Athletic Event Scoring System

Problem statement:

Consider a system to support the scoring of judged athletic events such as gymnastics, diving and figure skating. There are several events and competitors. Each competitor may enter several events and each event has many competitors. Each event has several judges who subjectively rate the performance of competitors in that event. A judge rates every competitor for an event. In some cases, a judge may score more than one event. The focal points of the competition are trials. Each trial is an attempt by one competitor to turn in the best performance possible in one event. A trial is scored by the panel of judges for that event and an average score is determined. **(30 points total)**

a. Develop a use-case diagram capturing the scope of the system **(10 points)**

b. Develop a design class diagram (attributes, operations with parameters, association specification, etc. – more detail than a robustness analysis diagram or a domain model) for the system. You may wish to sketch a domain model or robustness analysis model as a step toward the design class diagram. **(10 points)**

c. Develop a design sequence diagram (showing the interaction of the class objects within the system) for the task flow steps: **(10 points)**

1. The athlete performs a trial in an event
2. Each judge uses the system to record their score of the trial
3. The system averages the scores across all judges and records that as the athlete's trial score