**Lab 6**

**Domain Model Class Diagram**

**Use Visio to create a DMCD that captures the following:**

Note:

* Use the “UML Class” template in Visio
* To show multiplicity, right click on the association line and click on “Show Multiplicity”

1. You have been asked to create a domain model class diagram to model the NCAA football teams and student players. A football team has zero or more players, and each player is on one and only one team.
2. Use an association class to extend the class diagram to track game statistics for each player in each game. Obviously, a game involves multiple players, and a player can play in multiple games over time.
3. Extend the class diagram to track the two types of players: undergraduate (UG) and graduate (G) student players. They each have some unique attributes: G student players have *attribute1* and *attribute2*, while UG student players have *attribute3*.
4. Further extend the diagram by adding a Staff Member class. A football team can have multiple staff members, and each staff member can only work for one team.
5. Use part-whole relationships to show that the team staff class includes coaching staff and support staff (e.g., doctor, therapist).

**NOTE: No late submission is accepted unless there is a documented illness or emergency.**

* If you experience **technical difficulties with Citrix or Visio**, you may create your drawing by hand (and include a brief explanation of the situation in your submission for the TA). However, such hand-drawn diagrams must still be submitted by the same 11:59pm deadline.
* If you experience **technical difficulties with Canvas** during submission, you may submit your work to the TA via email. However, such email submission must be sent to the TA by the same 11.59pm deadline.