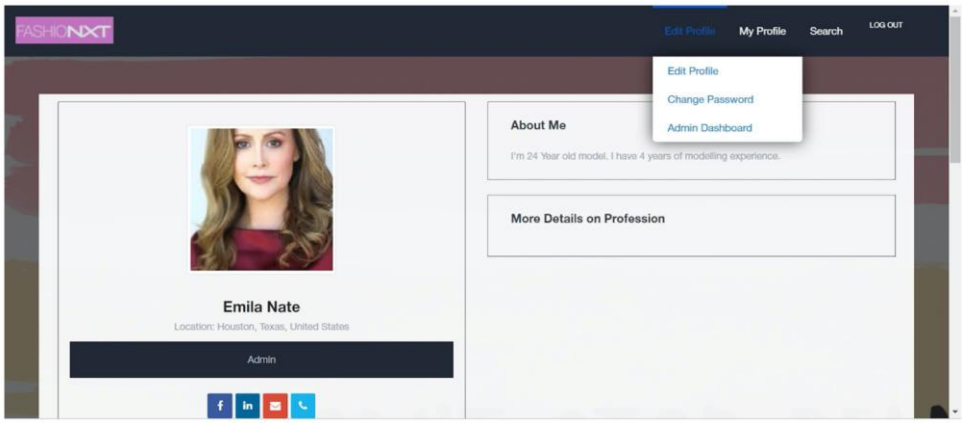


The images below show the profile page of a user.

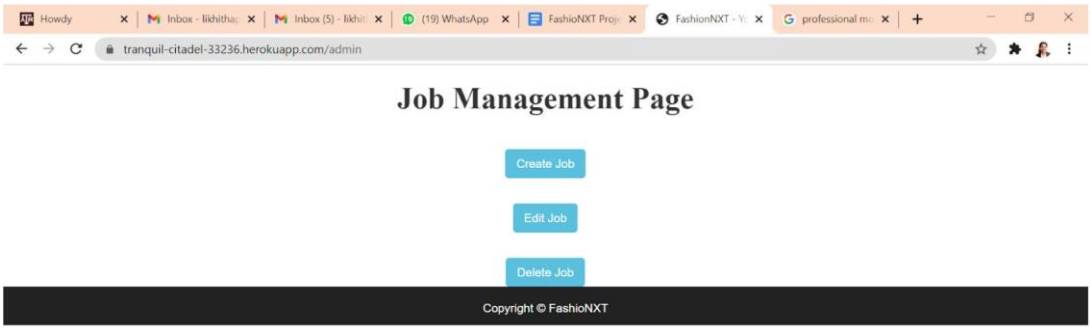


9. *Admin adding, editing, and deleting jobs*

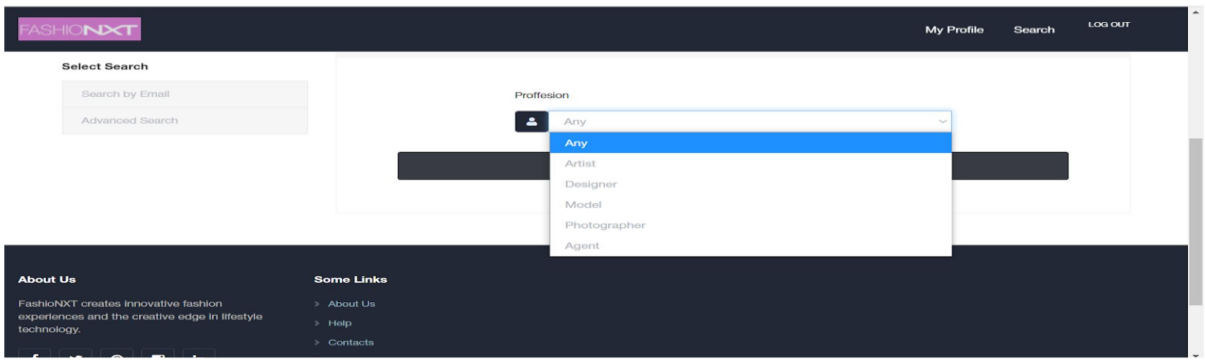
   This feature is requested by the client. Any user can be made admin, and the admin has the unique access to add, edit, and delete the professions without modifying the code. This helps the client to add or edit a job whenever necessary.
   The image below shows the option to choose the admin dashboard.



The image below shows the admin dashboard with add, delete, and edit options.



The image below shows that the new profession ‘Artist’ is added by the admin.



Legacy project Strategy

Our project, named "FashioNXT," is a legacy project which aims to connect people of different professions and find a common platform where people can find the right people according to their preferences with advanced search metrics functionality implemented in the application. The application serves primarily in the field of the fashion industry. Our overall strategy is to improve the current functionalities that are identified as priority functionalities for the app to release a Beta version by the end of the semester. The strategy will be implemented in four different iteration phases, with each sprint spanning over 2-weeks. This is a legacy project; we will continue with the same technology with our project built upon JavaScript, HTML, CSS, and Ruby. We have come up with user stories and mock-ups that constitute a significant part of our project strategy. Following are the initial priority user stories that we will be working on:

Creating multiple different professional profiles for the same Id - In the present system, a single user is only allowed to create a profile for just one of the professional roles, which we feel is limiting the overall vision of the application. With this enhancement, we will allow the same user to sign up as a model, photographer, designer, etc. with the same email Id.

Email and Password Verification and Validation - This feature will restrict users' unauthorized access by junk emails and passwords. The current app does not have any validations in place for different signup and login fields, which we feel is a basic necessity for the application to go live.

Fine-tune the search functionality by name - The current system does not search from any metrics other than the email Id. We will be expanding this functionality to search by name and other parameters. We feel that this will add tremendous value to the application as it will make our search algorithm more advanced and diverse. This user story will significantly enhance the ease of user interaction with our application and would instill a sense of satisfaction among our customers.

Adding a set of parameters/ fields to different profiles – The current legacy code does not provide an option to edit all the given profile parameters, making a user profile very restrictive. For example, we will be adding height and weight measurements in the edit profile page for a model profile. This edit would indirectly improve search metrics as well.

Apart from the above-mentioned user stories, we will be implementing other features and functionalities in subsequent iterations that enhance the user satisfaction and general purpose of our application. We will further divide the user stories into modules and have each team member assigned to a specific module every iteration. We will be tracking and maintaining our code through Git and Pivotal Tracker. We will be having regular meetings with our client and will work on every feedback with diligence. We will also carry out frequent code reviews and optimization discussions amongst our team, which would further justify our final product's efficacy.

TEAM ROLES

Likhitha Chowdary Paladugu served as the Product Owner and Mulkiye Sumen served as the Scrum Master. These roles stayed the same throughout the project due to the comfort of the client and ease of communication.

SCRUM ITERATIONS

Iteration 0: Problems with acquiring the legacy code did not give us enough time for doing a legacy review for this iteration. Using the existing Heroku deployment by the previous team, we came up with new goals and objectives with the client for improvements. We developed out initial set of user stories. We began shortly after this iteration when we received the entire code to work on and were able to set it up locally on our machines.

Iteration 1: Attempting the revamping of UI revealed that some of the existing user stories were not functioning the way they were supposed to and way too many links were broken. So, the team fixed all the broken links and also added a small functionality of having a default profile picture if no picture is uploaded by the team.

Iteration 2: Significant changes were made to the homepage UI for better user experience. Proper presentation and design standards were implemented when it came to button positions and content representation. Email and password verification feature were added so that only valid email and password is accepted. The social media icons were changed in the sense that they would only appear when a user provides these links.

Iteration 3: Amazon S3 bucket was implemented and tested for use to save images so that loaded images aren't lost. Another feature to filter the users based on their profession was added.

Iteration 4: Gallery images were added and displayed in a square grid. This feature allows users to add images to their profile. There is also no limit to the number of images a person can add. Another special feature requested by the client was to be able to make user admin or give a particular user the admin rights. This admin rights gives unique access to add, edit, and delete the professions without modifying the code helping the client to add or edit a job whenever necessary.

CUSTOMER MEETINGS

Meeting Date	**Description**
09/24/2020 (Iteration 0)	Discussed customer expectations and deadlines for the same
10/16/2020 (Iteration 1)	Showed demo of Iteration 1 and discussed plan for iteration 2
10/30/2020 (Iteration 2)	Showed demo of Iteration 2 and discussed plan for iteration 3

11/13/2020 (Iteration 3)	Showed demo of Iteration 3 and discussed plan for iteration 4
11/22/2020 (Iteration 4)	Showed demo of Iteration 4

BDD/TDD PROCESS

The team was able to reuse several of the legacy codes and change them for our own needs at the start of the project. However, in general there was not much use of TDD and BDD behaviors.

CONFIGURATION MANAGEMENT

In general, the team did a great job when it comes to configuration management without having to be explicitly told to do so. Features were individually worked on and pushed from feature branches, where they were then evaluated and pulled into master after clearing if/any merge conflicts.

HEROKU DEPLOYMENT

We did not face any deployment issues for the most parts in Heroku.
We pointed the automatic deployment to our "master" branch, which we tried to keep clean, but the automation script always failed. We did spend some time to see the issue and found that it is because of the ruby version that we were using. Had this automatic deployment worked, we could have avoided this manual deployment.
The production instance in Heroku doesn't provide a free SMTP service. Hence, we had to perform a workaround to support the Password Recovery feature.

GITHUB AND LOCAL REPOSITORIES

In general, no team members had many problems with GitHub. However, initially it was hard to get the code running locally in our machines and Cloud9 was an issue because of running out of student account credits required for free access. The team, however, was able to clone repositories into their local machines and use their own code editors to work on it. Git feature branches were used extensively to make changes individually. The individual code was later merged by clearing merge conflicts by the team members as and when they pushed changes.

OTHER TOOLS

Other than Github, Rubymine, and pivotal tracker, we used Amazon S3 service for storing the images uploaded per user.

CLOSING WORK

In preparation of closing the project, we're working with the client on a document that explains future development that can be done by the next team. The next team will have to meet with the client and develop new features as per requirements, but we hope that the present system will not

have bugs that they will have to fix but only improvements they find necessary at the time. A good amount of time was spent on understanding the code and figuring out how to set it up locally and also the Heroku deployment. We therefore believe that such a document would still be of great help. A file that explains how the database works already exists on the Github.

LINKS

Github: https://github.com/mulkiye/match-my-fashion-public-CodeCreators/tree/codecreators/

Heroku Deployment: https://tranquil-citadel-33236.herokuapp.com/

Site Demo: https://vimeo.com/485746931

Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2468515%E2%80%8B