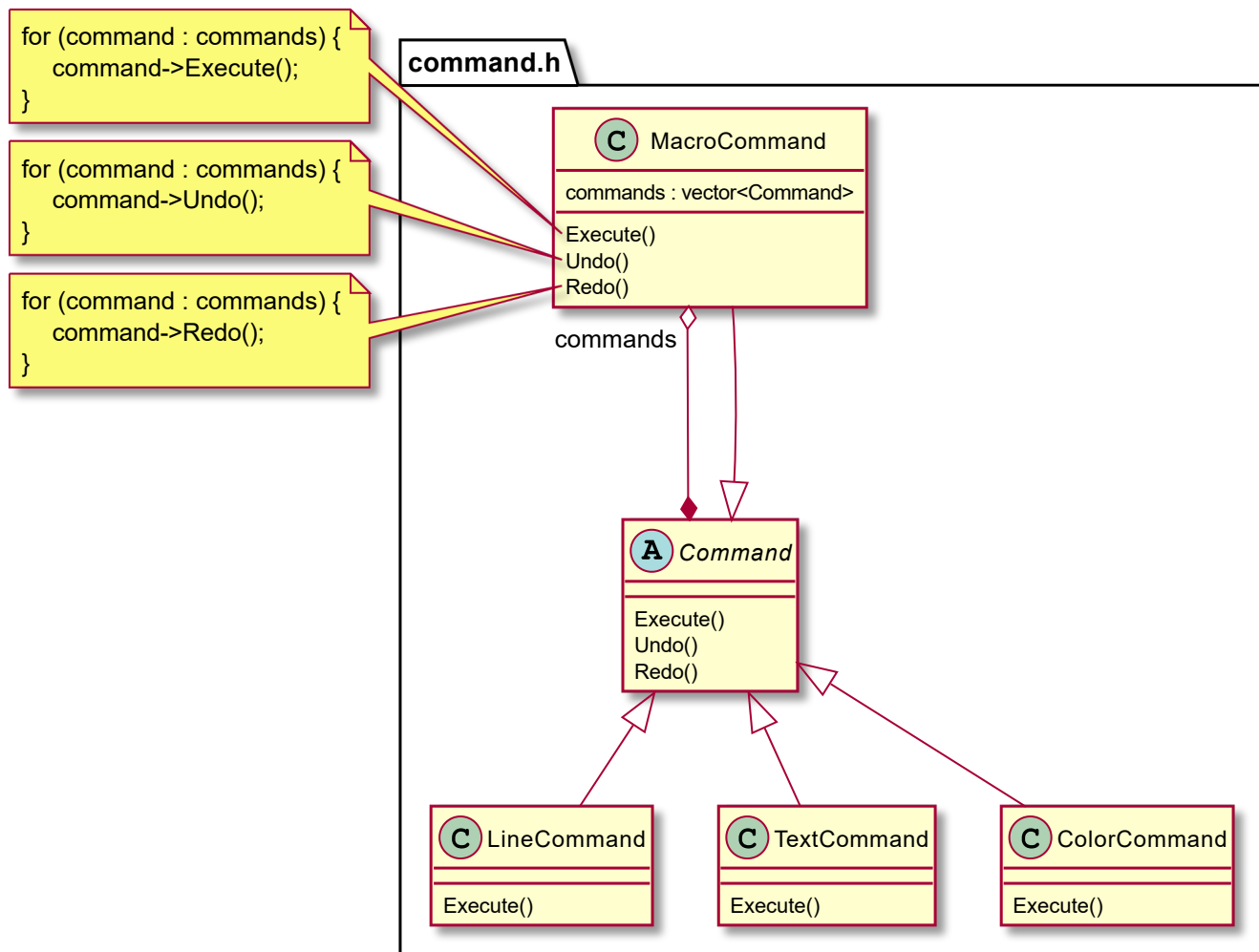


Design Patterns Used in this Lab

Here's 4 main design patterns used in this Lab:

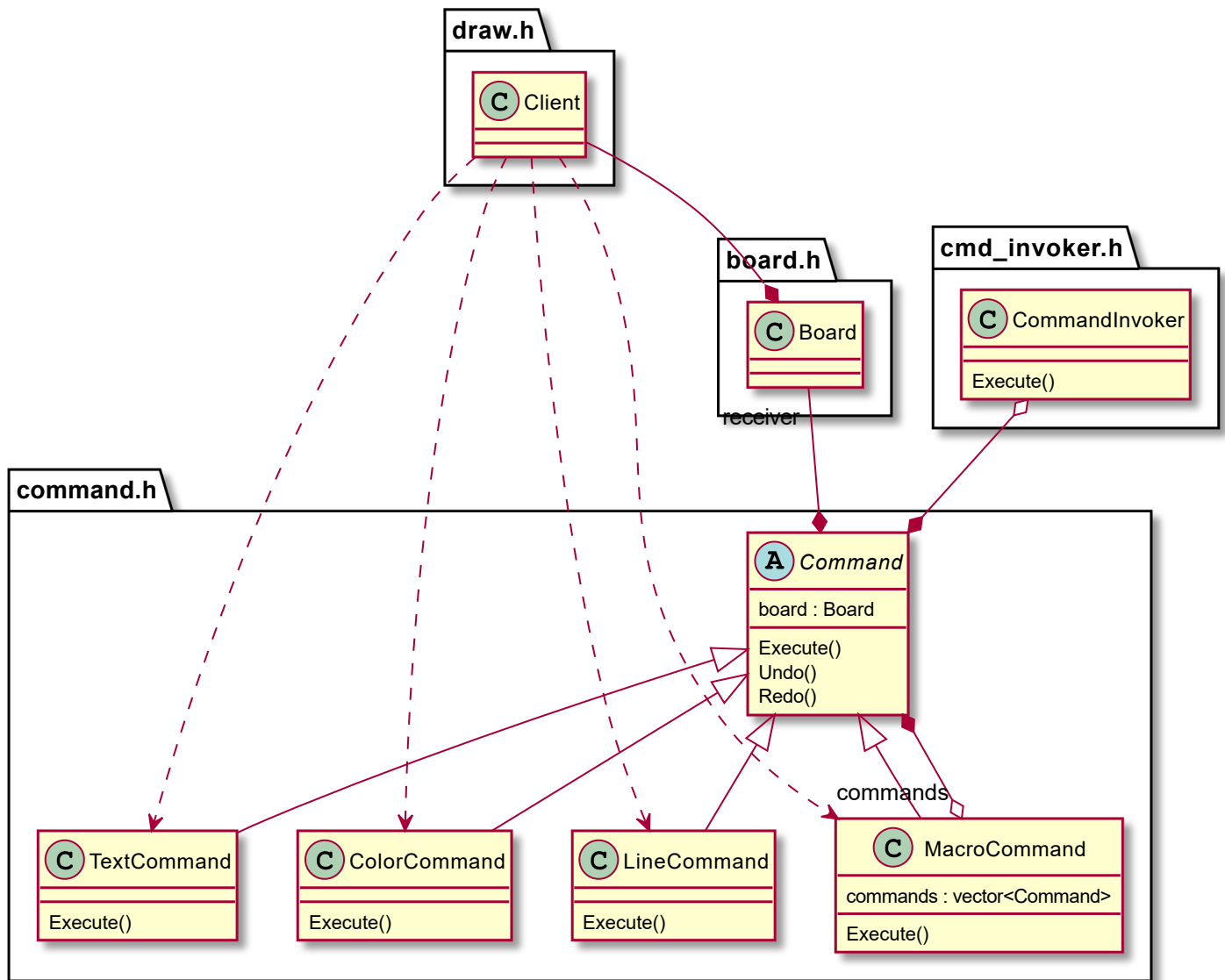
Composite

Composite is used to build the `Command` abstract class, and its subclasses `LineCommand`, `TextCommand` and `ColorCommand`, where `MacroCommand` includes a vector containing multiple `Command`s.



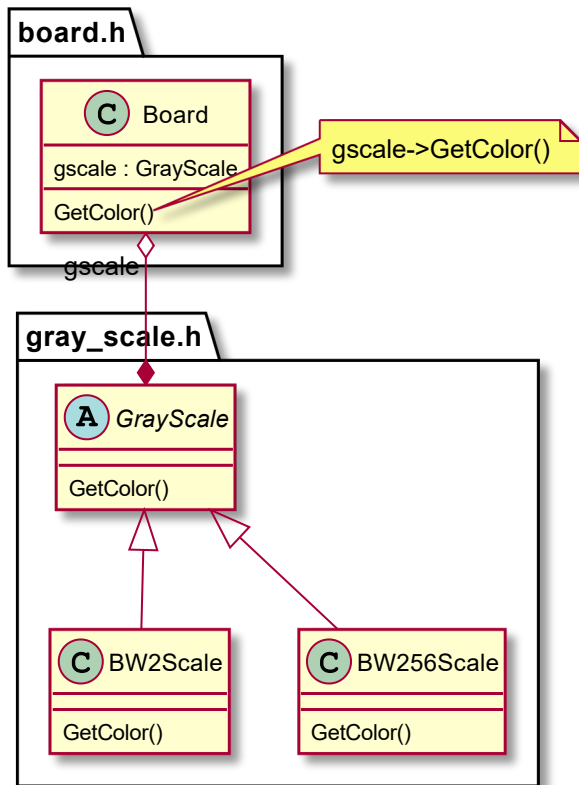
Command

Command is used to organize how the commands are invoked to apply to its receiver by the client. It also facilitates the Undo() and Redo() methods.



State

State is used to help `Board` to switch between two gray scale modes according to the command line parameters, `[-g 2]` or `[-g 256]`.



Singleton

Singleton is used because gray scale modes only need one instance each.

