Homework 2: InstaGraph

Overview

In class, we wrote a method to model an Instagram post. Your homework this week is to build on what we learned today to create a Graph out of Instagram posts. Given the InstaGraph function that takes in a single parameter and returns an Object, create a Graph which connects posts with

1. [3 points] Run the code using chalk.js (you'll need it for the test file)
2. [6 points] addPost(post)
    a. Get the id of the post
        i. If the passed in post does not have that property, return null
    b. Add the post as a new property into the posts Object with the key of post.id
    c. Return the post that was just created
3. [8 points] getRelatedPosts(id)
    a. Retrieve the property in the posts object with the given id.
        i. If the post with that id doesn't exist, return null
    b. For each hashtag in the retrieved post, get a post that shares the same hashtag
    c. Return this array of posts, each of which shares at least 1 hashtag with the given post
4. [3 points] removePost(post)
    a. Retrieve the property in the posts object with the given id
        i. If the post with that id doesn't exist, return null
    b. Remove that post by setting the property with that id to null
    c. Make sure that if you made a reference to the post somewhere else (like in the hashtags object that you remove it from there too)

Submission

- Due Date: Week 3 Tuesday at 5:30
- Submission Link:
- Format: 1 zip file with the package.json, instagraph.js, and instagraph.test.js files

Tips

1. Write the pseudocode of what you're trying to do before starting. I've given you rough steps above. It'll help you ask questions to me, your TA, and your classmates. Be sure to ask questions when you're not sure about what to do or how to go about things.

2. Remember the first thing to do is run npm install to pull in the npm packages required. You'll need to do the same thing in the Lab.

3. In my solution, when I added the post, I also made to reflect the new post in the hashtags object. You may choose to do the same, it'll keep your O(n) low.

4. You can check for the existence of a property in an object by checking if it's undefined

```
if (posts[id] === undefined) {
  // then posts doesn't have a property with that id
}
```

5. You can run your program using node instagraph.test.js

6. If you're having trouble with Objects, here's the official docs. Eloquent JavaScript is a really good resource as well.