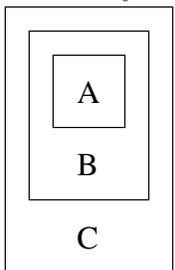


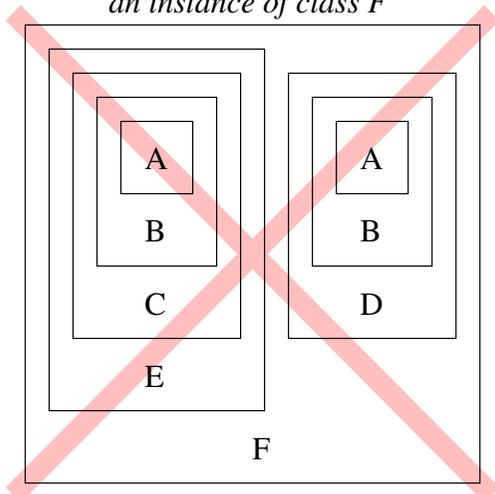
*an instance of class C*



Normally, inheritance just adds layers, like an onion or a nesting doll.

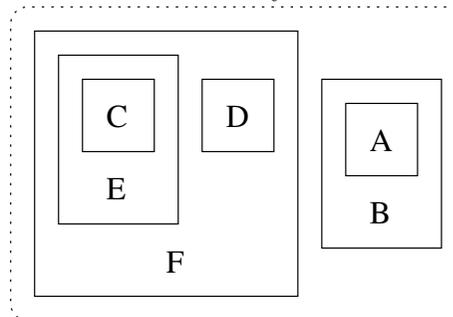
In each layer, we store the member variables for that class.

*an instance of class F*



With multiple inheritance, this could lead to duplicate copies of the member variables for classes A & B.

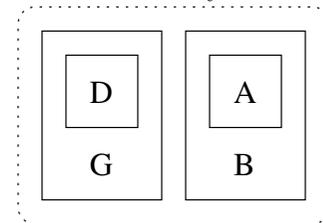
*an instance of class F*



Instead, we inherit virtually, which requires separate construction of the parts of the diagram marked virtual.

This ensures we have a single unambiguous copy of the member variable data for A & B.

*an instance of class G*



Note that even if a class does not itself use multiple inheritance, it may still have virtual inheritance on its path and require separate construction.