SA Team Work 2

Due by 5/29 at noon (paper, file, Java code)

Based on your team project of team work 1, please do the following:

1. Please explain the **Law of Demeter (LoD)** by using of your project.
2. There are six (or seven) types of interaction coupling, each falling on different parts of a good-to-bad continuum. Choose three pieces of your project to describe what types of the coupling they belong to.
3. There are seven types of method cohesion, choose three pieces of your project to describe what types of the cohesion they belong to.
4. Connascence generalized the ideas of cohesion and coupling, use three pieces of your project to describe what types of the connascence they belong to.
5. Use one class from your project that can create a set of invariants and add them to the CRC card or the class diagram.
6. Use a method of a class from your project that can create a contract and describe its algorithm specification. Specify the pre- or post- condition and use both Structured English and an activity diagram to specify the algorithm.
7. Please evaluate any piece of your project in terms of cohesion, coupling, and connascence perspective.
8. Assume that you are going to adopt RDBMs to your project, please describe the referential integrity.
9. Using the steps of normalization, create a model that represents the file of your project in third normal form. Please make necessary assumptions to explain why the tables are related.
10. Describe how you would denormalize the model that you created in question 9. Draw the new class diagram based on your suggested changes.
11. Examine the model that you created in question 10. Develop the inter-file clustering and index strategies. Describe how your clustering strategy will improve the performance of the database. List possible indices you would recommend and describe the reasons.