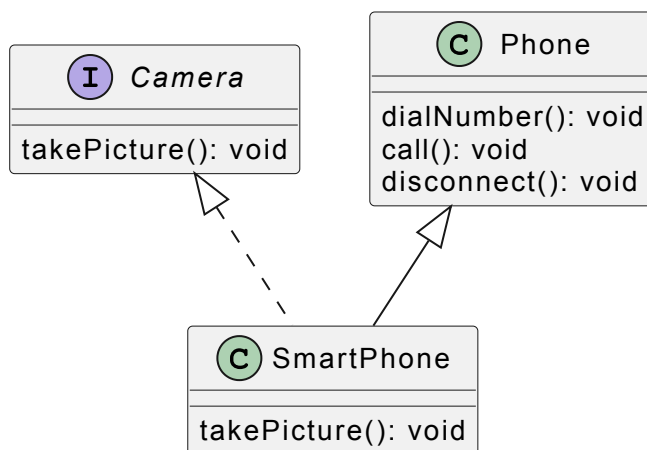


Interfaces

Interface

- is a data type for creating reference variables
- is an abstract type
 - an object of this type cannot be created
 - there is no constructor for an interface
- can contain:
 - public static final variables
 - must have an initialization
 - public abstract methods
- starting from Java 8, an interface can contain
 - methods with body, but need to be marked as "default"
 - static methods



- A class may implement an interface
 - the effect of this is the class must implement all abstract methods coming from the interface, or else the class must be declared abstract
 - this was true even for abstract classes
 - hence many people say that **implementing an interface** is similar to **extending an abstract class**

Exceptions in Java

Exception

- is an error that occurs at the runtime, during the execution of the program
 - For example, when an integer is divided by zero, the runtime cannot proceed further
 - JRE will create an object of a class called **ArithmeticException** and **throws** to you
 - We need to **catch** the thrown object, and take an alternate step
 - if we do not do this (handle the exceptional scenario), then the JRE will break the execution of the program (not desirable)

