**Terms**

1. Individual work only
2. You may use outside sources, but these must be cited as comments in your program. E.g., if you use ***Stack Overflow*** then add the link in the comments for that section of code.
3. Due dates and deliverables are listed below.
4. There are a total of 100 points to be earned. See below for how to earn points.

You are to design and write a useful ASP.NET MVC Web Application. You should not repeat something we have already done in class.

Your application should demonstrate the following:

1. Data model
   1. No tables: 0 points
   2. Tables with no relationships: 5 points max
   3. Tables with one-to-many relationships: 8 points max
   4. Tables with many-to-many relationships: 10 points max
2. CRRUD capabilities:
   1. CRRUD with no relationships: 10 points max
   2. CRRUD with one-to-many relationships: 16 points max
   3. CRRUD with many-to-many relationships: 20 points max
3. REST Web API: 10 points max
4. JavaScript and AJAX
   1. None: 0 points
   2. Minimal: 10 points max
   3. Some use: 16 points max
   4. Extensive use: 20 points max
5. A visually appealing user interface. You are to modify the views to take advantage of front-end frameworks such as ***Bootstrap***.
   1. Default scaffolding used: 5 points max
   2. Some modifications done: 8 points max
   3. Extensive modifications done: 10 points max
6. Write comments for each controller, service class, and JavaScript code (10 points)
   1. State the purpose of each class, each method, and functions
   2. Describe each parameter
   3. If your block of code is not self-explanatory, then write short inline comments to explain it

**Deliverables**

1. One page document describing your application. Due: Oct 12, 2023 (10 points)
2. Application User Stories and Scenarios. Due: Nov 2, 2023 (10 points)
3. Completed application. You will demonstrate your application to me via Zoom during finals week on either Tuesday, Dec 12th or Thursday, Dec 14th. The timeslots are listed below. Please choose 3 possible slots and email your choices to me. I will use your choices to create the schedule.

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| Tue, Dec 12th | Thu, Dec 14th |
| 10:30-10:45am | 1:20 - 1:35pm |
| 10:45-11:00am | 1:35 - 1:50pm |
| 11:00-11:15am | 1:50 - 2:05pm |
| 11:15-11:30am | 2:05 - 2:20pm |
| 11:30-11:45am | 2:20 - 2:35pm |
| 11:45-12:00noon | 2:35 - 2:50pm |
| 12:00-12:15pm | 2:50 - 3:05pm |
| 12:15-12:30pm | 3:05 - 3:20pm |