abstract base class

Abstract base classes complement duck-typing by providing a way to define interfaces when other techniques like <code>hasattr()</code> would be clumsy or subtly wrong (for example withmagic methods). ABCs introduce virtual subclasses, which are classes that don't inherit from a class but are still recognized by <code>isinstance()</code> and <code>issubclass()</code>; see the <code>abc</code> module documentation. Python comes with many built-in ABCs for data structures (in the <code>collections</code> module), numbers (in the <code>numbers</code> module), and streams (in the <code>io</code> module). You can create your own ABCs with the <code>abc</code> module.