

CECS 274  
Homework Chapter 12: Object-Oriented Design

Let's consider the problem of capturing the state of a game of Monopoly by first thinking about the possible classes we would build. What classes can you identify using the "nouns from the requirements specification" technique?

1. Square
2. Token
  - a. Different types
3. Dice
4. Money
  - a. DifferentTypes
5. House
6. Hotel
7. Cards
  - a. Different types
8. PropertyTitleDeed

2) In thinking about the classes you identified in 1), can any of them be reasonably related by inheritance? Which ones? Keep in mind we don't have to implement all possibilities. At this point we are just imagining possibilities.

- Square types (railroad, utility, etc)
- Different Token types (top hat, battleship, etc)
- Different card types (chest, chance)

3) In thinking about the classes you identified in 1) can any of them be reasonably related by aggregation? Which ones? Keep in mind we don't have to implement all possibilities. At this point we are just imagining possibilities.

- The board consists of different square types
- The game object overall has multiple classes aggregated into it