Proxy separate end user from destination directly interact

Proxy is used for the image loading,cche loading it keep the downloaded image as cache

A screenshot of a computer

AI-generated content may be incorrect.**Adapter Pattern**

Purpose:  
To *allow two incompatible interfaces to work together* by converting the interface of one class (the adaptee) into an interface expected by the client (target). It acts as a bridge between two unrelated classes.

How it works:

* The client interacts with the adapter instead of the adaptee directly.
* The adapter implements the expected interface and internally calls the adaptee’s methods, translating calls as needed.
* This enables reuse of existing classes without changing their code.

**ecorator Pattern**

Purpose:  
To *dynamically add new behavior or responsibilities* to an individual object without affecting other objects of the same class. It’s like wrapping the original object in layers that add extra features.

How it works:

* The decorator and the original object share the same interface.
* The decorator holds a reference to the original object.
* When a method is called, the decorator can add its own behavior before/after delegating the call to the original object.
* Multiple decorators can be stacked, allowing flexible combinations of behaviors at runtime.

Real-world analogy: