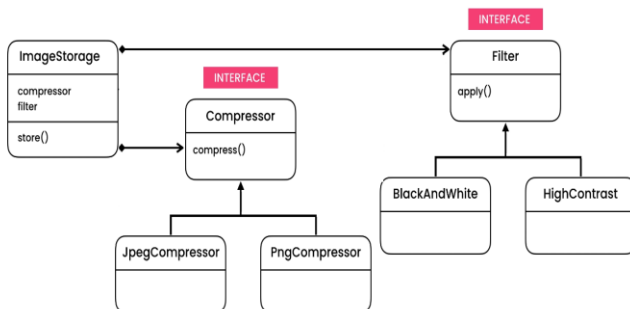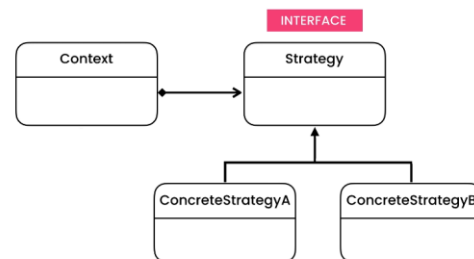# Strategy **Design Pattern**

This pattern is used when there are different types of algorithms for implementing a behavior.

Class Diagrams

Our Example	The pattern in Gang of Four's book

Explanation

In our imaginary application, we need to compress and filter images before saving them. There are two different types of algorithms for both compression and filtering. ImageStorage class is responsible for saving the image. its inputs are special types of compressor and filter classes. Compressor and Filter are interfaces. JpegCompressor and PngCompressor classes implement the Compressor interface (each of them overwrites compress() method in its own way). BlackAndWhite and HighContrast classes implement the Filter interface (each of them overwrites apply() method in its own way. With this structure, we satisfy the "open-closed" principle, different types of algorithms will be added in the future and remove the ugly if-else statements.