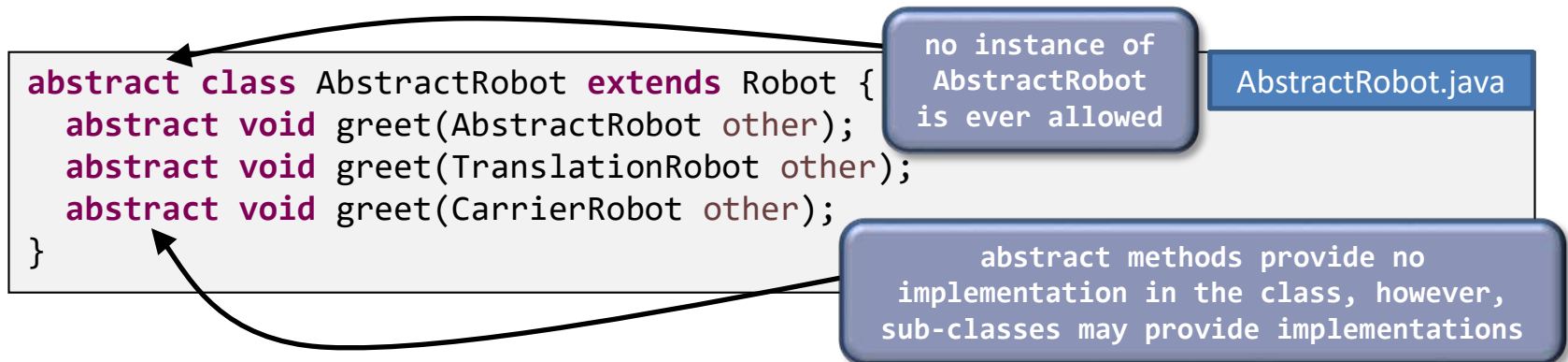


Abstract Classes, Abstract Methods

- to prevent us from making instances of a class we apply the **abstract** keyword to the class
- abstract classes are often ones that are purely conceptual without any instances (e.g. a generic **Shape**, an **AbstractRobot**)



- usually an **abstract** class contains **abstract** methods, that is methods which are declared, but supply no implementation (any non-abstract sub-class is forced to implement **all** these methods)
- a class with one or more abstract methods **must be** declared abstract itself