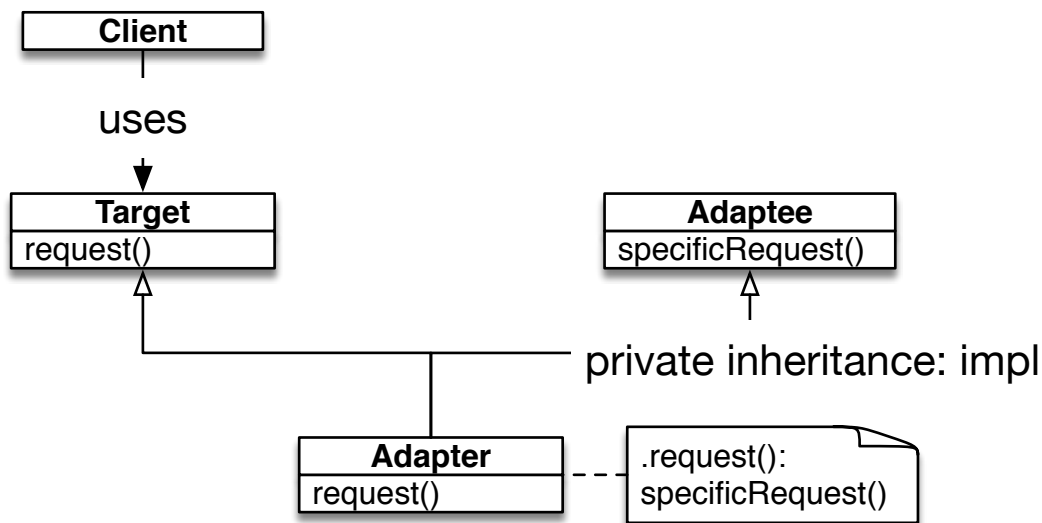


## Adapter / Wrapper

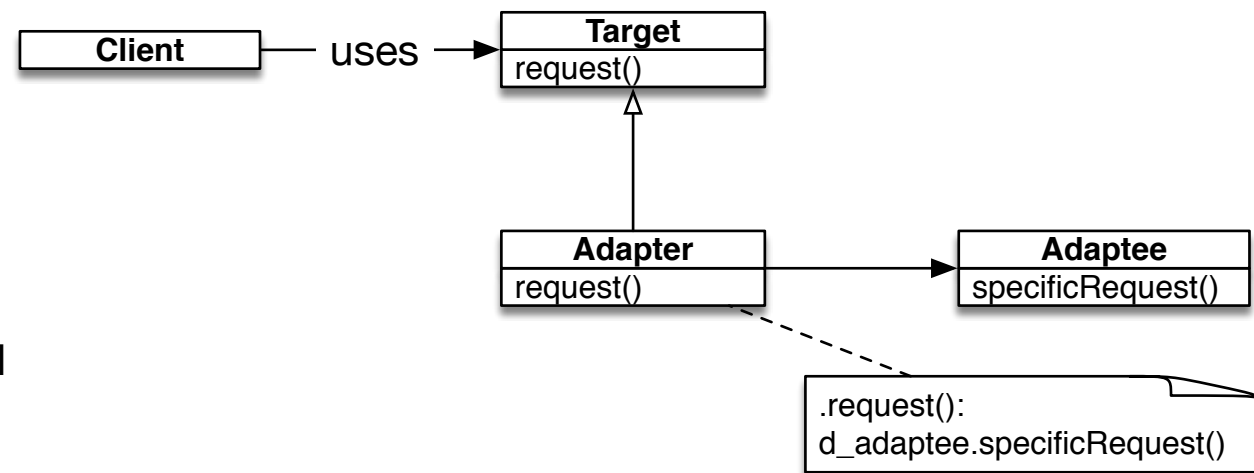
**Intent:** convert the interface of a class into another interface client expects. Adapter lets classes work together that couldn't otherwise because of incompatible interfaces.

Use adapter when you want to use an existing class whose interface does not match the one you need; Or you want to create a reusable class that cooperates with unrelated or unforeseen classes; Or you need to use several existing subclasses, but it's impractical to adapt their interface by subclassing every one.



Adapter using multiple inheritance:

- committed to a concrete class: won't work when we want to adapt a class and all its subclasses.
- lets Adapter override some of Adaptee's behavior
- Introduces only one object, and no additional pointer indirection needed to get to the adaptee



Adapter using object composition:

- makes it harder to override adapter behavior
- lets a single Adapter work with many adaptees