Bridge Overview

1. Connecting components together through abstractions
2. Bridge prevents a Cartesian product complexity explosion
3. Example:
   1. Base class ThreadScheduler
   2. Can be preemptive or cooperative
   3. Can run on Windows or Unix
   4. End up with a 2x2 scenario: WindowsPTS, UnixPTS, WindowsCTS, UnixCTS
4. Bridge pattern avoids the entity explosion
5. Bridge: A mechanism that decouples an interface (hierarchy) from an implementation (hierarchy)

Bridge

1. Shape -> Circle, Square
2. Rendering -> Vector, Raster
3. Have a renderer ,interface and all rendering options will implement this interface
4. Have an abstract shape class that takes a renderer in constructor and extend this class for your specific shapes like circles.

Summary

1. Decouple abstraction from implementation
2. Both can exist as hierarchies
3. A stronger form of encapsulation