Lead QA - Take Home Assessment

# Overview

A live streaming company (CompanyA) has acquired a different company (CompanyB) that specializes in including commenting and posting on live streams. CompanyB’s solution allows authenticated customers to post comments, photos, and reactions, and allows the public (i.e., non-authenticated users) to view the comments, photos, and reactions (but not contribute). The company wants to know if this newly acquired technology will scale and perform once it is integrated.

CompanyA has several popular live stream creators that come online at regularly scheduled times. These live streams can exceed 5k authenticated and 25k non-authenticated concurrent viewers across all devices. CompanyA anticipates that 25% will actively engage the stream with reactions (e.g., emojis, likes, etc), 15% will participate in comments/replies, and 10% will upload at least 1 photo.

CompanyA has client apps across the following platforms:

* Desktop Web (OSX Safari, OSX Chrome, Windows Edge, Windows Firefox, Windows Chrome)
* Mobile Web (Android Chrome, iOS Safari, iOS Chrome)
* iOS Native (iPhone, iPad; latest OS)
* Android Native (Samsung, Moto; last 2 OSes)
* FireTV
* AndroidTV
* Roku
* Chromecast (Android and iOS)

CompanyB’s API can be found here: <https://jsonplaceholder.typicode.com> .

# Goals

CompanyA wants to ensure that:

* CompanyB’s API will scale up quickly as required by the scheduled popular live streams
* The API, which CompanyA plans to expand and enhance, will continue to scale and be resilient in the future without requiring extensive manual testing
* The API will be backwards compatible through every foreseeable iteration

# Assignment

* Provide a high-level functional test plan
* Provide a high-level automated test plan for client apps specifying whatever tool you think would work best
* Provide a high-level load test plan using specifying tool you think would work best
* Write a simple test script (using a tool of your choice) to verify the consistency and integrity of the data being returned on two (2) of CompanyB’s endpoints
* Include anything else you think would be helpful in achieving these goals

# Requirements

* All scripts, plans, and documentation should be shared via a publicly available github repository
* Provide a README file with detailed instructions on how to set up and run any tests scripts provided