Factory Design Pattern

Factory

- Handles Object Creation
 - Returns an interface
- Often used in conjunction with Prototype pattern
 - Factory maintains a collection of objects that implement the same interface, clones as needed.
- Often a singleton

Motivation

- Used when we have two differing implementations of the same function
 - Caller isn't responsible for knowing which implementation matters
 - Shifts this decision to factory
 - More modular if which implementation depends on config, only factory need depend on config

Participants

- Interface
 - Defines the interface that the factory will return
- Concrete Components
 - Objects which implement the Interface which can be created by the factory

Consequences

- More modular code: dependencies limited to factory
- Open/Closed easy to add a new concrete implementation