



Heroes get lonely too....

Project Description - Database Evaluation

The Database Evaluation is an individual 48 hours written assignment that counts 5 ECTS points towards the Multimedia Production Advanced exam.

You will work with:

ER modelling
Mapping and table structure
Database relations and keys
SQL - Basic & advanced levels
Utilizing data through PHP
Security concerns

Frontend Developer

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Business Academy Aarhus
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Background for the assignment

As part of the Multimedia Production Advanced you will be tested in database design and development.

This evaluation is divided into 3 parts, which focuses on

1. Modelling the data
2. Structuring and implementing the model
3. Utilizing the database

Deadlines and Practical Info

Deadline

The evaluation will take place from 24-27th April 2018. The deadline for handing in the assignment is Friday 27th at 11:59.

Handin

You must hand in the following:

- A written report
- All relevant code on GitHub, including an SQL dump of your database

Form and Evaluation

This evaluation is an individual assignment and will be graded by the 7-point scale. The given grade will count 25% towards the final grade of the Multimedia Production Advanced exam.

A failure to hand in will result in the grade -3. It is not possible to retake this assignment if the combined grade of the Multimedia Production Advanced is a passing grade.

The assignment will be given a grade based upon an overall evaluation of both the submitted solution and the report.

The solution

You will have to independently develop a solution for the provided case that covers the following areas:

- Structuring and modelling with ER diagrams
- Translating an ER diagram to tables
- Relational structure of tables (i.e. keys)
- Using PHP to access the database
- Using SQL to insert, update and delete data
- Security concerns

The Report

A written report has to be handed in that addresses your considerations behind your solution and documents your process. The report can be a maximum of 6 pages. A page is counted a 2.400 characters including spaces.

The report has to address the following:

- Examples from your solution
 - simple and advanced usage of SQL
 - using the data with php
 - Handling user input with forms
- Your process must be illustrated by
 - ER diagram(s)
- Considerations about
 - the development of the ER diagram
 - mapping the ER diagram to MySQL
 - structuring the tables
 - working with relations
 - using the data with Php
 - security and handling user input

The structure of your report is up to you. Images and code examples are encouraged.

Remember to include a link to your public GitHub repository.

The Case

Your client wants to develop a dating site for superheroes. Don't ask why. They also get lonely. Your prototype has to showcase the basic functionality and data structure for this.

Features it must support

1. Users have profiles where they can fill in information about themselves, e.g. name, age or superpowers.
2. They can see other users' profiles. If they like another user's profile, they can press a button to "like" it. The profile should display the amount of likes.
3. Users should also be able to comment on profiles and these should be displayed publicly together with the profile.

Minimum requirements

Your prototype has to have implemented the following as a minimum

Functionality:

- showing and liking a profile
- commenting on a profile
- updating the profile data through HTML forms

Data

- ALL of the data structure captured in your ER diagram should be present in your database
- You must have sample data in all tables. No lorem ipsum.

Optional functionality (gives bonus nerd points)

- Users can send private messages to each other, where each user only sees the messages send to *them* from other users.

Delimitation

You are NOT expected to create a login system. Just select one of the users as the one you are logged in as. All prototyping should be assuming that the user is logged in as this user.

The visual design of the solution is NOT part of the evaluation. Design it any way you want. Or not at all.

Use of 3rd party code is allowed but should be attributed.