# Dudes of 708

Software Engineering Intern Challenge - 2021

#### Instructions

Pick one of the following tasks and submit it as a GitHub repository link (please remember to make it public so we can look at it). Email your submission to <a href="internchallenge@dudesof708.com">internchallenge@dudesof708.com</a> with the subject: <a href="NAME - 2021 - CHALLENGE #">NAME - 2021 - CHALLENGE #</a>. For example, if your name is Jane Doe and you chose to do challenge #1, your subject line is Jane Doe - 2021 - #1.

The challenges are open-ended and you can choose to approach them however you want.

Please include a README so someone knows how to use your app. Your README must include a link to this challenge. You may use any language, and any public library or framework.

Try not to spend more than 2-3 hours.

### Challenge 1

**TASK:** Build an image repository. It can be completely frontend or completely backend, we do not expect you to build both.

Implement a few features into your repository. List these features in your README, but if you need a few ideas, past interns have implemented:

- Likes and dislikes
- See a random image
- Uploading images
- Deleting images

You can obtain images to use in this project for free from <a href="Canva Photos">Canva Photos</a> or <a href="Unsplash">Unsplash</a>.

# Challenge 2

**TASK:** This task is a biology-related task. It is common for biologists to want tools to analyze DNA/RNA sequences and find mutations. Your job is to build such a tool.

It can be run from the command line or provide a visualization, such as a web application. If you need inspiration, one such example is <u>MutScan</u>. Given multiple DNA/RNA sequences, your tool should find mutations.

# Challenge 3

**TASK:** Make a game. Since this is open-ended, it can be anything you want. To save you time, try to make something simple, like <u>tic-tac-toe</u> or <u>chopsticks</u>.

The game cannot communicate with a remote server, as it will be tested in an environment without internet. If you need help, check out <u>the React tutorial</u>, which walks you through making tic-tac-toe.