Assignment 5 - Rest & NoSQL

This assignment has three parts and focuses on the development of a Rest/Restful API for the creation & retrieval of

- Posts
- Comments.

You will learn about

- Developing a Nodejs server that uses a CouchDB (NoSQL) database
- Developing a Rest Level 2 (CRUD) API
- Developing a Rest level 3 API

Please provide the Dockerfile and/or docker-compose.yml you used in completing the assignment. Failure to provide the needed Dockerfile and/or docker-compose.yml will make it impossible to test the solution you developed and result in 0 marks for this assignment.

Part A) 40 Points

Develop and implement a Level 2 Rest API (CRUD) that allows the creation and retrieval of posts and comments. A post consists of a PostID, Topic and PostData. A comment consists of CommentID, PostID, CommentText.

Your API should support users in creating Posts & Comments. Obviously, Comments must relate to an existing Post. Your API should also all users to retrieve all posts & all comments for a post.

Part B) 40 Points

Develop and implement a Level 3 Rest API (all resonance must be in JSON) that allows the creation and retrieval of posts and comments. A post consists of a PostID, Topic and PostData. A comment consists of CommentID, PostID, CommentText.

Your API should support users in creating Posts & Comments. Obviously, Comments must relate to an existing Post. Your API should also all users to retrieve all posts & all comments for a post.

Part C) 20 Points

Provide 2 web pages that use the APIs of parts A & B. The first web page called TestRestLevel2.html should demonstrate all features of your Rest Level 2 API (Part A). The second web page called TestRestLevel3.html should demonstrate all features of your Rest Level 3 API (Part B).

What to hand in?

The docker-compose.yml file that you used in the assignment and any additional dockerfiles you developed. Failure to provide this/these files will result in a zero (0) grade for the assignment.

Part A) -> one file called serverA.js that contains all code for part A.
Part B) -> one file called serverB.js that contains all code for part B.
Part C) -> TestRestLevel2.html & TestRestLevel3.html