

Assignment #6

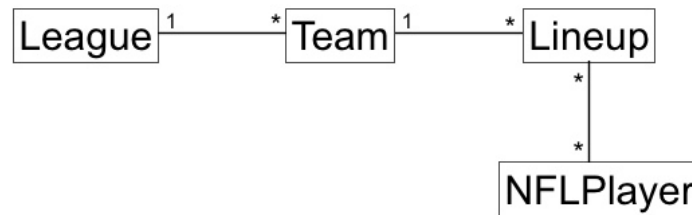
Mapping Models to Code

CS 4354 Fall 2012

Instructor: Jill Seaman

Due: Tuesday, 12/04/2012 (upload electronic copy by 11:30am)

1. Apply the appropriate transformations described in Section 10.4.2 to the associations in the model below (for a simple fantasy football website). Assume that all associations are bidirectional. Assume that the association between League and Team will NOT change after each object has been created. For the rest of the associations, assume that they can change during the lifetime of each object. Write the source code in Java needed to manage the associations, including class, field, and method declarations, method bodies, and visibility.



2. Add code to the classes you defined for the previous question to check the following constraints on the Lineup class (as described in Section 10.4.3).

context Lineup **inv:**

getNFLPlayers().size() <= 7

Check this invariant in addNFLPlayer(p) only

context Lineup::addNFLPlayer(p) **pre:**

getNFLPlayers().size() < 7

context Lineup::addNFLPlayer(p) **post:**

getNFLPlayers().size() = self@pre.getNFLPlayers().size() ||
getNFLPlayers().size() = self@pre.getNFLPlayers().size() + 1

Logistics:

Please submit your java files in a single zip file (assign6_XXXXXX.zip). The XXXXX is your TX State NetID (mine is js236).

Submit:

An electronic copy only of your java classes, using the Assignments tool on TRACS.