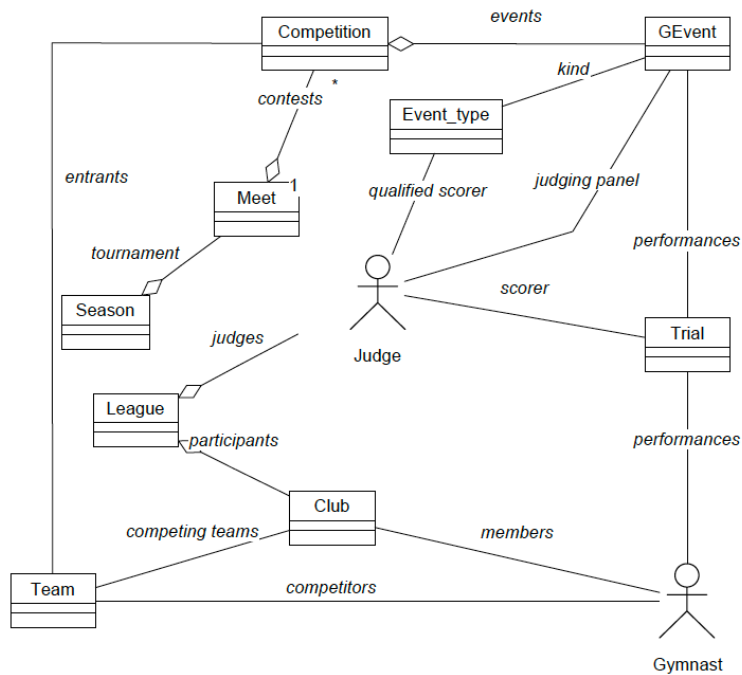


## 2DV604 Exercise 1 – Decompositions

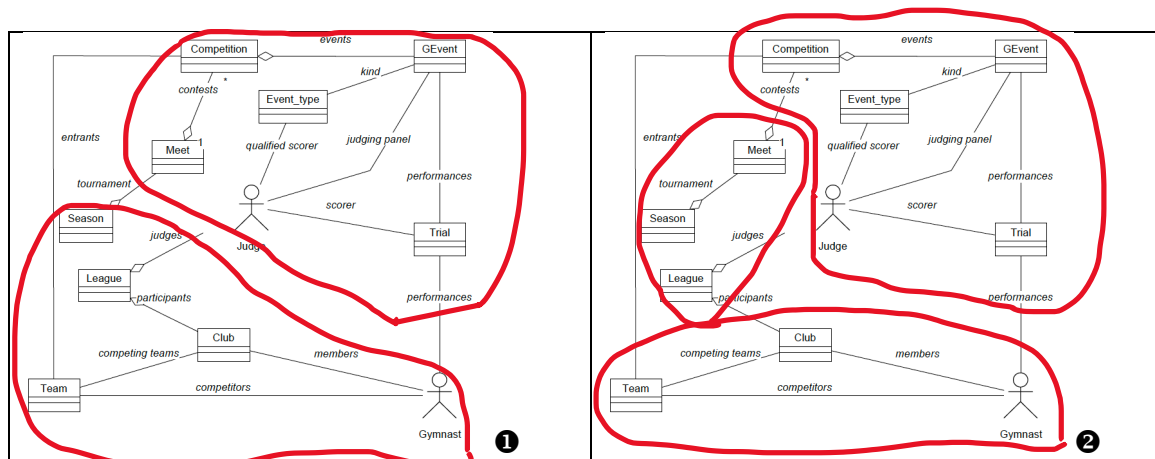
### Answers

Remember that “answers” to design exercises are multiple.

We use this class decomposition as the basis for our answer. A class level decomposition provides a finer-grained level than component/subsystem level.



Below identify two alternative decompositions.



Motivation ① – We identify two main functionalities/ capabilities for the system, League Management and Meet management. League Management manages all aspects of a *league* including *clubs*, *teams*, and *gymnasts*. The Meet Management take on the responsibilities

connected to a gymnastic meet including managing *Competitions*, the *Gymnastic Events*, and *Scoring*. The decomposition is based on two principal business capabilities, Organizing the League and running the Meets. Each capability can be manifested by two separate systems or services.

Motivation ② – We can use a similar argument for the second alternative decomposition. The difference is that we provide a separate subdomain for the *Team* administration capability. We also move the border between *League* and the *Competition* management. So which decomposition is better? The answer is not straightforward, “it depends”! What type of system should we provide. If it is two separate systems, we may argue for decomposition 1 because one system is more active between meets and one during meets. The second, is more realistic if we consider a single web-based application where each subdomain/capability maps to a set of services that better matches stakeholder groups, such as Meet manager, League Manager and Team manager.

