YouTube Clone Backend

Learning Objective

Use Django REST Framework to build a REST API to serve as the backend for a YouTube Clone application with JWT user registration and login functionalities.

Technologies

Django, Django REST Framework, MySQL, Postman

User Stories

**Total Unweighted Project Points: /32.5**

**Total Weighted Project Points: /30**

(5 points): As a developer, I want to make good, consistent commits (at least 20 for both the backend and frontend).

(5 points) As a developer, I want to setup the Django + React starter code and connect the backend (Django API) to my MySQL database, closely following the setup guide for instructions.

(5 points) As a developer, I want to run the django-admin startapp command to create a comment app and create a Comment model in the comment/models.py file:

**Property names must be in snake\_case and match the following exactly! Be sure to register your app before making migrations and create a serializer for your model!**

user – ForeignKey

video\_id – CharField

text – CharField

likes – IntegerField

dislikes – IntegerField

(7.5 points) As a developer, I want to create a GET endpoint that does the following things:

* Accepts a value from the request’s URL (The YouTube video id I am trying to get comments for).
* Returns a 200 status code.
* Responds with all comments from the database that are related to the video id sent in the URL.

(5 points) As a developer, I want to create a POST endpoint that does the following things:

* Requires JWT authorization (Protected route).
* Accepts a body object from the request in the form of a Comment model.
* Adds the new comment to the database associated with the user who sent the JWT in the request.
* Returns a 201 status code.
* Responds with the newly created comment object.

(5 points) As a developer, I want to use Postman to make requests for all of my endpoints, save it to a collection, and then export it as a JSON from Postman.

BONUS

**NOTE: Only attempt once both the backend and frontend are feature complete for non-bonus user stories**

(5 points) As a developer, I want to create a PATCH endpoint that does the following things:

* Requires JWT authorization (Protected route).
* **Accepts two values from the request’s URL** (The id of the comment to be updated and a query parameter called “type” with two possible values, “like” or “dislike”).
* Finds the correct Comment based on the id that comes in from the URL parameter
* Increments the “like” property by 1 if the “type” query param value is “like” or increments the “dislike” property by 1 if the “type” query param value is “dislike”
* Returns a 200 status code.
* Responds with the newly updated comment object.

(5 points) As a developer, I want to create a Reply model:

**Property names must be in snake\_case and match the following exactly!**

user – ForeignKey

comment – ForeignKey

text – CharField

(5 points) As a developer, I want to create a POST endpoint that does the following things:

* Requires JWT authorization (Protected route).
* Accepts a value from the request’s URL (The id of the comment the reply will be connected to).
* Accepts a body object from the request in the form of a Reply model.
* Adds the new reply to the database associated with the comment id sent in the URL and the user who sent the JWT in the request.
* Returns a 201 status code.
* Responds with the newly created reply object.

(5 points) As a developer, I want to create a GET endpoint that does the following things:

* Requires JWT authorization (Protected route).
* Accepts a value from the request’s URL (The id of the comment I am trying to get replies for).
* Returns a 200 status code.
* Responds with all replies from the database that are related to the comment id sent in the URL.