Assignment Four

Purpose

The purpose of this assignment is to leverage Google's analytics policies to gather information about the requests being sent in by users.

Using the information already entered to MongoDB for the previous assignment, you will add another collection of reviews that are tied to the movies. This way users can query the database and get the previous information (title, year released and actors) as well as the reviews. These two entities should remain separate! Do not append the reviews to the existing movie information.

Leverage the Async.js library or mongo $lookup aggregation capability to join the entities.

Requirements

- Create a collection in MongoDB (Mongo Atlas) to hold reviews about existing movies.
    - A review contains the name of the reviewer, a small quote about what they thought about the movie, and their rating out of five stars.
    - The review collection should have at least one review for each movie. – The review can be a simple, fictitious review that you create.
- This proxy should build upon the previous proxy in assignment four.
    - If the user sends a response with the query parameter reviews=true, then the response should include the movie information as well as all the reviews for the movie. If they do not pass this in, the response should not show the reviews. – The review information should be appended to the response to the user.
    - Implement GET/POST (DELETE is optional for reviews)
        - POST needs to be secured with a JWT authorization token. The Username in the token should be stored with the review (indicating the user that submitted the review)
- Extra Credit: Add custom analytics to return information about which movies users are querying.
    - Create a custom analytics policy that describes the number of times each movie has been reviewed. To do this, you will have to send a number of requests for each movie.
        - Custom Dimension: Movie Name
        - Custom Metric: Requested: Value 1 (it will aggregate)
    - Custom Dimension and Metric should be sent with an Event type
        - Event Category: Genre of Movie (e.g. Western)
        - Event Action: Url Path (e.g. post /reviews)
        - Event Label: API Request for Movie Review
        - Event Value: 1

Acceptance Criteria

- Create a Postman test to test your proxy. You should include the following requests.
- All tests from HW4 and
- Valid request without the review query parameter.
- Invalid request (for a movie not in the database) without the review query parameter.
- Valid request with the review query parameter.
- Valid save review method that associates a review with a movie
- Invalid save review (movie missing from DB)
- Export a report from Google Analytics

Resources

- https://github.com/daxko/universal-ga
- https://developers.google.com/analytics/devguides/collection/analyticsjs/custom-dims-mets
- https://cloud.google.com/appengine/docs/flexible/nodejs/integrating-with-analytics
- https://caolan.github.io/async/index.html

- https://support.google.com/analytics/answer/2709829