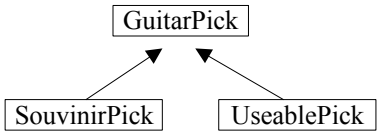
Assignment: Create a hierarchy for the objects in your collection. For example, I have both souvenir guitar picks, and useable guitar picks. There are some things I would keep track of for all of them (*e.g.* thickness, color), but only some things for souvenir picks (where bought), and some things only for useable (grip). So my hierarchy might look like



Once you've decided a hierarchy, create classes in your collection project for the superclass and all subclasses you plan on using. Common fields and methods go in the superclass; unique fields and members go in the subclasses. You may need concepts from Chapters 11 & 12 to complete this, which is why you have so long to work on it.

Rewrite your collection class to make use of you new classes. The functionality of this class should not change. You should be able to do all the things in the new project that you could in the previous version.

M: A proper hierarchy is designed, with appropriate classes written. It's ok if the separation of fields/methods is not perfect. Project must still maintain original functionality.

E: Well designed classes (*i.e.* methods and fields in proper classes.)

Related Learning Outcomes:

H 10.1: Use inheritance to refactor a class design
C 10.1: Draw an inheritance diagram
J 10.1: Create a subclass
J 10.2: Call a base class constructor
J 10.3: Assign a subclass object to a superclass variable
J 11.1: Write an overriding method
J 11.2: Call overriding methods

Due Date/Time: as posted on Canvas