Class Diagrams: A Structural Perspective

CS 2720
Questions on Class Diagrams

1. In the UML diagram hierarchy, what is the abstract class that a class diagram inherits?
2. What are the classes, and what attributes and operations do they have?
3. What abstract classes and interfaces are realized?
4. What generalizations are present?
5. What classes are involved in an association, and what are their roles and multiplicities?
6. What compositions are present, and what do they mean?
7. Where are the association classes and what do they mean?
What are some errors and “smells” to watch for in class diagrams?

- Abstract classes or interfaces not generalized or realized
- Associations and compositions in the wrong “direction” (based upon listed roles, names, multiplicities, or notations)
- Incorrect use of generalization (determined from class names)
- ...