# Introduction

## Problem

For the final project you will be taking an existing project and fixing some bugs and adding some new features.

# New Features

The following new features have been added to the application since the last lab. Review each of the new features before working on the change requests.

## MPAA Ratings

Movies may now have an MPAA rating. The movie details now show the rating. When adding or editing a movie the rating is selectable from a dropdown list.

## Release Year

Movies may now have an optional release year. The release year is between 1900 and 2100.

# Change Requests

Important notes about this project.

* You will not be creating any new solutions or projects. You will take the existing solution that is provided and make the appropriate changes.
* To identify your changes, add a comment to each code change (or block of changes) you make that identifies your name and the CR you are making the change for.
* The following areas of the code should be assumed to be working properly and therefore do not need to be touched unless explicitly stated in the change request.
  + Database
  + View logic

## CR0 – (Compiler) Fix the compiler errors

The code does not currently compile. Fix the compiler errors.

This should not require but a couple of small changes to the code.

## CR1 – (Bug) Movie rating is not being persisted

When adding or editing a movie, the rating is not being saved properly. It keeps resetting to Unspecified.

Update the code to have the rating properly loaded and saved.

## CR2 – (Bug) Release year is not being properly limited to the given years

The release year is not being enforced to be between 1900 and 2100. The year should be enforced before it gets to the database.

Note: This does not require any changes to the view or database.

## CR3 – (Bug) Removing a movie fails

When trying to remove a movie nothing happens. Fix the issue so a movie can be removed.

## CR4 – (Feature) Require the movie name to be between 2 and 100 characters

The database does not allow a movie to have more than 100 characters in the name. A movie with only a single character also does not make sense. Add validation to require the movie name to be between these two values. The validation should be enforced at the movie level and not in the database.

## CR5 – (Feature) Movies should be sorted when displayed

When viewing the list of movies, they are currently not sorted. Sort the movies by title.

# Requirements

Your program must meet all the following requirements.

* Compile cleanly with no warnings or errors.
* Meet all the points mentioned in the solution.
* Ensure each file has a file header indicating the course, your name and date.
* Solution, project and code should be uploaded to Github
* Submit lab in MyTCC by providing link to Github URL