Thursday, July 25, 2019

Greetings to the Database Team!

UPDATE 1: 2 more features were added to certain object below (they are highlighted in yellow)

This is Miriam from the Front-End team. Below are the five different objects and their respective features that we would like to store within the database and later retrieve into the user-interfaces we build. Explanation about specific features, if such is needed to mention, will be provided after all the features for that object are mentioned, and will begin with a bullet •.

Please feel free to ask the Product team and us any questions about these objects.

Therefore, here they are:

1) Port	
Features	**Specifics**
id	
name	up to 100 characters
list of ids of users who subscribed to the port	
list of ids of posts written in that port	

2) Post	
Features	**Specifics**
id	
name / title	up to 10,000 characters
content (text) of post	up to 10,000 characters
image	up to 10,000X10,000 pixels (or equivalent 400 megabytes)
day	integer (1-31)
month	integer (1-12)
year	integer (2019-9999)
hour	integer (0-23)
minute	integer (0-59)
id of the user who wrote this post (only 1 user)	
# of votes	integer up to 10 billion (there are 8 billion people in the world today, for any case)
list of ids of comments that comment directly to this post (comments of level 1)	

- Since we will have comments to posts, and then comments to comments, and comments to these comments, etc., ad infinitum, we will have *comment levels*. The post itself will be of level 0 (zero), the comments to the post will be of level 1, etc. In practice, this will resemble a tree-like structure in which the post is the root node and the other comments are nodes in the tree. The list above that we ask for should contain the ids of **comments in level 1 only**. As you will see below, the **Comment** object will have one feature of id of either a post or a comment under which the comment came and another feature of list of ids of comments to that comment (which is essentially this very tree structure).

3) Comment	
Features	**Specifics**
id (of this comment)	
content of comment (text)	up to 10,000 characters
id of the comment (or of the post) to which it comments	
id of the user who wrote this comment	
# of votes	integer up to 10 billion
day	integer (1-31)
month	integer (1-12)
year	integer (2019-9999)
hour	integer (0-23)
minute	integer (0-59)
list of ids of comments that comment directly to this comment (comments of the next level)	

- If the current comment is of level 5, the list of ids of comments will contain ids of comments of level 6 that comment to the current comment (as explained in the bullet in the page above.)

4) User	
Features	**Specifics**
id	
first name	up to 30 characters
last name	up to 30 characters
username / 'login' name	up to 30 characters
email address	
password	up to 30 characters
image	up to 400 megabytes
list of ids of written posts by the user	
list of ids of written comments by the user	
list of ids of ports to which they are subscribed	
# of posts that the user want to see per page	integer (10-1000)
list of ids & votes for posts that the user	list of arrays of the form: {post id, 1 or -1}

saved	[If user upvoted, it will be one. If downvoted, it will be -1]
list of ids & votes for comments that the user saved	list of arrays of the form: {comment id, 1 or -1} [If user upvoted, it will be one. If downvoted, it will be -1]

5) Advertisement	
Features	**Specifics**
id	
image	up to 400 megabytes
URL for redirection to the ad's website	string of text
caption / description	up to 100 characters

This is all. In case the Product team will tell us that some more features are needed for any of the objects, we will update this file and notify you in class about it. You could start filling the database with some info of your choice (users named John Smith and Jane Dow, for instance) and decide on the structure of the ids that you choose for each type of object.

Here is an advertisement example:

1) id: (your decision!)

2) image:

(assume brooklyn_college.png)

3) http://www.brooklyn.cuny.edu/web/home.php

4) Go to the Brooklyn College Website

Thank you very much for your attention, and good luck with the project!