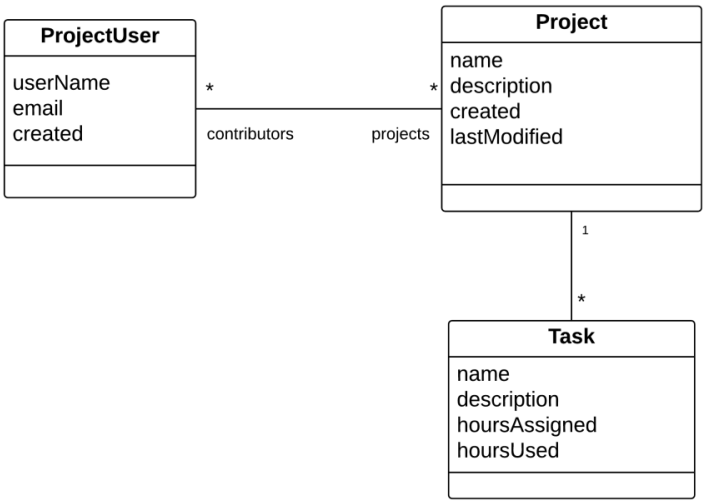
Persistence – Exam Preparation Question

General part

- Describe how you have handled persistence in the last three semesters.
- The considerations should include all relevant layers. File IO, Relational Databases, No SQL databases, local storage and cookies in browsers.
- Discuss the logical data model in this perspective

Practical part

The model below is an initial model for a system than can handle *Users* and *Projects* assigned to *Users* (contributors to the project). A project can have a number of assigned *Tasks*.



1) Examine and understand the diagram. Select one of the following two implementation strategies and write the necessary code to implement the model.
    - A relational database (Oracle or Derby) via JPA (create a java project using NetBeans).
    - A No-SQL database (Mongo) via Mongoose (Create a start project using the seed: https://github.com/Lars-m/ExpressAngularSeed)

    You must argue for the choice you make. Feel free to change the model (as long as the business logic remains the same) in order to fit into the choice you make[1].

2) Create a façade (in java or JavaScript, depending on your choice above) and implement as many of the methods below as you have time for (not necessarily in the order given):
    - Create user
    - Find user
    - Get all users
    - Create project
    - Assign user to project
    - Find project
    - CreateTaskAndAssignToProject
    - Etc.

[1] Remember, normalization is cool for relational databases and de-normalization is (often) cool for No-SQL databases