


Continue with the ASP.NET Core MVC Gym Management application from Part 3. Please use the posted solution for Part 3 as the starting point for Part 4.

### Instructions:

1. (4 Marks) Add Unique constraints to both the Category property of the FitnessCategory model class and the Name property of the Exercise model class.
  - a. Add a migration to be applied when you next update the database.
2. (16 Marks) On both the Create and Edit Views for GroupClass, add an option for the user to create a new FitnessCategory in a popup Modal dialog box without ever leaving the page.
  - a. The option to add the new FitnessCategory should appear as a button attached to the select control (drop down list) where they choose the fitness category for the group class. It might look something like this: 
  - b. All validation messages must appear in the Modal if there are any issues with the value the user enters. That includes errors raised by the database.
  - c. If there are no validation errors and the new value is added to the database, the select element should be refreshed so the new value appears in the list. However, the selected value must be put back to the original one that was there before the user clicked the button.
3. (2 Marks) Modify the FitnessCategory Details View to show a list of all the Exercises in the Category.
4. (18 Marks) Add a form where the user can select an Excel file to upload containing two columns of data.
  - a. In the Excel spreadsheet, the first column contains names for Exercises and the second column contains the name of the Fitness Category for the exercise.

	A	B
1	<b>Exercise</b>	<b>FitnessCategory</b>
2	finger extensions	Hand Dexterity
3	foot shaking	Personal Training
4	ear scratching	Yoga
5	hand clapping	Hand Dexterity
6	finger extensions	Personal Training

    - i. Note that exercises can be in multiple fitness categories.
  - b. For (18 Marks) just insert data from the FitnessCategory column.
    - i. Give feedback on how many Fitness Category records were added to the database and what, if any records were rejected and why.
  - c. **BONUS:** Insert any new data for all three entities involved, FitnessCategory, Exercise and ExerciseCategory.
    - i. If either the Exercise or FitnessCategory do not exist, add them to the correct entity in the database.
    - ii. If it does not exist already, add the ExerciseCategory record to relate the exercise to the category shown.
    - iii. Give feedback on how many records of each type were added to the database and what, if any records were rejected and why.