

#### LAB 3

In this Lab you will implement the Movie Management System (MSS) available on Canvas. Make sure to read that document first.

You will progressively implement features until you have a complete MSS, so the labs are accumulative! Make sure to backup all your files.

#### **Presentation**

For the lab presentation, make sure you have the following ready to be shown to the TA:

- A thorough description of your database design, using course related terminology during the lab presentation.
- Code for the database creation showing keys, references, constraints, etc.
- Database diagram with all the tables and relations which are in BCNF-form.
- Code used to connect the database to the GUI.
- Your GUI, ready to be tested in a user scenario e.g. a user that wants to create, update and delete information from the database.

## **Project Background**

After creating your own database and making sure it all works as intended, KTH has requested us to create a Graphical User Interface (GUI) so they can retrieve the information in a more visual, easier way. This GUI needs to be a simple website or an application that you can use to display the information stored in your database.

In this Lab, your task is to add some constraints and create your own, simple GUI, to display the information stored in the database as well as handle the interaction between the Users and the database.

**OBS!** Focus on implementing the features rather than making the GUI visually pleasing, since we will not be evaluating the looks but the functionality you have implemented.

### Required features

You are required to implement the following features in order to pass this lab:

- Alter the MSS database with the following criteria:
  - 1. Add at least 5 total check constraints you find appropriate for the MSS to any of your tables. (Using functions for the checks are not recommended, keep your checks basic).

#### **DATABASE TECHNOLOGY**





# Lab 3

- Create a Graphical User Interface (GUI) that displays all the required information and implements the interactions defined in the Case Study file. A few details about this:
  - You are encouraged to try to make the GUI respond differently to Admins/Customers, depending on who is logged in. However, solutions where all the features are available to one user are allowed.
  - You are provided with a PHP-template, but if you feel more comfortable by creating your GUI with some other tools (e.g. something more like an application in Python or Java), feel free to do so.