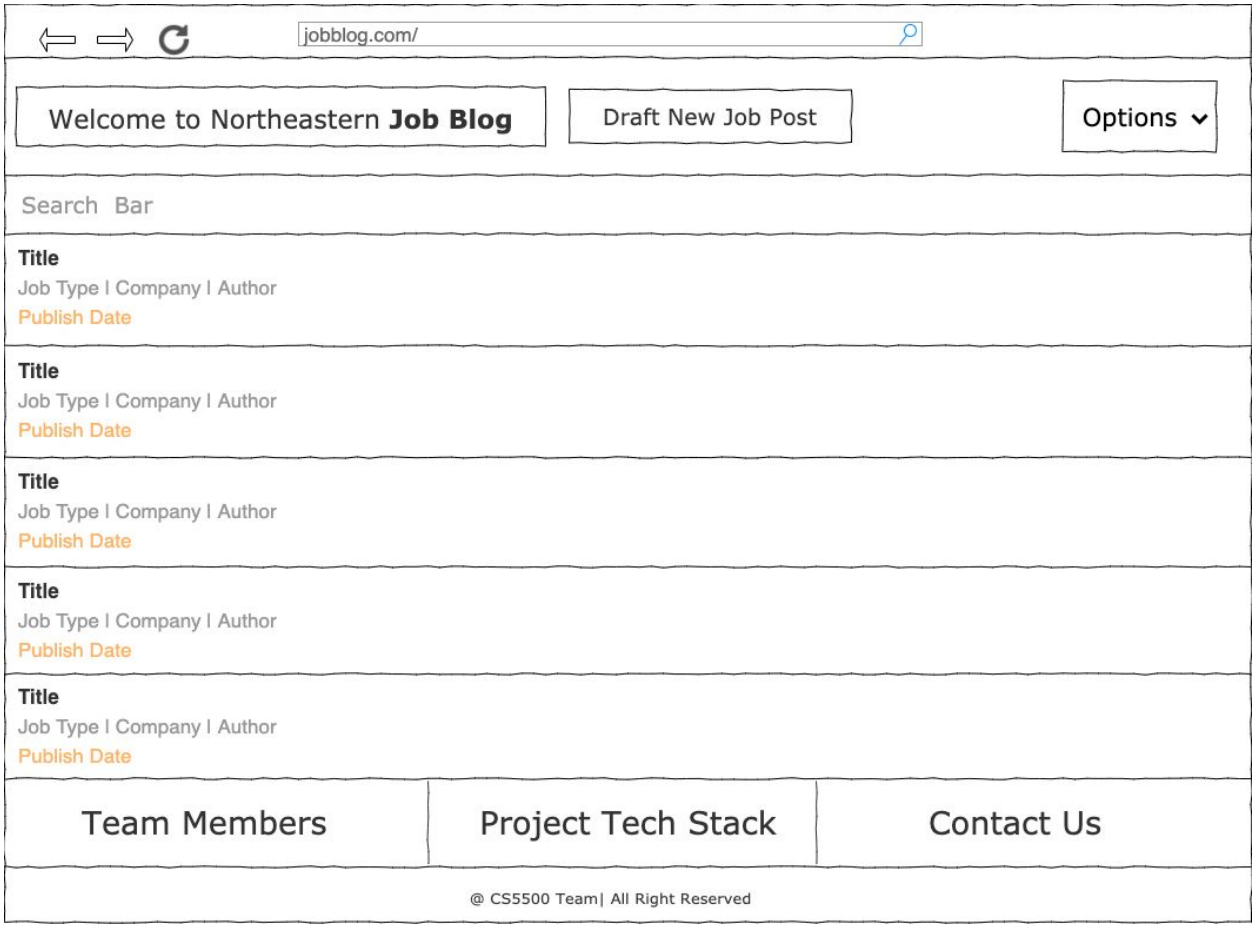
Project Design

Overview

This documentation provides a complete description of the underlying design of the project. The underlying design includes the UI Design and Backend Design.

UI Design

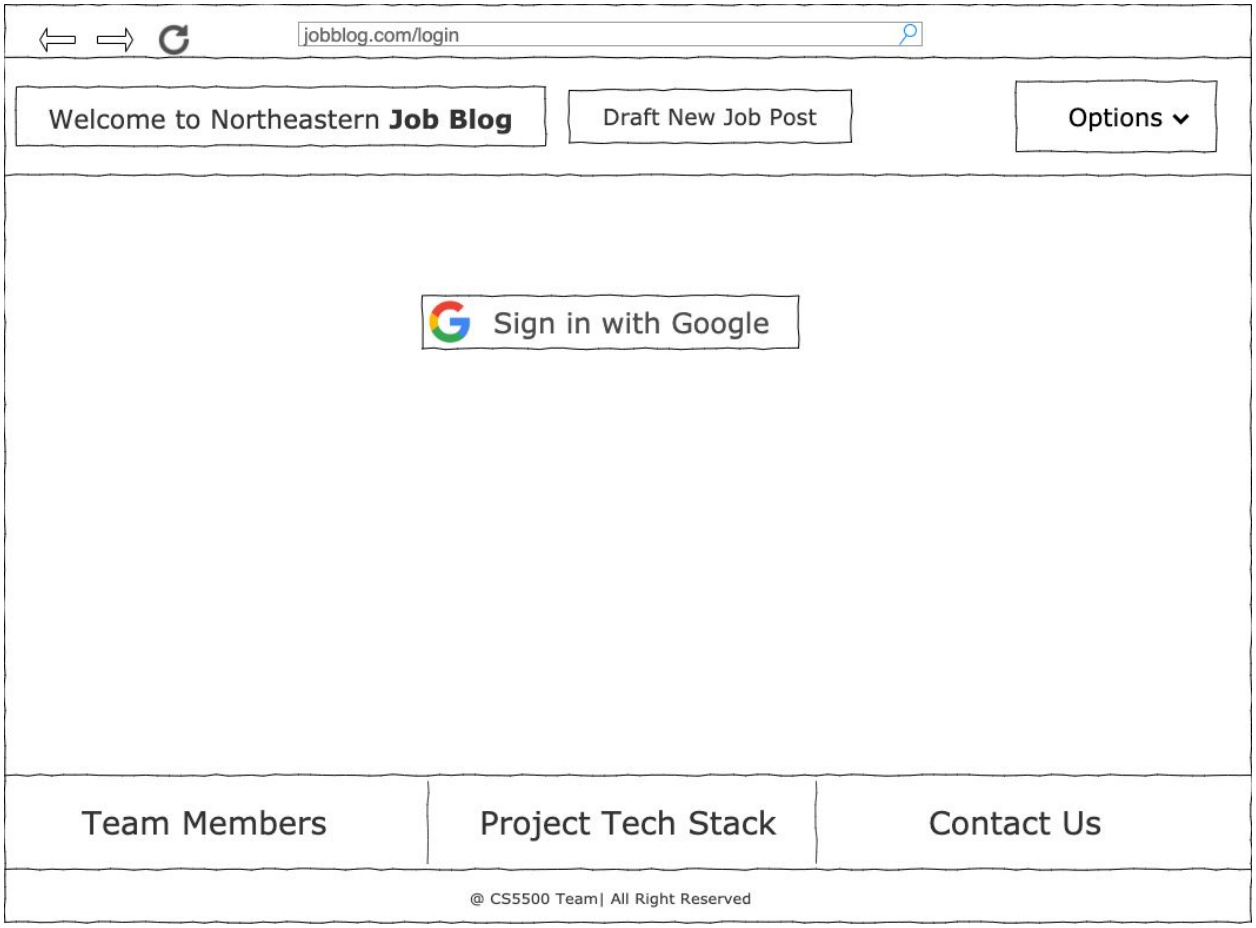
Main Page



This page serves as the homepage of our job blog website. When we enter the website address, this is the page we will see. In the header, we list some of our operations. Users can click *Welcome to Northeastern Job Blog* to go back to the homepage. And clicking *Draft New Job Post* will direct authenticated users to create new job posts. The Options is a drop down button which can help users to login and logout. Below the header, we have a search

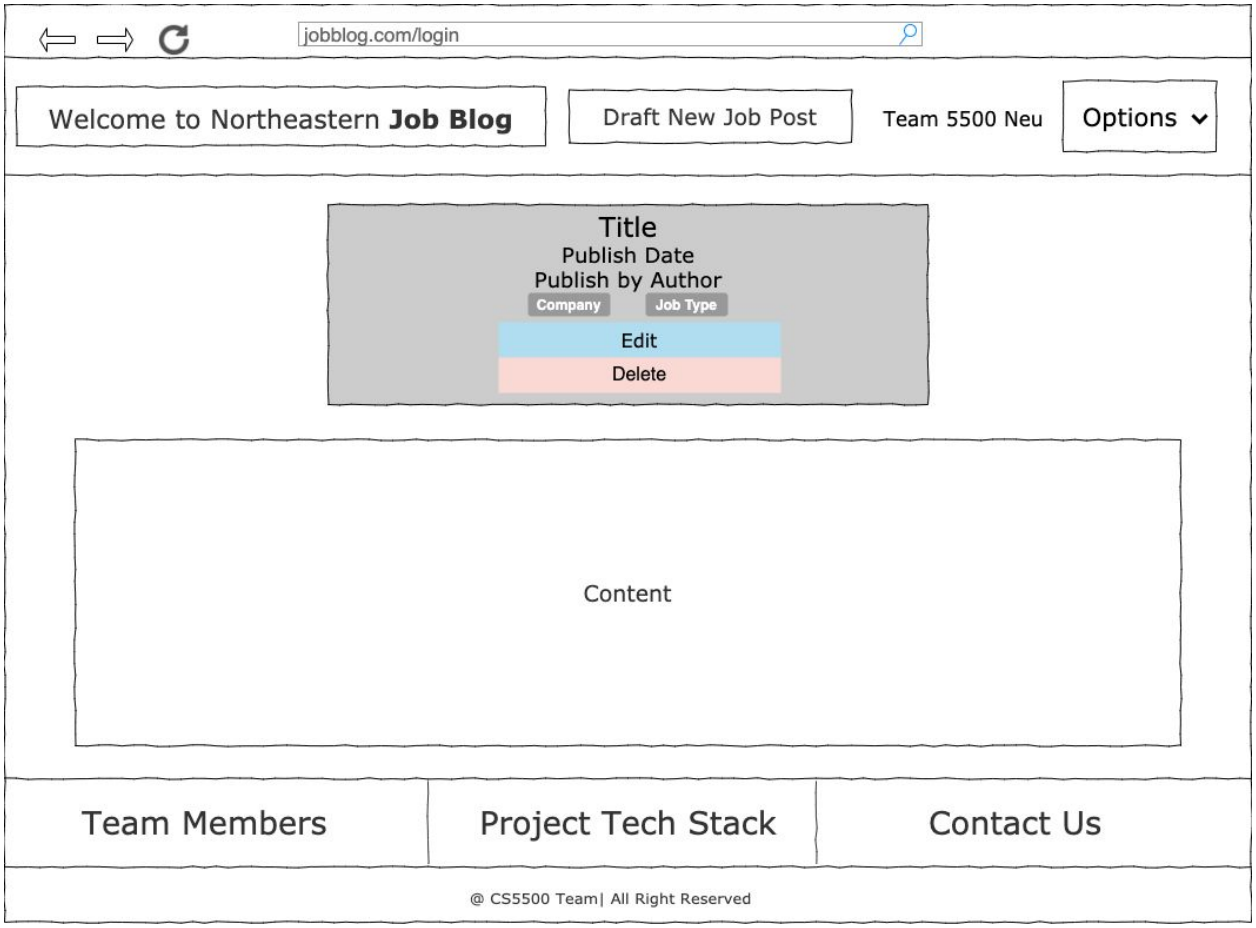
bar to search posts based on company name. In the footer, we design to list our team members, project tech stack and our contact information. The background color of our header and footer will be all red, which is our NEU branding color. At the same time, we will add more cute emoji to spice the website up. In the Main part, we design to list the job posts with a limit of 25. Useful information like title, job type, company and author will be listed to make it easier for use to find the information they need. Besides, on this page, all the poster's posts will be listed chronologically. The user can click the listed post to go into the view article page.

Login UI



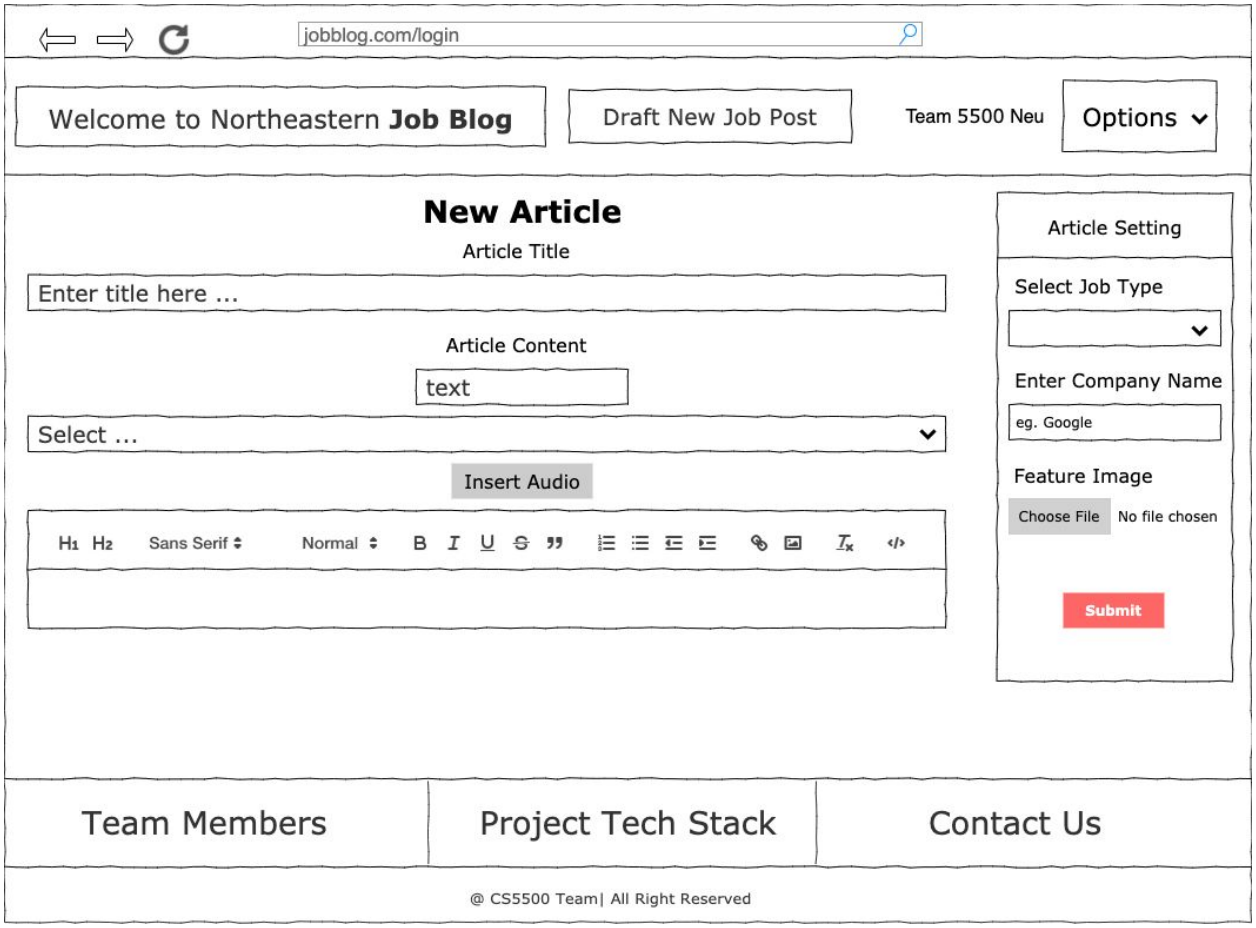
When users want to login, they can click the Options button and choose login to login the website. When they enter the login page, a google single sign on button will be shown in the middle of the page. Users can click the button to sign in our website through google single sign on service.

View Article Page



When users want to see more detailed information about a post, they can click the card of the post. The website will be directed to the view article page. On top of this page, the user will see the title, the author, the publish date, the job type and related company of the post. If the current user is the author of the posts, it will show the edit and delete buttons. Otherwise, these two buttons will not be shown. The background of the above information can be an image uploaded by users or default pictures. On the bottom of this page, it's the detailed content of this post. All the related information will be listed here.

New Article Page



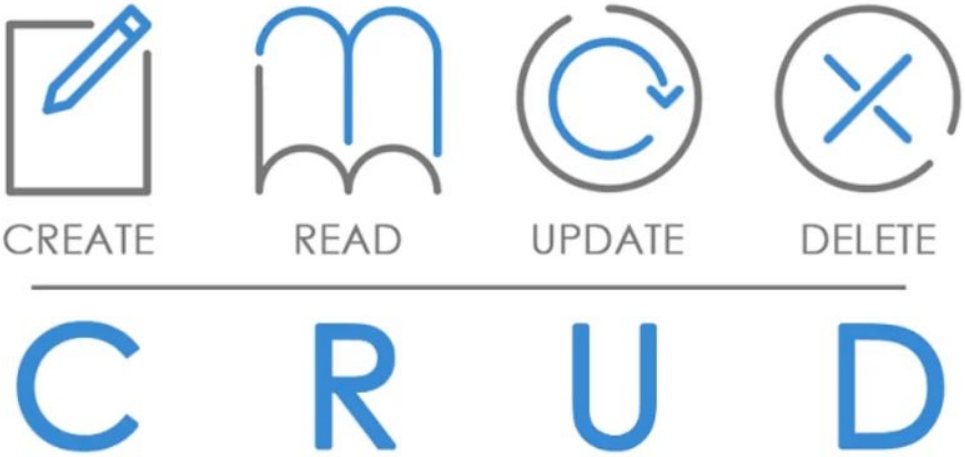
When authenticated users click *Draft New Job Post*, a new article page will be shown. In this page, users can create a post based on their preference. On the left hand side, users can enter the title, add article content and insert audio. On the right hand side, it's the article setting section. In this section, users can choose either internship or new grad as the job type. And they can enter the company name and choose the feature image to make their post more eye-catching. After the user finishes the needed information, they can click submit to add a post to our website.

Backend Design

CRUD operations

We build APIs based on the CRUD paradigm which can provide basic types of functionality. The model is able to Create, Read, Update, and Delete resources. The CRUD paradigm is common in constructing web applications, because it provides a memorable framework for

reminding developers of how to construct full, usable models.



Database

Cloud Firestore

Cloud Firestore is a flexible, scalable NoSQL cloud database for mobile, web, and server development from Firebase and Google Cloud Platform. Like Firebase Realtime Database, it keeps data in sync across client apps through real time listeners and offers offline support for mobile and web so we can build responsive apps that work regardless of network latency or Internet connectivity. Cloud Firestore also offers seamless integration with other Firebase and Google Cloud Platform products, including Cloud Functions.

Article Table: Record the information of article

Fields	Description
author	The author of the article
company	The related company of the article
content	The content of the article
createDate	The date the article was created
CreateUserID	The user Id of the author
featureImage	The feature image of the article
jobtype	The related job type of the article

lastModified	The last modified date of the article
title	The title of the article

Storage

Cloud Storage for Firebase is a powerful, simple, and cost-effective object storage service built for Google scale. The Firebase SDKs for Cloud Storage add Google security to file uploads and downloads for Firebase apps, regardless of network quality. We use our SDKs to store images, audio, video, or other user-generated content. On the server, we can use Google Cloud Storage, to access the same files.