



Wait a second, didn't you say we should NOT program to an implementation? But what are we doing in that constructor? We're making a new instance of a concrete Quack implementation class!

Good catch, that's exactly what we're doing... *for now.*

Later in the book we'll have more patterns in our toolbox that can help us fix it.

Still, notice that while we *are* setting the behaviors to concrete classes (by instantiating a behavior class like Quack or FlyWithWings and assigning it to our behavior reference variable), we could *easily* change that at runtime.

So, we still have a lot of flexibility here. That said, we're doing a poor job of initializing the instance variables in a flexible way. But think about it: since the quackBehavior instance variable is an interface type, we could (through the magic of polymorphism) dynamically assign a different QuackBehavior implementation class at runtime.

Take a moment and think about how you would implement a duck so that its behavior could change at runtime. (You'll see the code that does this a few pages from now.)