

# OBJECT ORIENTED DESIGN PATTERNS 2

## EX-06

NAME : M.R.P.N.THARUKSHA RAJAPAKSHA

NIC : 200019401866

BCU STUDENT ID : 22178965

SCN NO : 207977608

BATCH : JAVA INSTITUTE GRIFFINS BATCH

# Flyweight Design Pattern

- ▶ Flyweight pattern is used when there is a need to create a large number of objects of an almost similar nature. The large number of objects consume a large amount of memory and the Flyweight design pattern provides a solution for reducing the load on memory by sharing objects.
- ▶ Flyweight pattern is primarily used to reduce the number of objects created, to decrease memory footprint and increase performance.
- ▶ Flyweight pattern tries to reuse already existing similar kind of objects by storing them and creates a new object when no matching object is found.

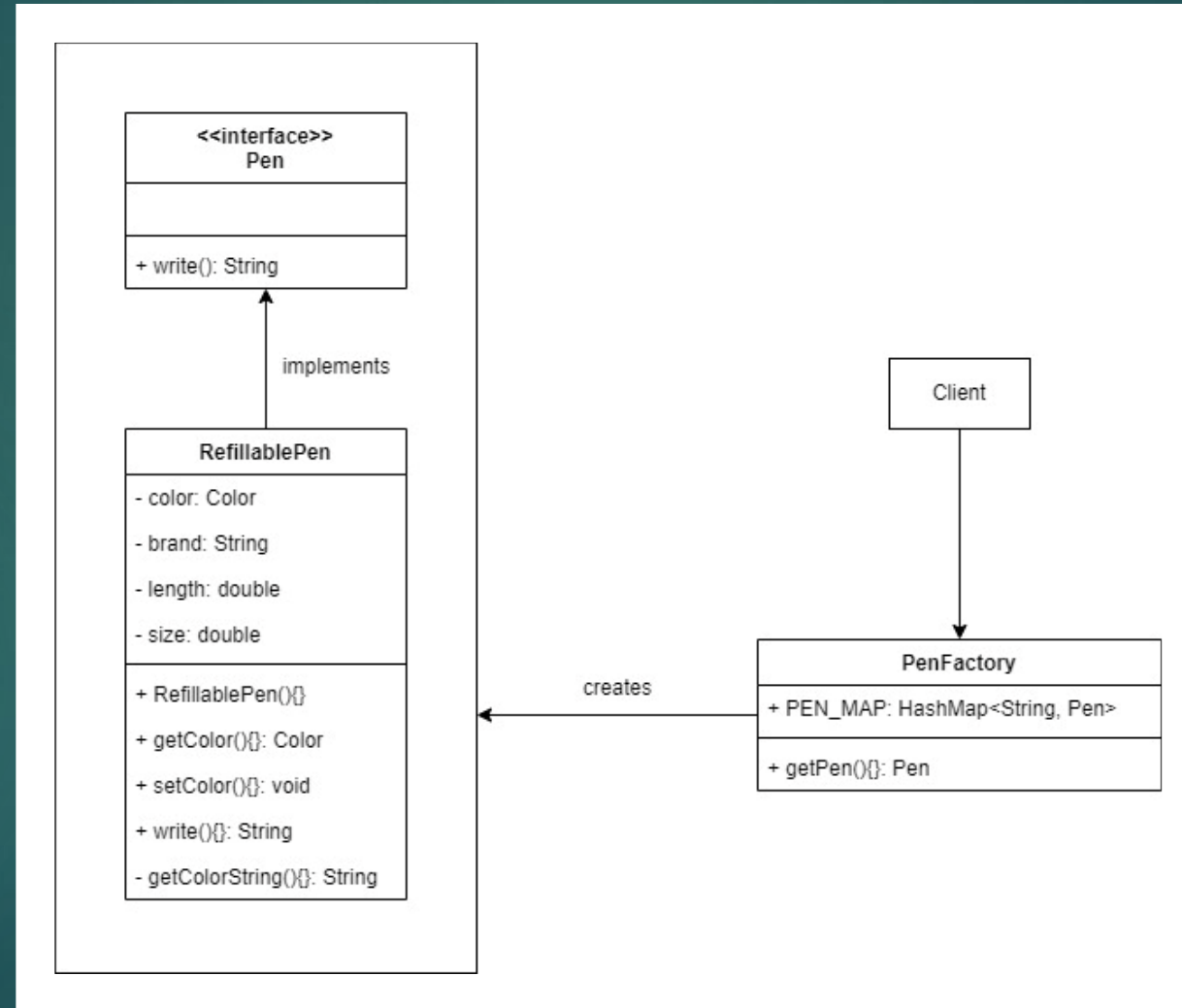
# States of Flyweight Design Pattern

- ▶ **Intrinsic:** Intrinsic states are things that are constant and are stored in the memory.
- ▶ **Extrinsic:** Extrinsic states are things that are not constant and need to be calculated on the fly, and are therefore not stored in the memory.

# Scenario

- ▶ Suppose you have a pen that can exist with or without a refill. Write a program to demonstrate the drawing process by changing the pen color.

# UML Diagram





Let's go to see the Demo