# School of Computing

## Diploma in Information Technology

**Assignment:** CA2

**Class:** DIT/FT/3A/02

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Github Repository Link: https://github.com/edee17/CSC_Assignment_2

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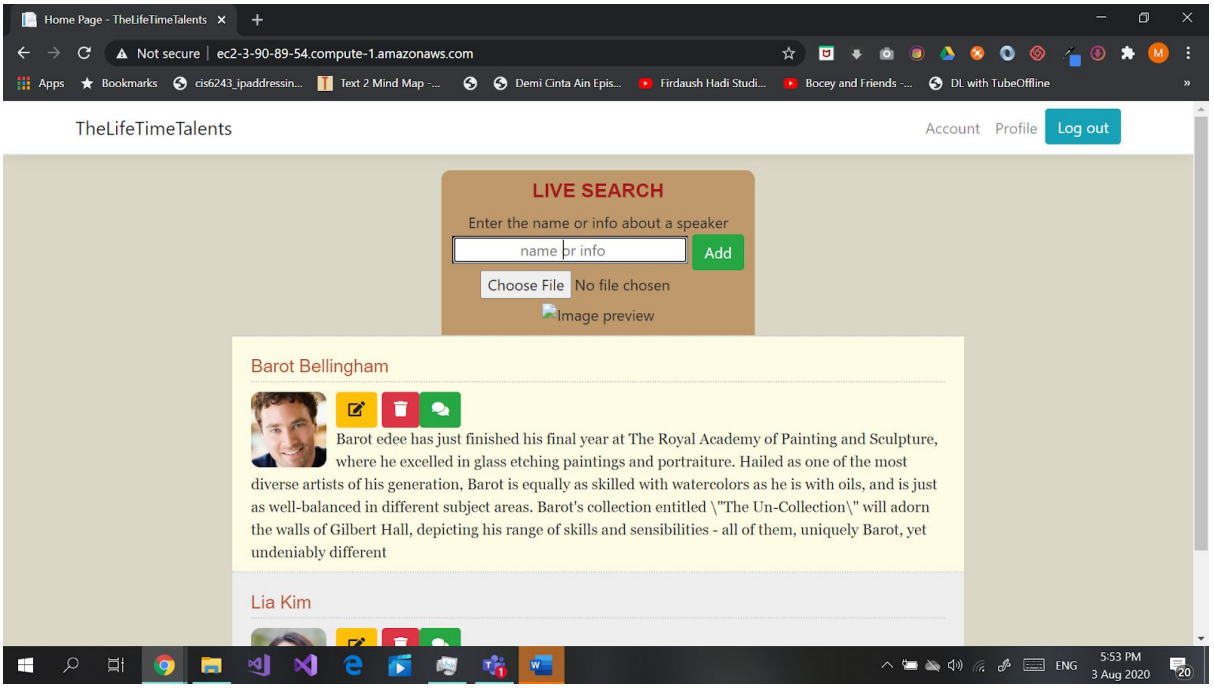
# Virtual Server

## Host Talents's SaaS web app

### Screenshot



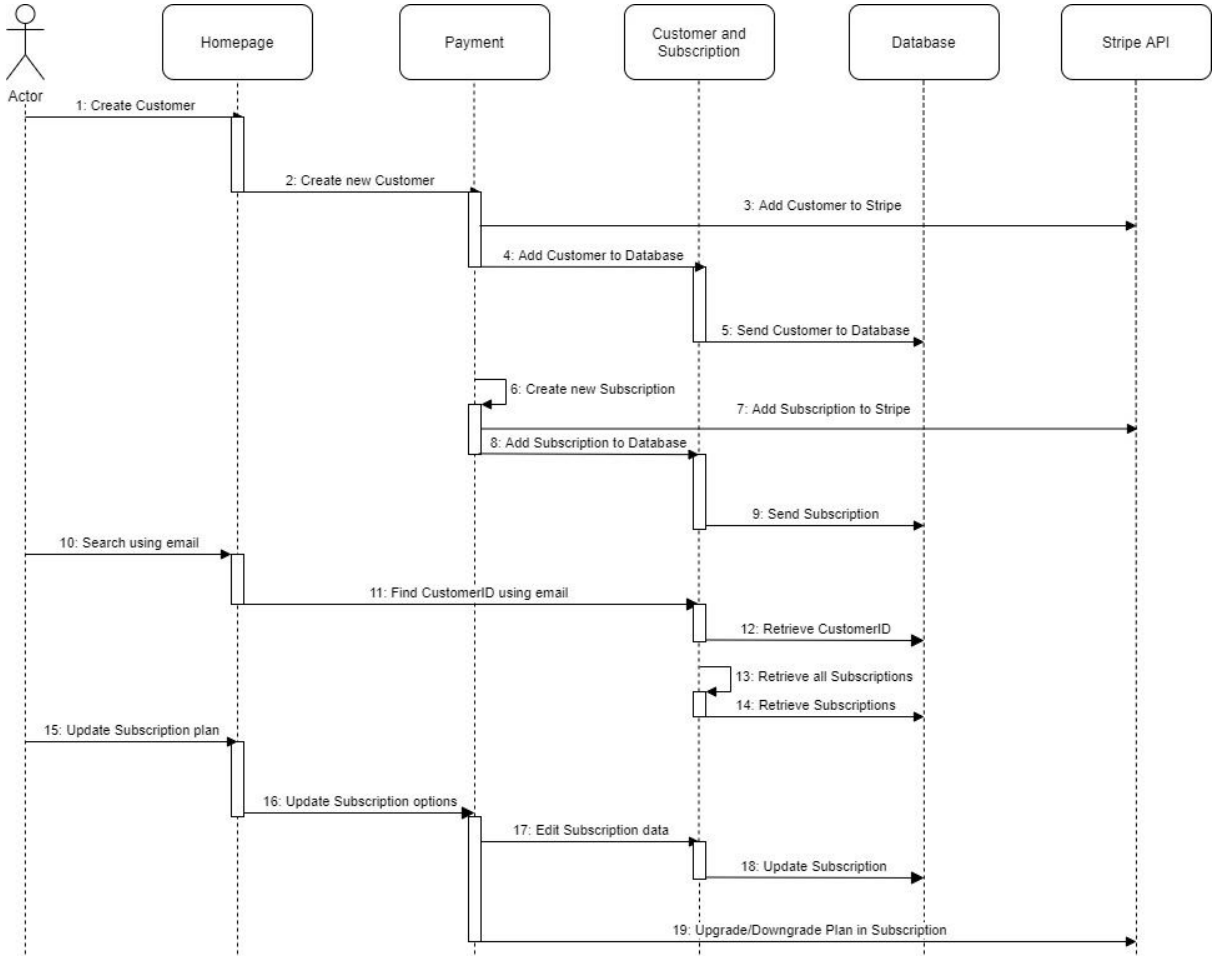
# Payment Management

## Accept daily subscription payment from users to differentiate between Free Users and Paid Users

### API Documentation

1. PaymentController
    a. Subscribe
        i. Subscribe and create new customer to a product
        ii. Method: Post
        iii. Url: /Payment/Subscribe/
        iv. Params:
            1. string cardEmail
            2. string plan
            3. string stripeToken
    b. Upgrade
        i. Upgrade or downgrade customer’s subscription
        ii. Method: Post
        iii. Url: /Payment/Upgrade/
        iv. Params:
            1. string subKey
            2. string plan

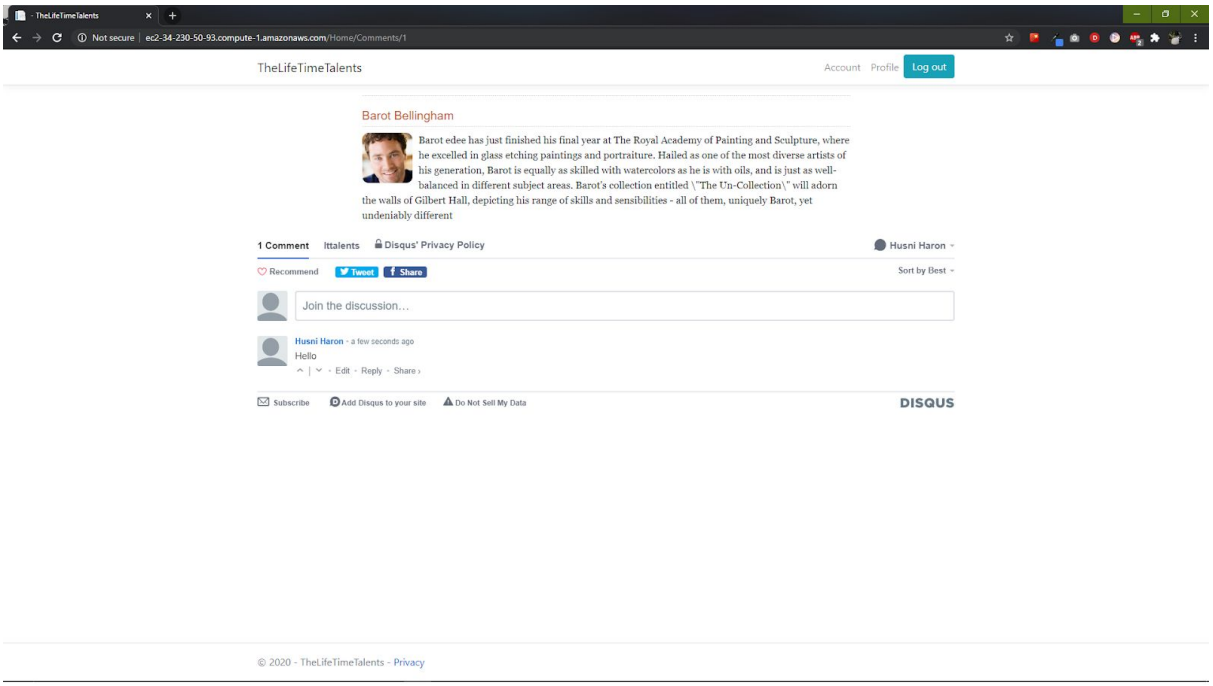
## Sequence Diagram



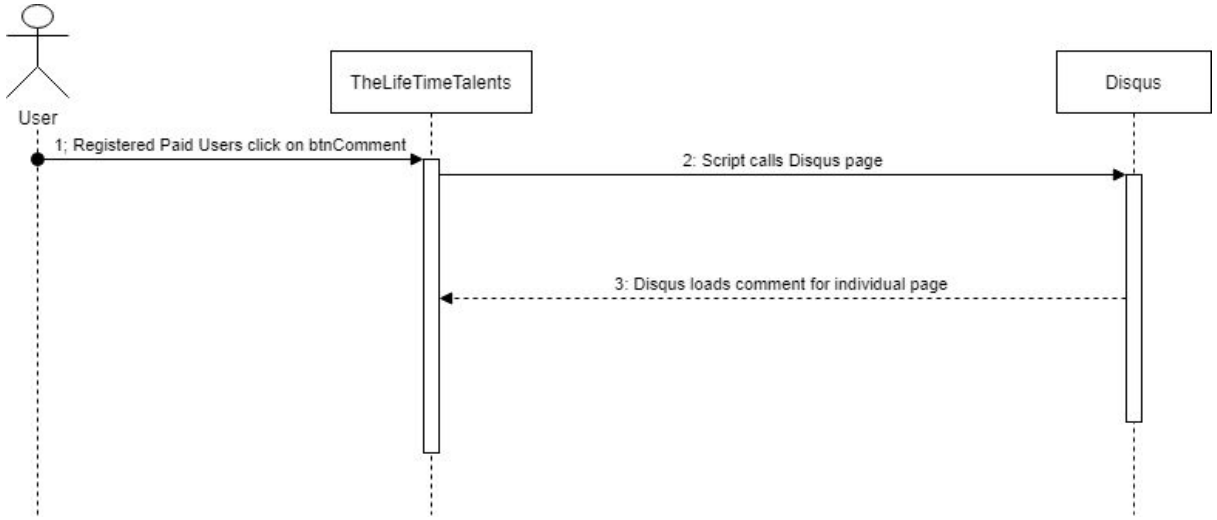
# Discussion Management

## Enable real time commenting for Paid users

### Screenshot



## Sequence Diagram



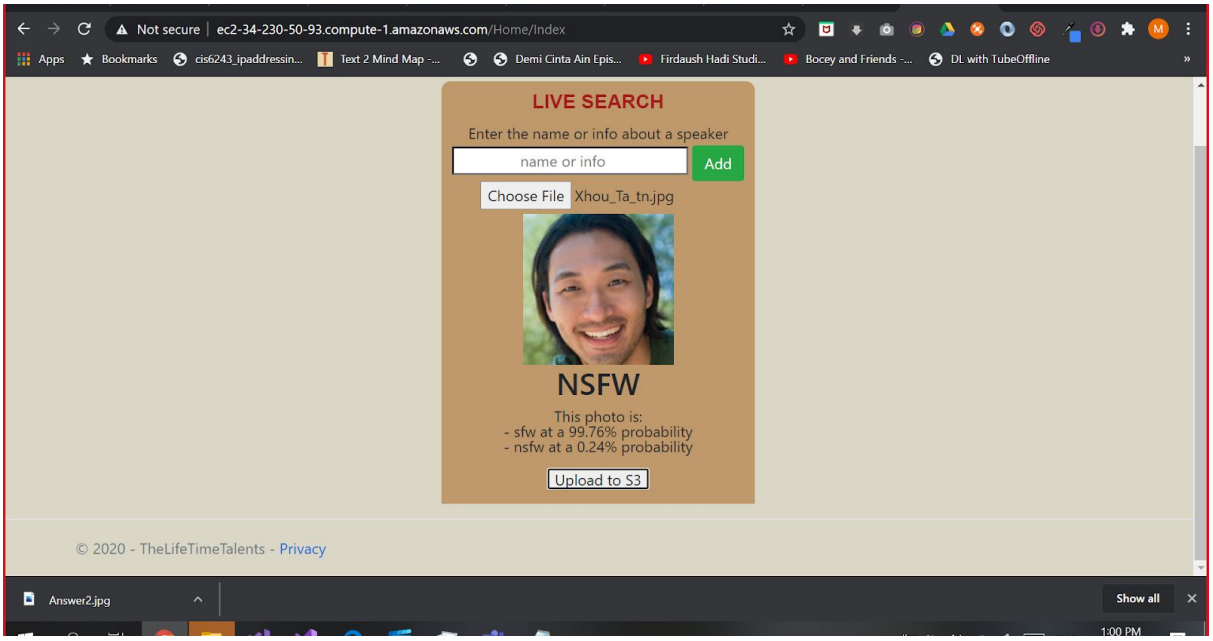
# Storage & Image Recognition

## Upload Talents images & Verify that the uploaded image is not NSFW

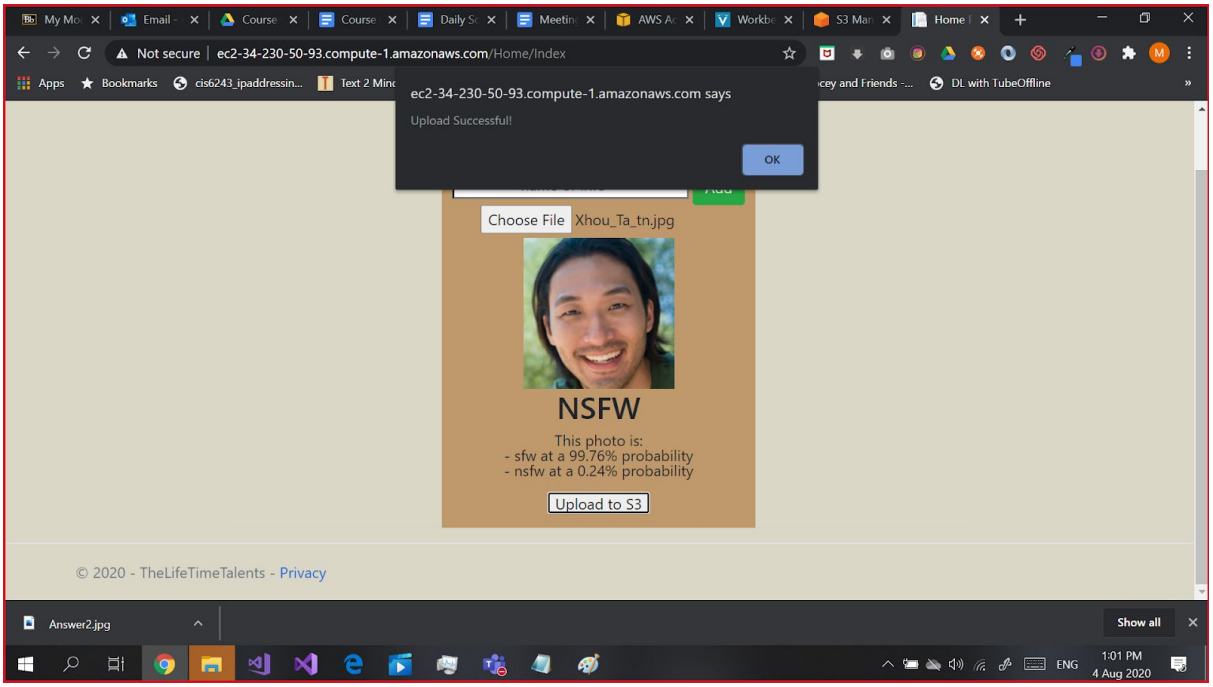
### Postman Screenshots

#### Upload Talent Image to S3

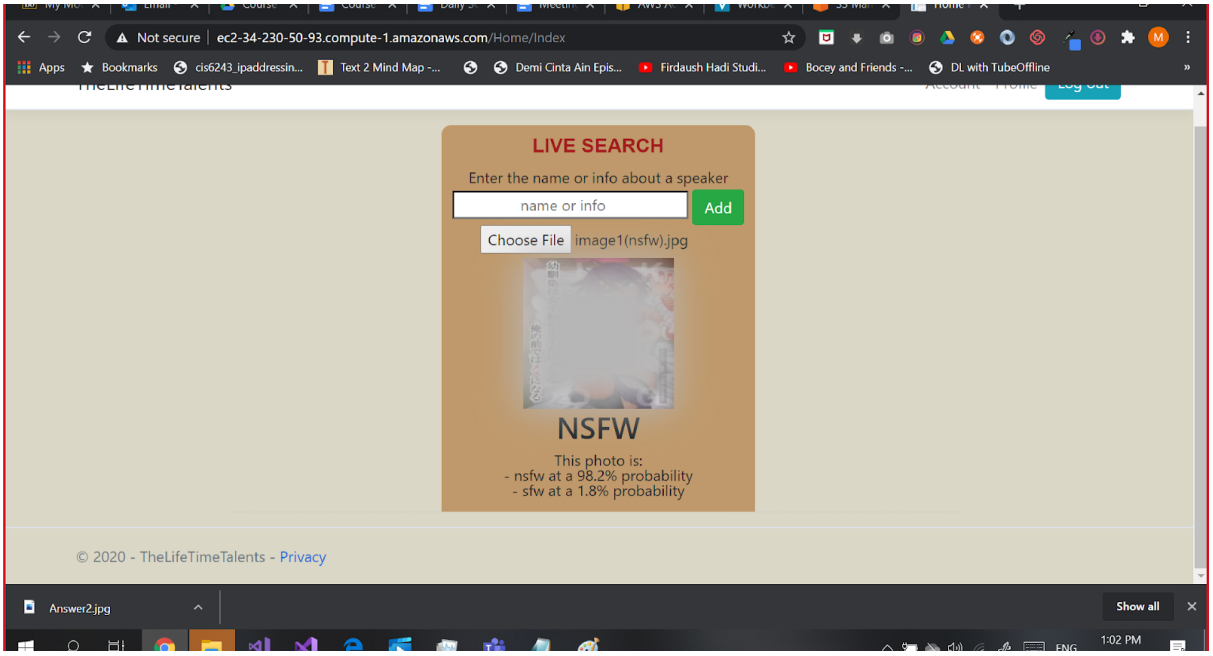
SFW:



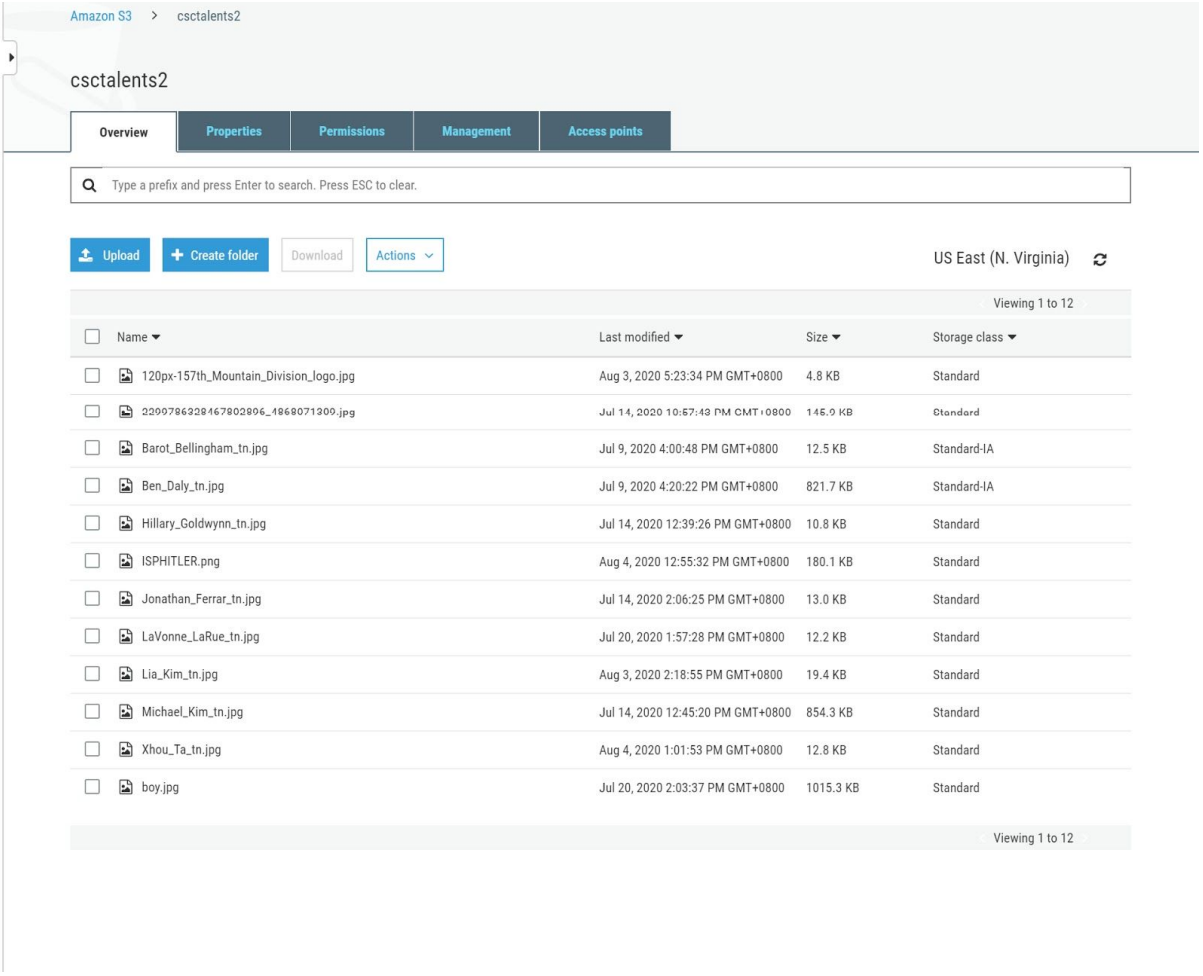

Successful:



NSFW:


Not secure
ec2-34-230-50-93.compute-1.amazonaws.com/Home/Index
LIVE SEARCH
Enter the name or info about a speaker
name or info
Add
Choose File
image1(nsfw).jpg
NSFW
This photo is:
- nsfw at a 98.2% probability
- sfw at a 1.8% probability
© 2020 - TheLifeTimeTalents - Privacy
Answer2.jpg
Show all
1:02 PM

# S3 Bucket


Amazon S3 > csctalents2
csctalents2
Overview
Properties
Permissions
Management
Access points
Type a prefix and press Enter to search. Press ESC to clear.
Upload
Create folder
Download
Actions
US East (N. Virginia)
Viewing 1 to 12
Name
Last modified
Size
Storage class
120px-157th_Mountain_Division_logo.jpg Aug 3, 2020 5:23:34 PM GMT+0800 4.8 KB Standard
Barot_Bellingham_tn.jpg Jul 9, 2020 4:00:48 PM GMT+0800 12.5 KB Standard-IA
Ben_Daly_tn.jpg Jul 9, 2020 4:20:22 PM GMT+0800 821.7 KB Standard-IA
Hillary_Goldwynn_tn.jpg Jul 14, 2020 12:39:26 PM GMT+0800 10.8 KB Standard
ISPHITLER.png Aug 4, 2020 12:55:32 PM GMT+0800 180.1 KB Standard
Jonathan_Ferrar_tn.jpg Jul 14, 2020 2:06:25 PM GMT+0800 13.0 KB Standard
LaVonne_LaRue_tn.jpg Jul 20, 2020 1:57:28 PM GMT+0800 12.2 KB Standard
Lia_Kim_tn.jpg Aug 3, 2020 2:18:55 PM GMT+0800 19.4 KB Standard
Michael_Kim_tn.jpg Jul 14, 2020 12:45:20 PM GMT+0800 854.3 KB Standard
Xhou_Ta_tn.jpg Aug 4, 2020 1:01:53 PM GMT+0800 12.8 KB Standard
boy.jpg Jul 20, 2020 2:03:37 PM GMT+0800 1015.3 KB Standard
Viewing 1 to 12

# SQL Database

## Store Talents data such as image URL and talent details

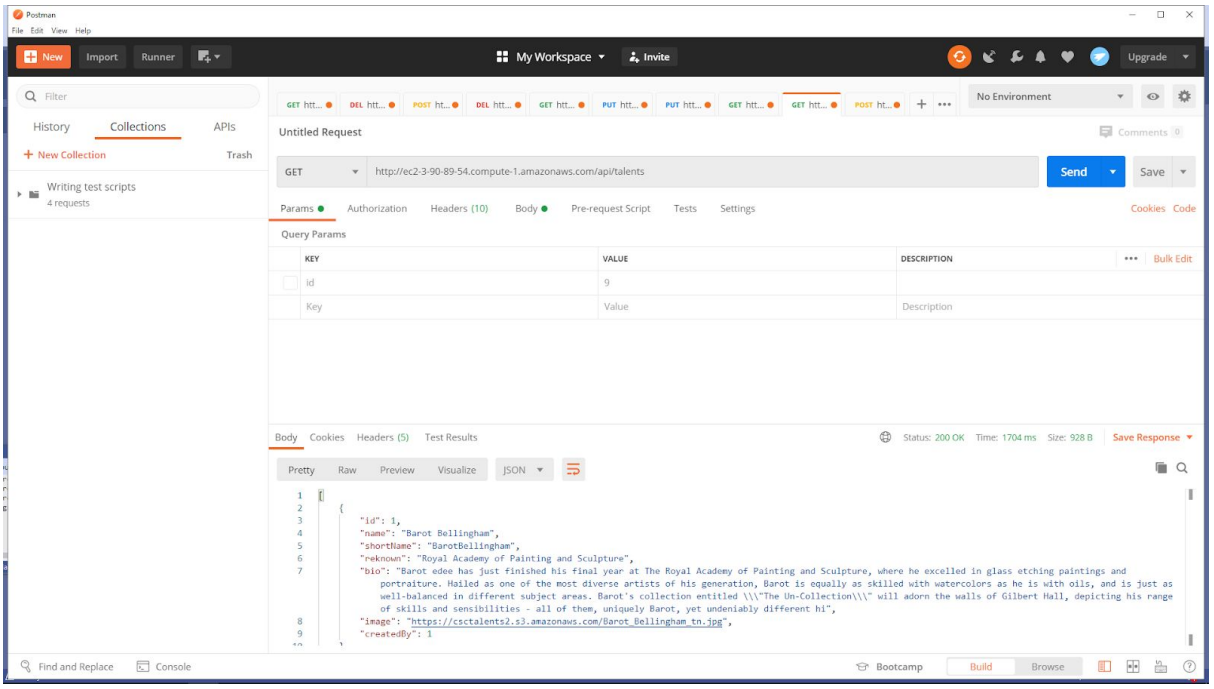
### API Documentation

1. Get All Talents
    a. Gets all talents
    b. Method: GET
    c. URL: api/talents
2. Get Talent
    a. Get 1 talent specified by ID
    b. Method: GET
    c. URL: api/talents/{id}
    d. Params
        i. int id
3. Add Talent
    a. Adds a talent
    b. Method: POST
    c. URL: api/talents/Add
    d. Params
        i. Talent talent
4. Edit Talent
    a. Edits an existing talent in the repository
    b. Method: PUT
    c. URL: api/talents/{id}
    d. Params
        i. int id
        ii. Talent talent
5. Delete Talent
    a. Deletes a talent
    b. Method: DELETE
    c. URL: api/talents/{id}
    d. Params
        i. int id

# Postman Screenshots

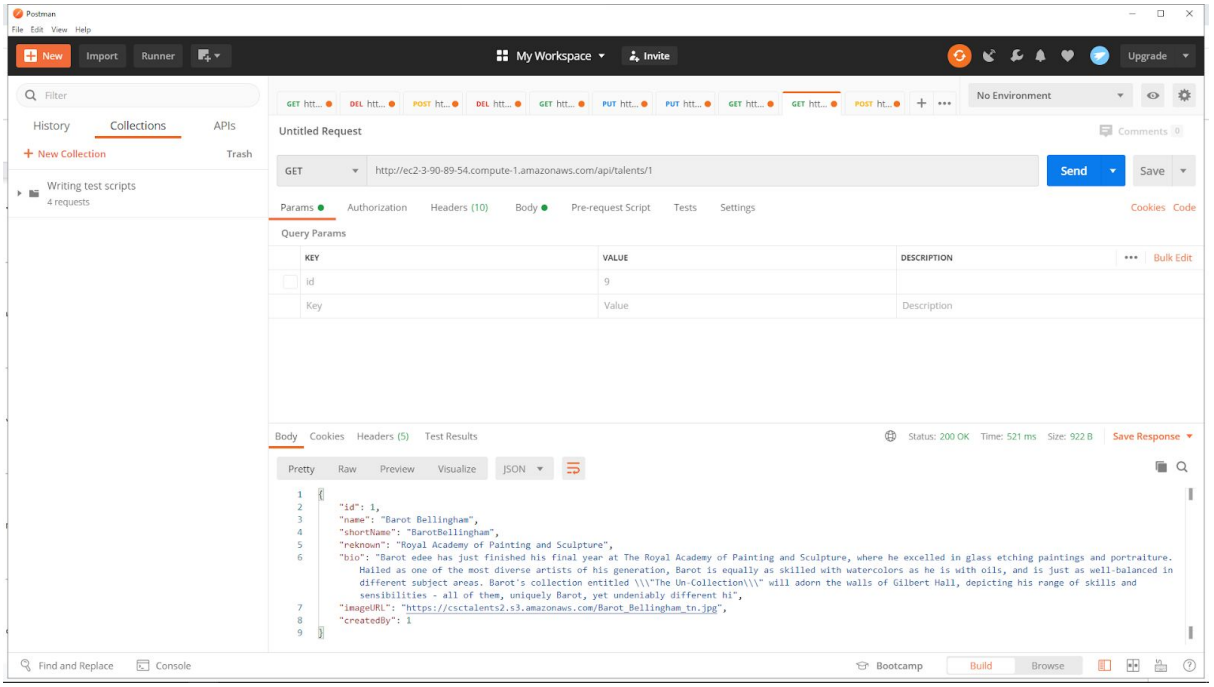
## Get All Talents

### Success:



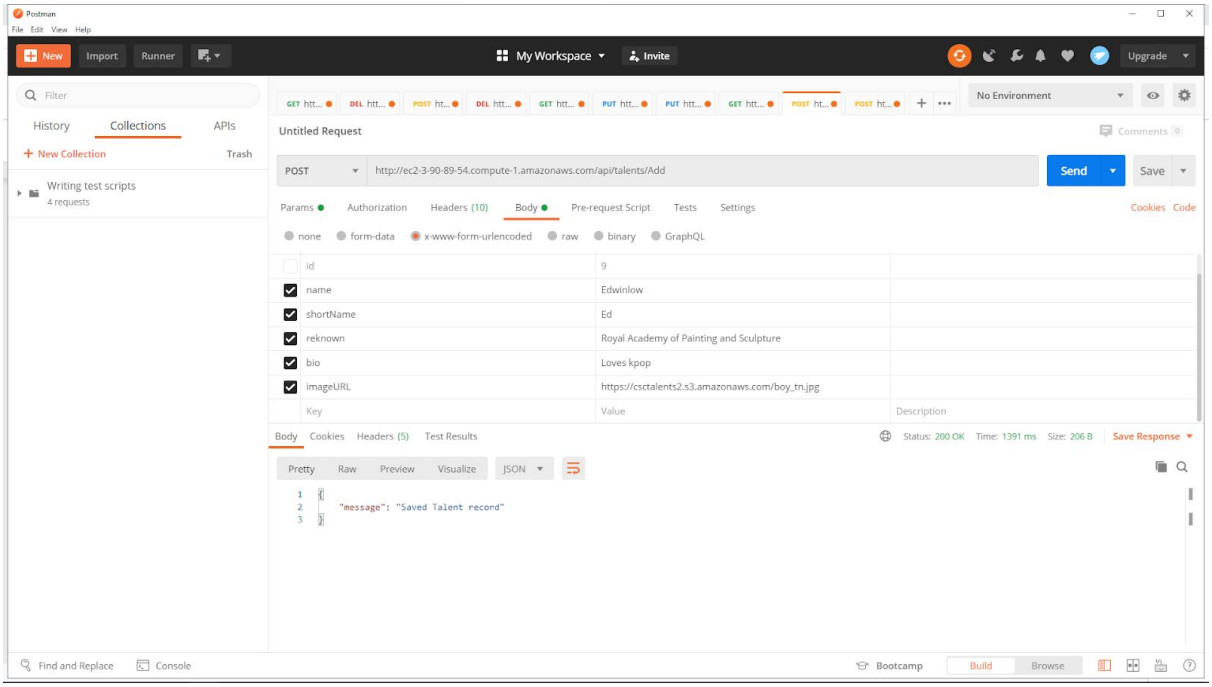

## Get Talent

### Success:

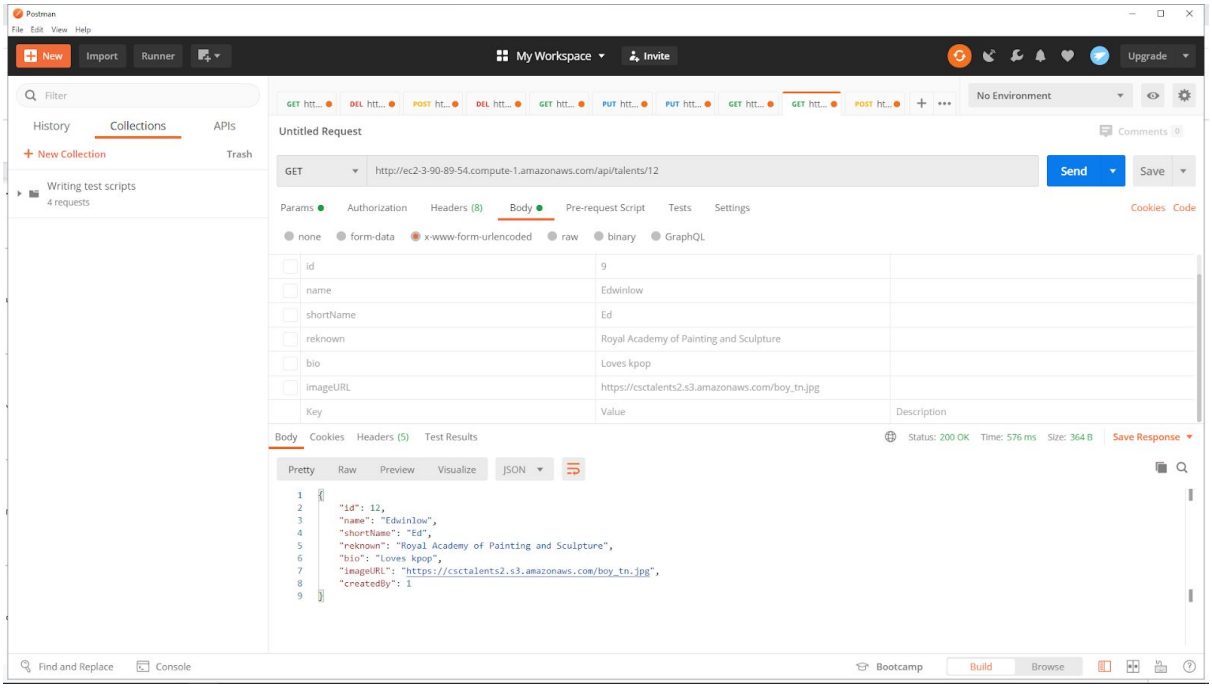


## Add Talent

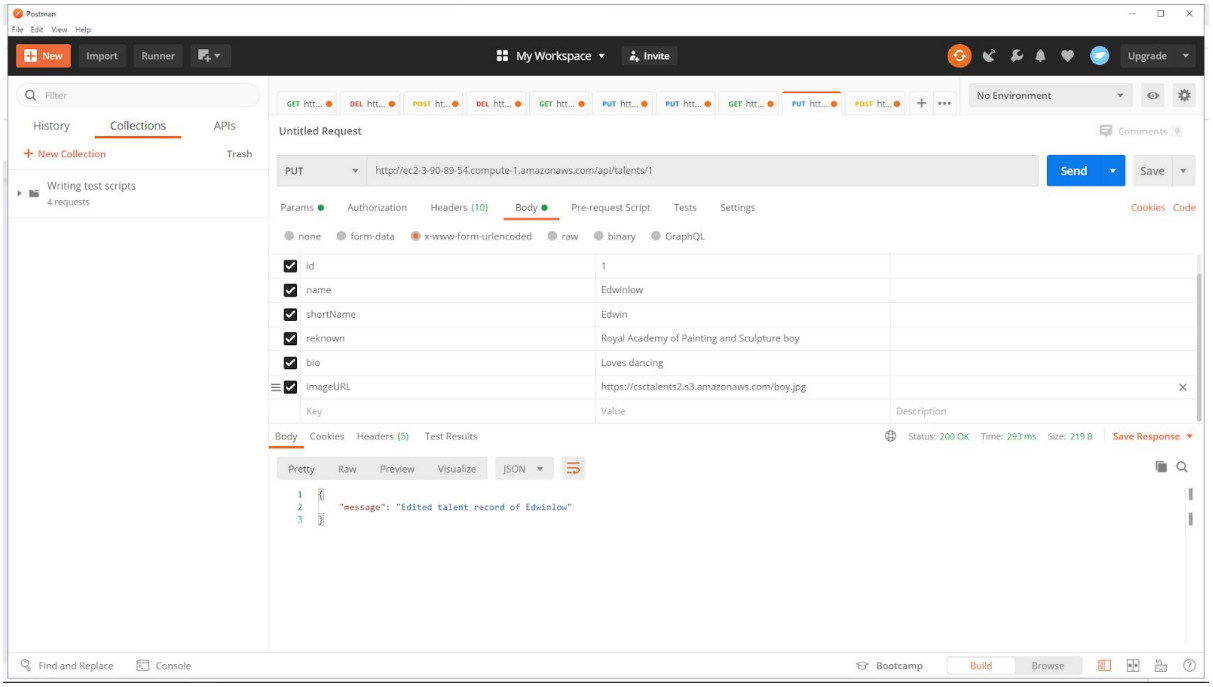
## Success:



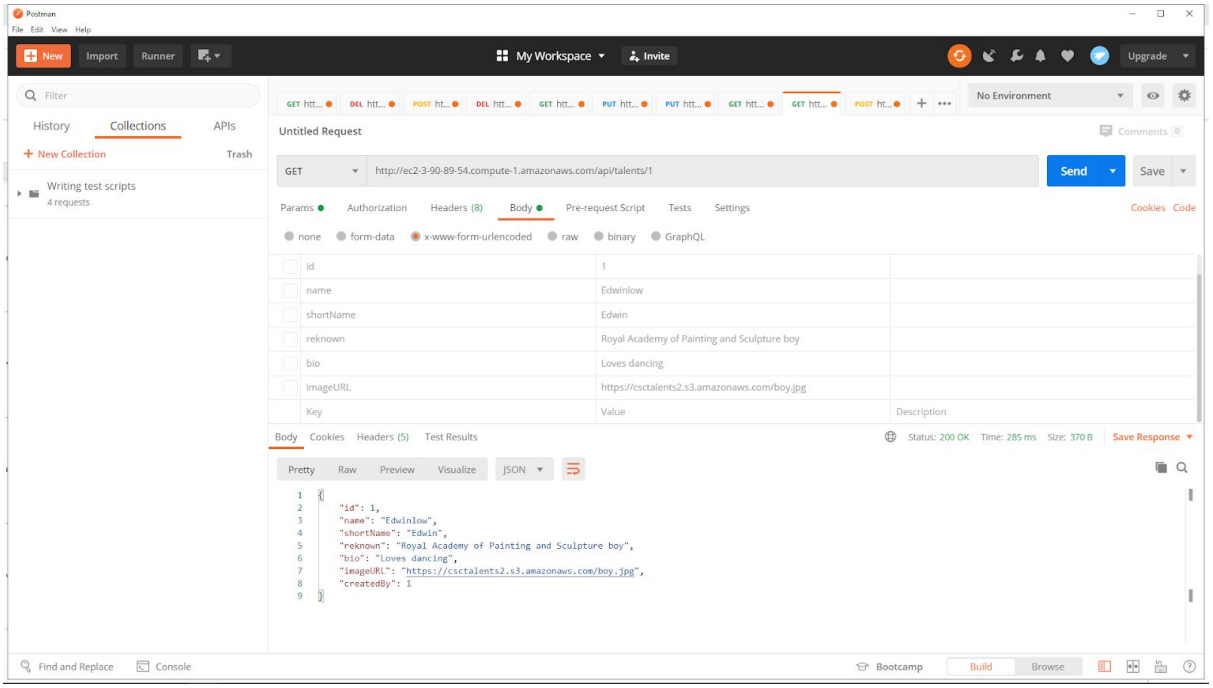

## Result



## Edit Talent

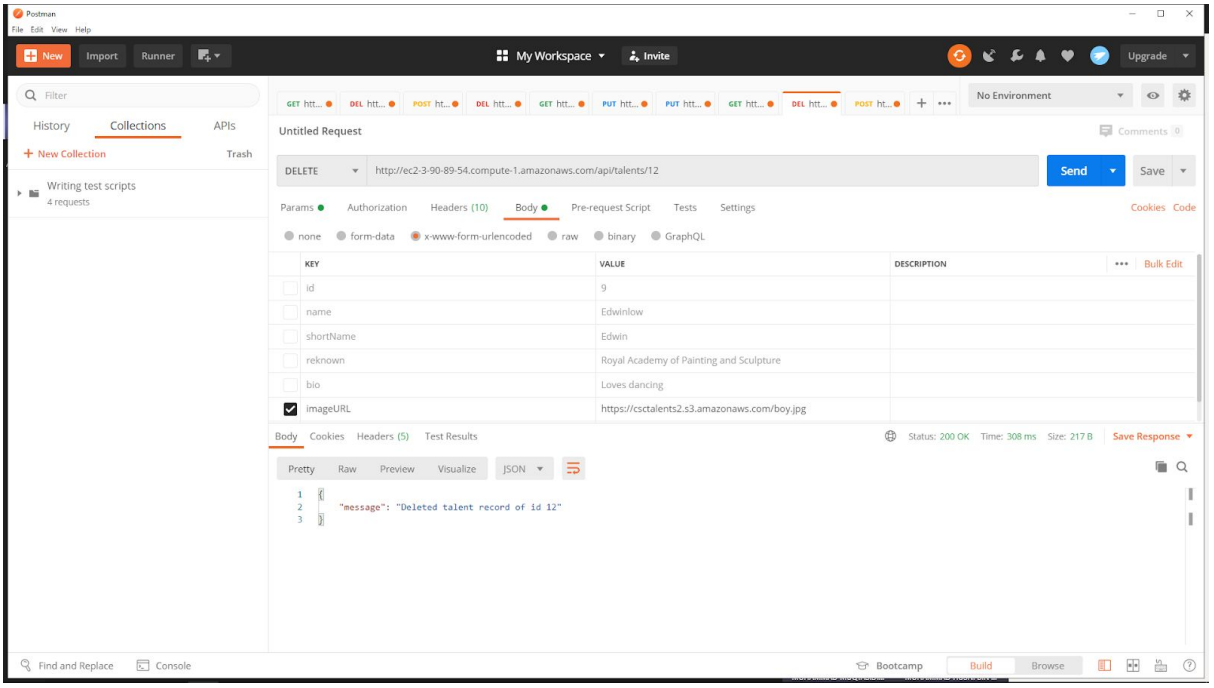



## Result

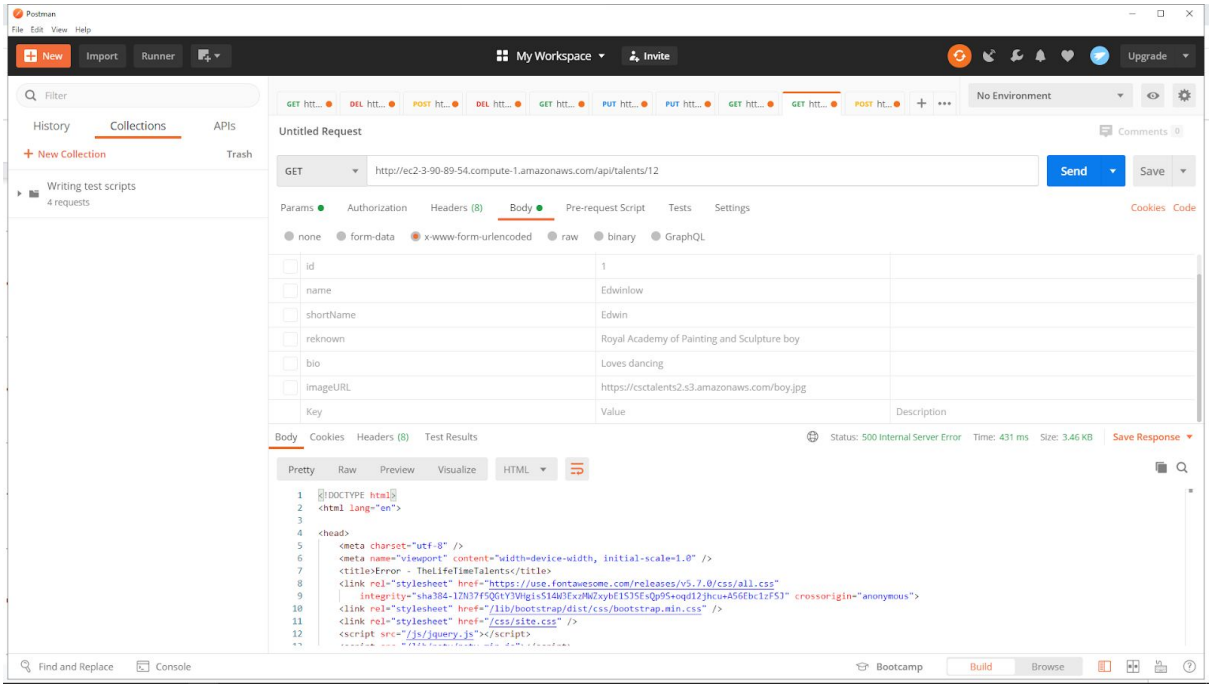


## Delete Talent

Success:




Result:



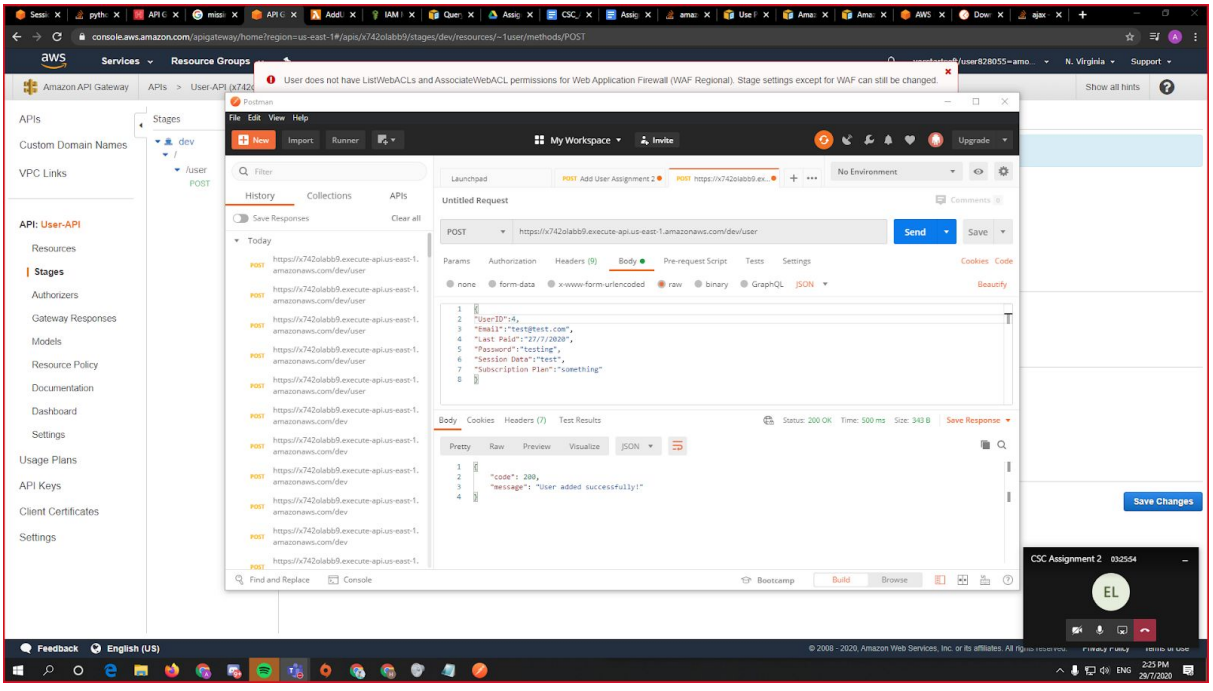
# NoSQL Database

## Store Users such as subscription plan, last paid, and/or **session data**

### API Documentation

1. Add User
    a. Adds a user to the database.
    b. Method: POST
    c. URL: /dev/user
    d. Params
        i. "UserID"
        ii. "Email"
        iii. "Last Paid"
        iv. "Password"
        v. "Session Data"
        vi. "Subscription Plan"

### Postman Screenshots

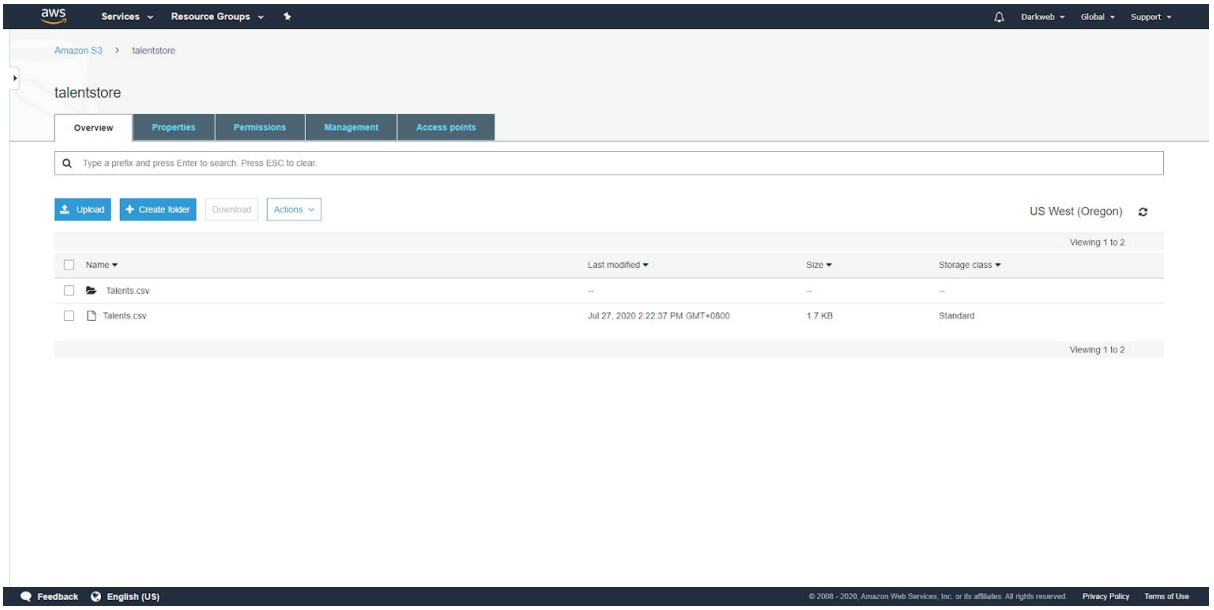


# Data Lifecycle Management

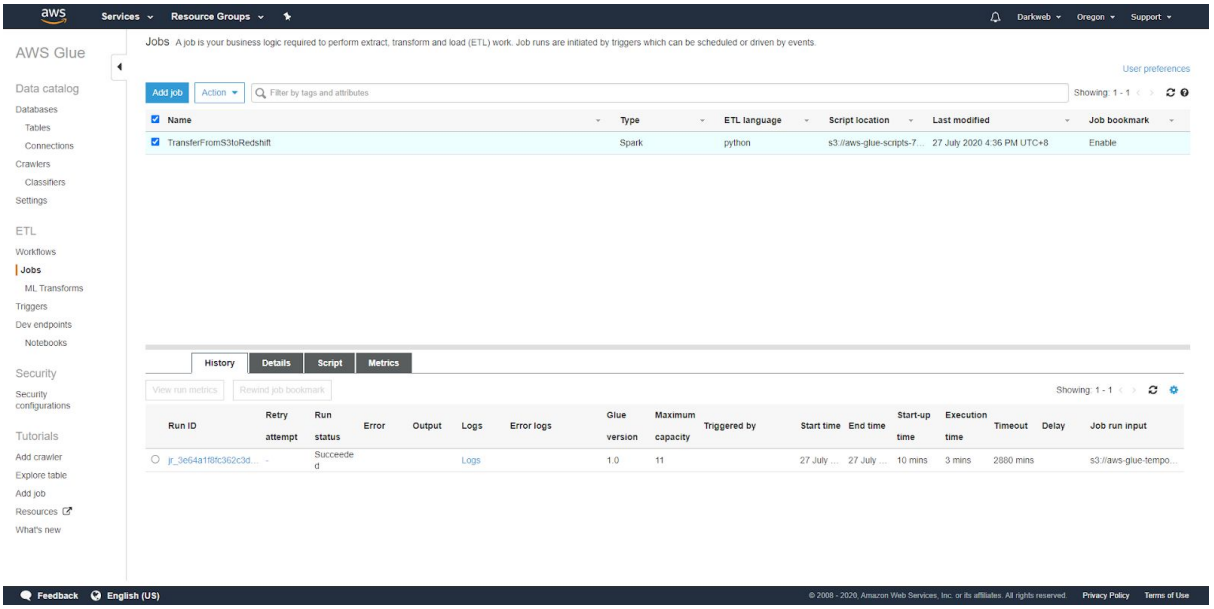
## Export **manually** Talents and Users data, import to data warehouse for future Business Intelligence (BI) use

### Screenshots

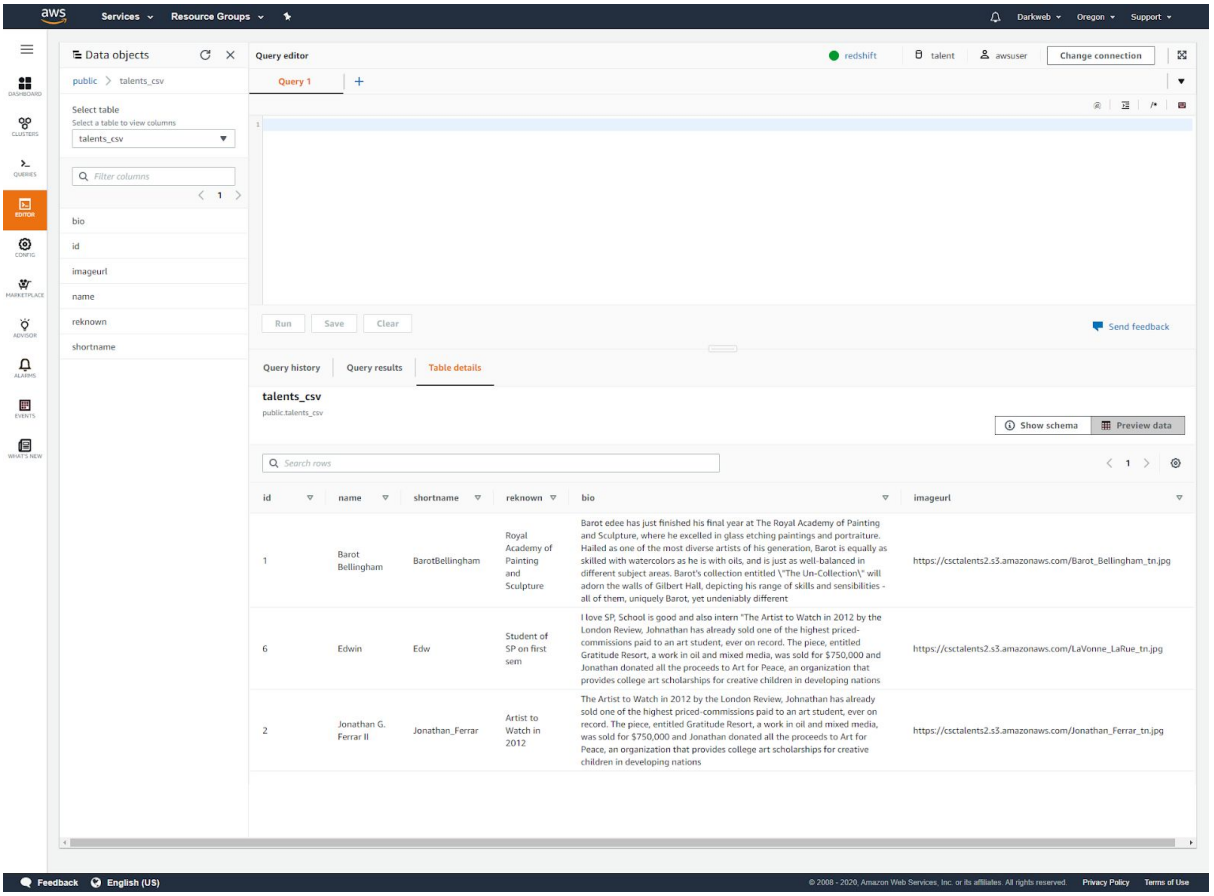
#### Create Talent.csv in S3 bucket




#### Link S3 bucket to RedShift using AWS Glue



Export as CSV and put it in Redshift:




# API Management

## Publish/Deploy your Talents data REST API

### API Documentation

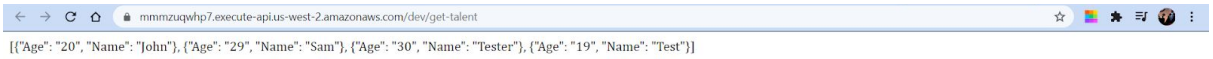
1. GET API
    a. Get all data.
    b. Method: Get
    c. Url: https://mmmzuqwhp7.execute-api.us-west-2.amazonaws.com/dev/get-talent

2. POST API
    a. Add new data.
    b. Method: Post

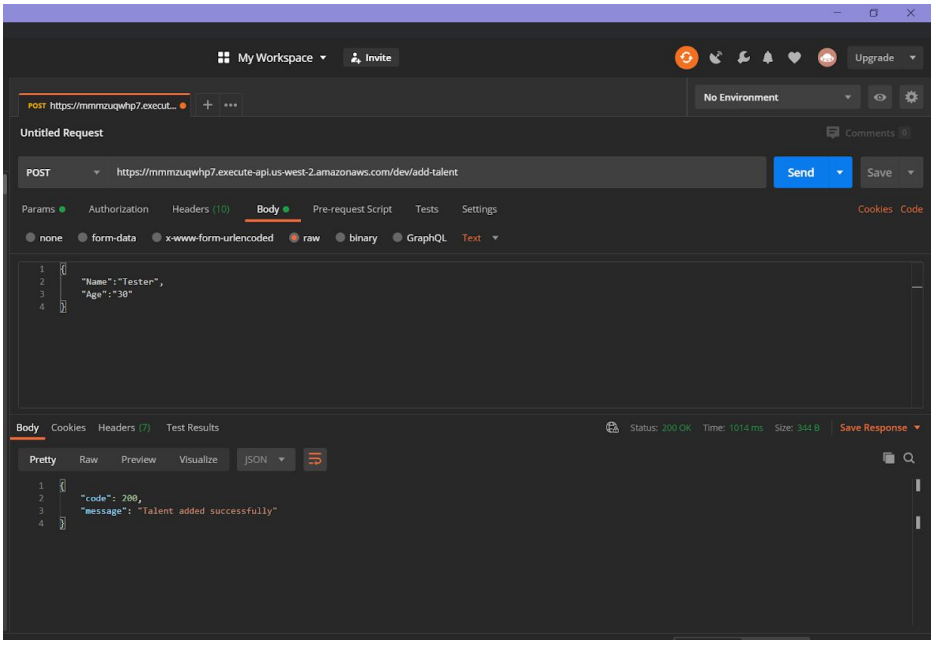
c. Url: https://mmmzuqwhp7.execute-api.us-west-2.amazonaws.com/dev/add-talent

## Postman Screenshots

[GET]




[POST]

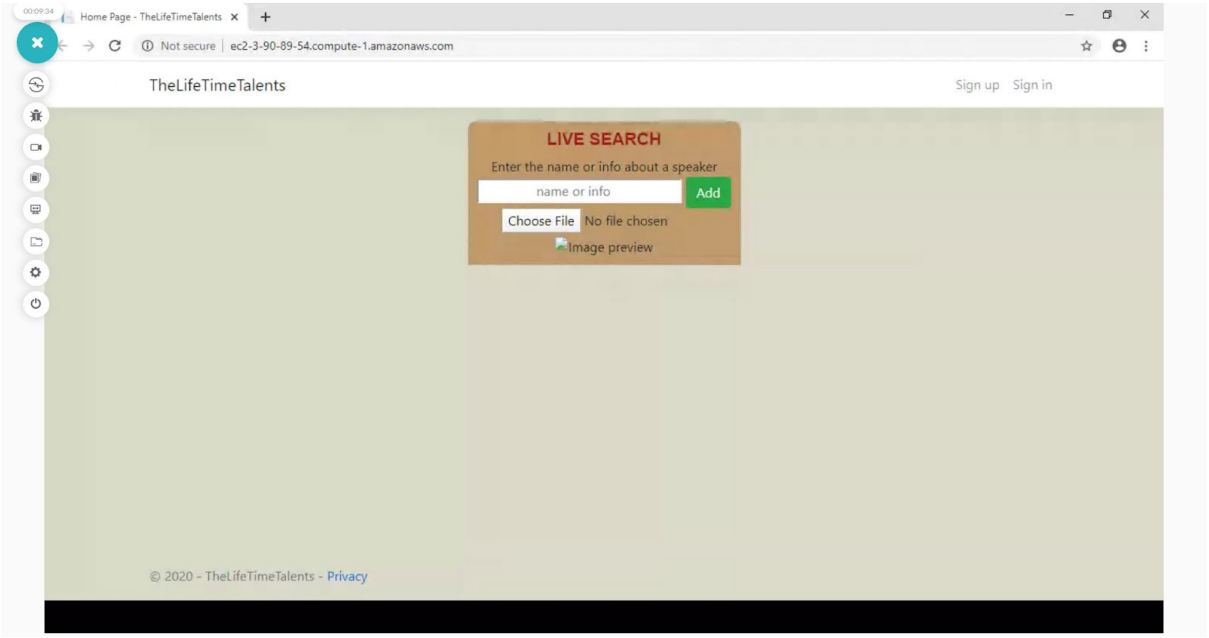


# Cross Browser Testing (LambdaTest)

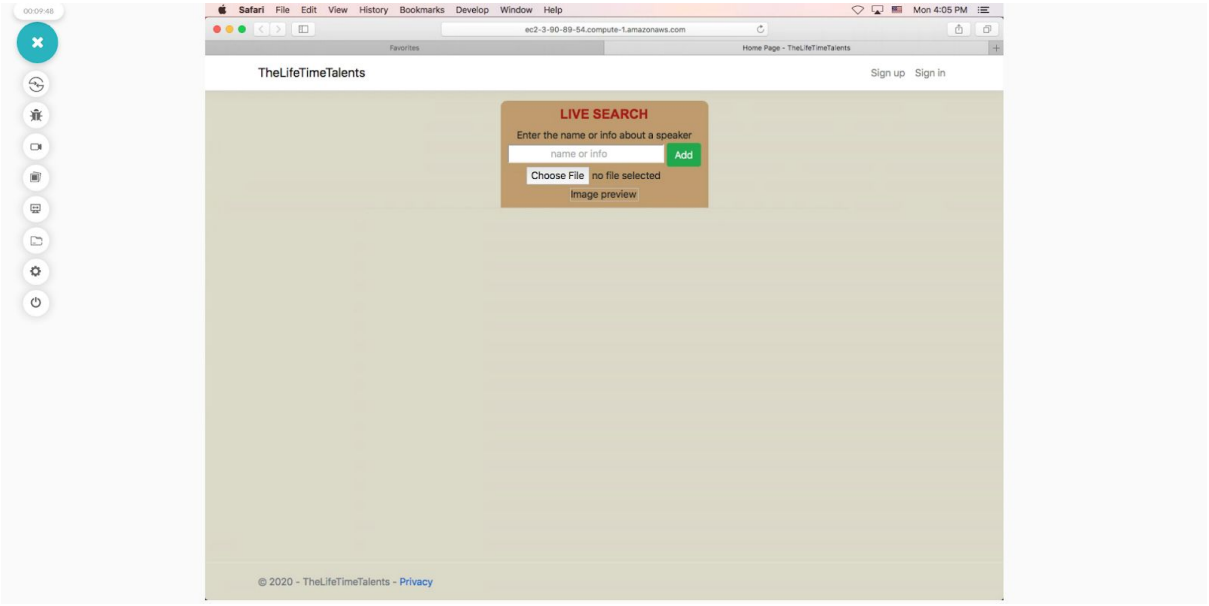
Show ability to use cloud cross browser testing tool to auto test web app and submit screenshots as proof

## Screenshots

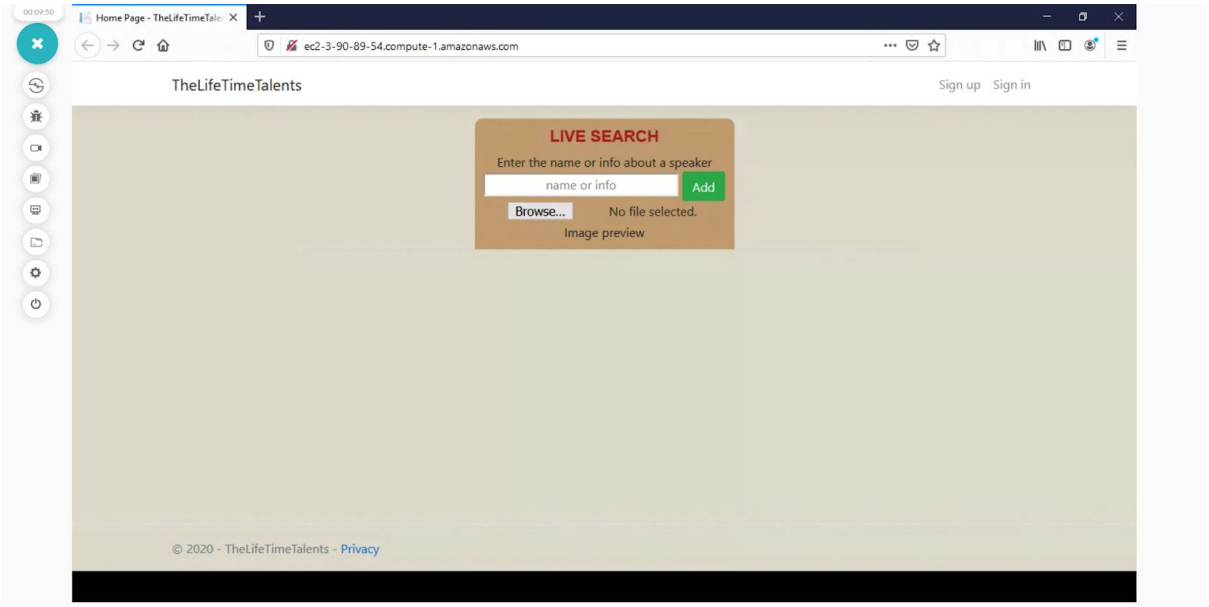
Chrome:



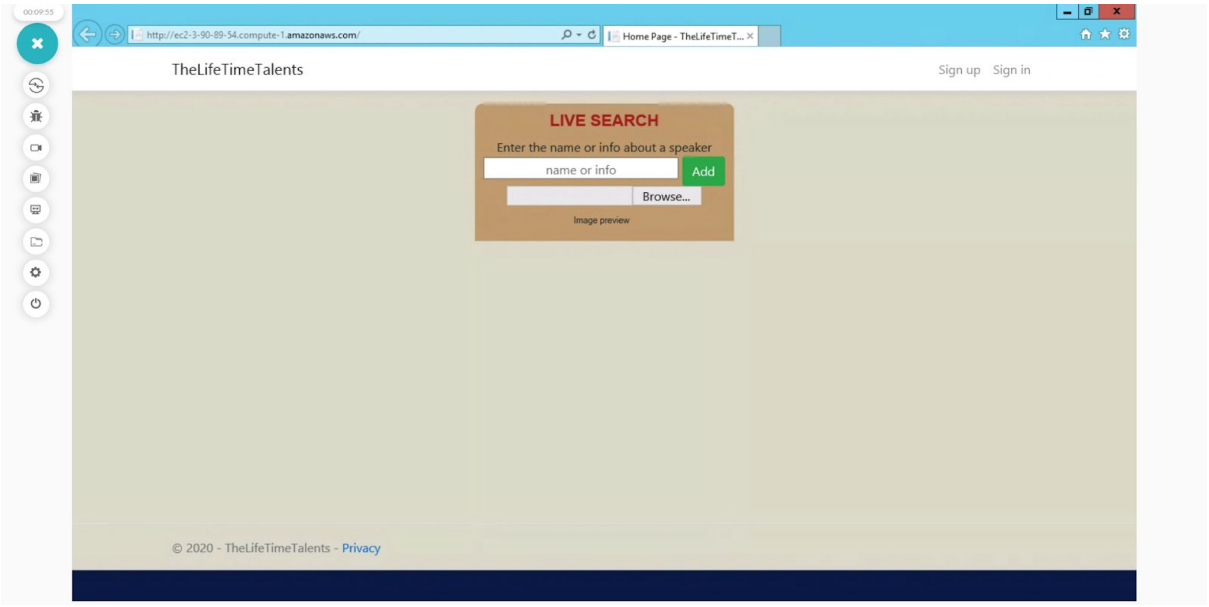
Safari:



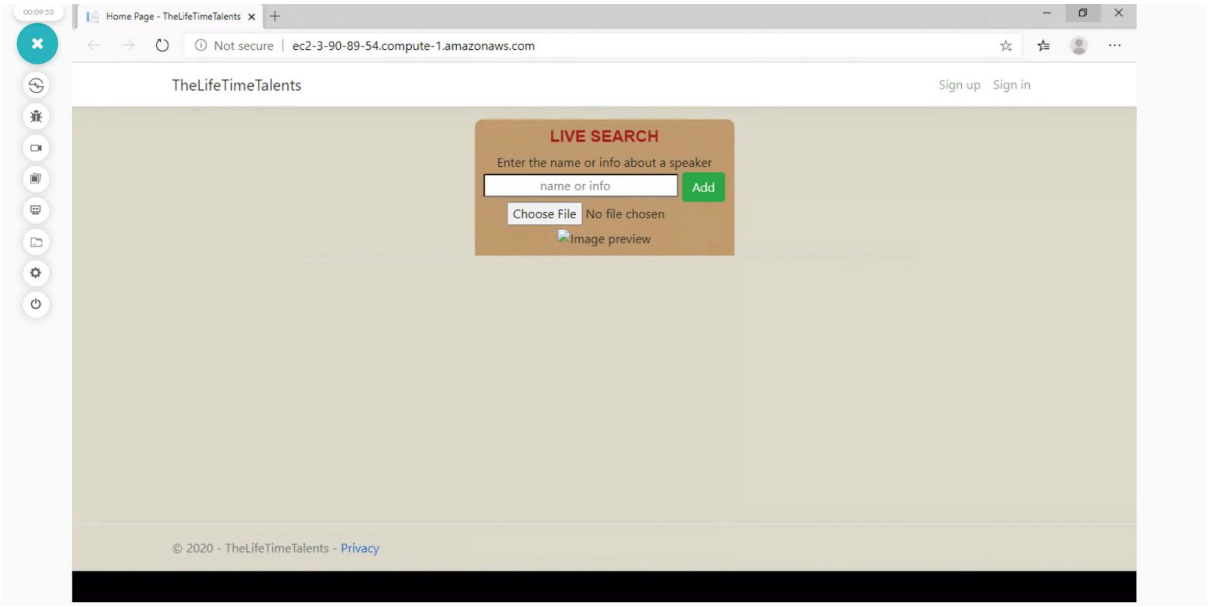

Firefox:

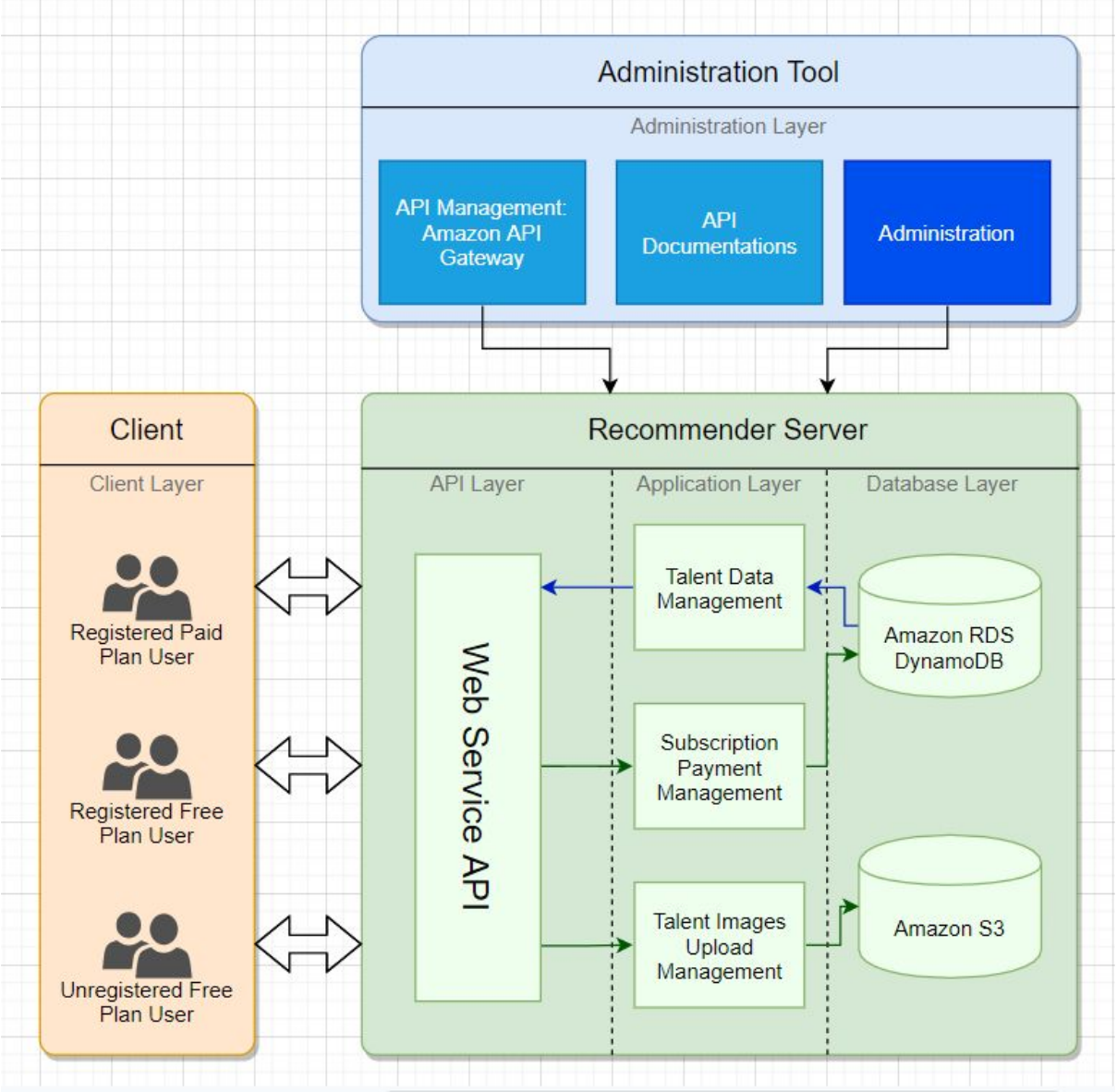


Internet Explorer:




Microsoft Edge:



# System Diagram

Draw a detailed architecture system diagram to illustrate your SaaS App