

# SelfAssessment12\_6

November 15, 2015

## 1 Exercise 12.6:

What do you think of the example hierarchy above, where the `Polygon` class is the parent of `City`, `Parcel` and `County` classes? Can you suggest another hierarchy that is closer to how we think of cities, counties and land parcels?

*Answer appears after one blank page (so you don't peek).*

Are you sure you're ready to peek?

## 2 Possible Solution

We usually think of these land units as having many attributes, and `Polygon` is only of them. Indeed, some land units have multiple polygons. A better hierarchy would be to define a `LandUnit` parent of all three. All of the subclasses (`City`, `Parcel` and `County`) would have *at least* one polygon, and some would have more. The unit's polygons could be stored as a list having at least one member. The `Polygon` object would be defined as before, but each subclass would have unique properties as in the example.