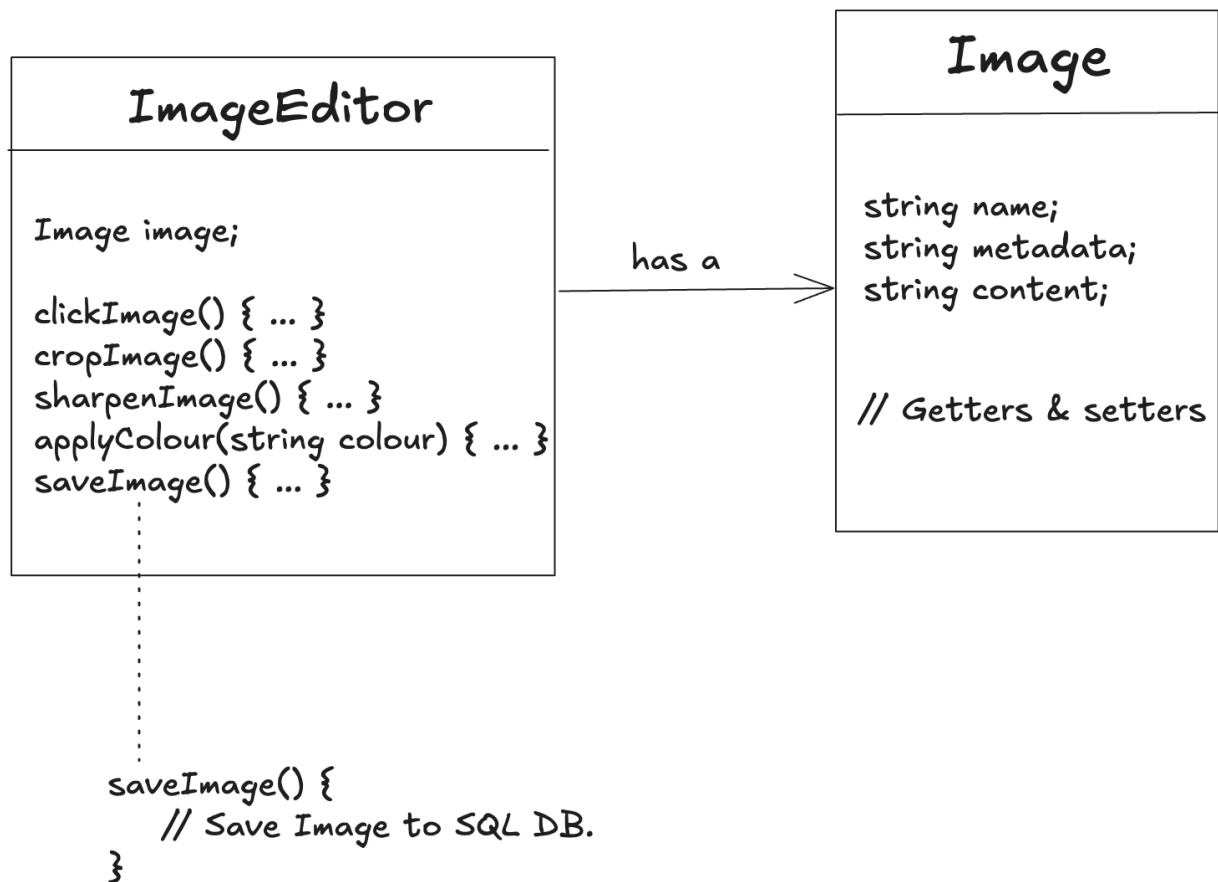# LLD Practice Problem:

Image Editor
Problem: (Easy)

See the UML Diagram below.
This class has some problems:
1. Currently class is maintaining multiple responsibilities.
2. Not scalable (I need to break OCP to add new type of filter or new type of Database)

```
┌─────────────────────────────────┐                    ┌─────────────────────────────┐
│          ImageEditor            │                    │           Image             │
├─────────────────────────────────┤                    ├─────────────────────────────┤
│                                 │     has a          │                             │
│  Image image;                   │   ─────────►       │  string name;               │
│                                 │                    │  string metadata;           │
│  clickImage() { ... }           │                    │  string content;            │
│  cropImage() { ... }            │                    │                             │
│  sharpenImage() { ... }         │                    │                             │
│  applyColour(string colour) {...}│                    │  // Getters & setters       │
│  saveImage() { ... }            │                    │                             │
│                                 │                    │                             │
└─────────────────────────────────┘                    └─────────────────────────────┘

        saveImage() {
            // Save Image to SQL DB.
        }
```

Functional Requirements:
1. Apply SOLID principles to handle the above problem.

Expectations:
UML + Code (Imagine simple console based void implementation for each method)