## UML Diagram

Overall good job, you captured the primary classes and interactions.

Some things that were confusing or need work:

* Methods getWins, Losses, Ties don’t make sense in Item list, should be in Item
* Some composition relationships should be association
* Not clear what NTest is
* Report is too vague – What is it reporting?/ What results is it showing?

FYI, you could scale back what you have if you need to, you’ve gone beyond the basic requirements.

## Code

Great job, you all are further along than we expected.

* Login screen and admin setup screens look great.
* Overall code structure looks good so far.
* Nice job with the unit tests.
* Good job connecting to the database.

We didn’t look at every class but did spot checks. Here are a few notes:

* You can use assertTrue or assertFalse rather than assertEquals(true, something)
* Answer seems to have a logic error in the isAnswered method
* ItemList.removeItem: use equals when comparing Strings, == performs object identity. A better option for comparing items may be to implement an equals method on the Item class.
* If you coded the GUI by hand, note that using a null layout manager should usually be avoided since everything is absolute and nothing is flexible (some GUI builders use null layout). Alternatives that give you similar power include GroupLayout (which was actually created for GUI builders but can be used manually) and GridBagLayout. Feel free to keep using null layout though if that’s working for you. Laying out components can easily become a time sink and we don’t want that to be the major focus.

Let us know if you have any questions.