Back-end exam prep task

v. 2019-04-16 by JV

(Pairwork if find a pair, otherwise individual). Spend some 5-6h with this starting this morning.

Back-end code work

Category only, and just some, but not all of these services _properly_ made:

- GET (single Category by id)
- POST (single Category as JSON, excluding the id that will be auto-generated by DB)
- PUT (single Category as JSON, including the id)
- DELETE (single Category, by id)
- GET /all (multiple Categories as JSON)
- Extra: POST /insertMany (multiple Categories as JSON, excluding the ids that again will be auto-generated by DB)
- Pro: GET/all/isActive/true (multiple Categories as JSON, all of those who are active categories)
- Pro: GET/all/isActive/false (multiple Categories as JSON, all of those who are active categories)
- Pro: GET/all/budgetLimit/10000/false (multiple Categories as JSON, all of those whose budget limit is <= 10000)
- GET /db_reset => would run the drop, create, insert statements to reset DB to test case situation. Only
 development time => would go to the checklist of things changed befor publication
 - 1. Check the incoming request for the needed data, if faulty => 4XX errors sent back, e.g. 400.
 - 2. Do the knex operation (see https://knexjs.org documentation and examples
 - 3. In .then case handle the possible return data (GET) or rowsaffected (PUT, DELETE) or the returned created new item's id (POST).
 - 4. In the .catch case e.g. find out from the DB status code what happened. See given code examples
 - 5. If no specific error code matched, return e.g. generic "400" error code.

PostMan test collection!

- Create an account with PostMan
- Create a Collection
- Create subfolders to the collection, e.g.

Collection

Category
Single
Multiple
Idea
Single
Multiple

About 4 test cases per each REST API service like the single GET:

- Successful GET with correct id
 Put "OK" in the name and tell why ok
- Unsuccessful GET with id that is correct but doesn't exist in DB Put "X" in the name and tell why

- Unsuccessful GET with id missing (Also X, diff explanation)
- Unsuccessgul GET with id that is not a number, like "" or "abc" (Also X, diff explanation)

DDL for the DB and Test data scripts for the whole database

(Incremental way, Category, Idea, Member, ...)

But just 5-20-10-5 rows in the five tables (Comments and Idea_Members should both have 20)

Database: Foreign key policy suggestions

for all 5 FK:s, (=10 policies) plus some speculation for alternatives for just two of the FK:s, and why those policies maybe would be not suitable

Optional: Data dictionary updated to match 100% the DB diagram

DB diagram updated e.g. 2019-04-16. E.g. deletion business rules / decisions,

Exam likely like this:

- 20 multiple-choice questions (1. select best answer or 2. select all that apply)
- One task or drawing about back-end architecture