

# SWE-4501: Design Pattern



## Strategy Pattern

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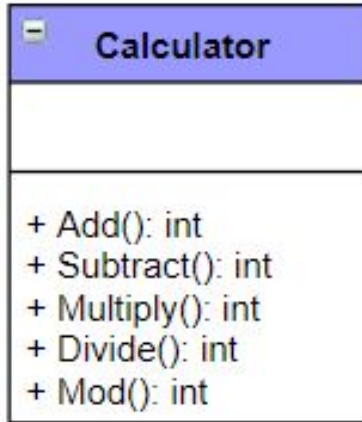


- Motivation
- Solution



# Calculator design

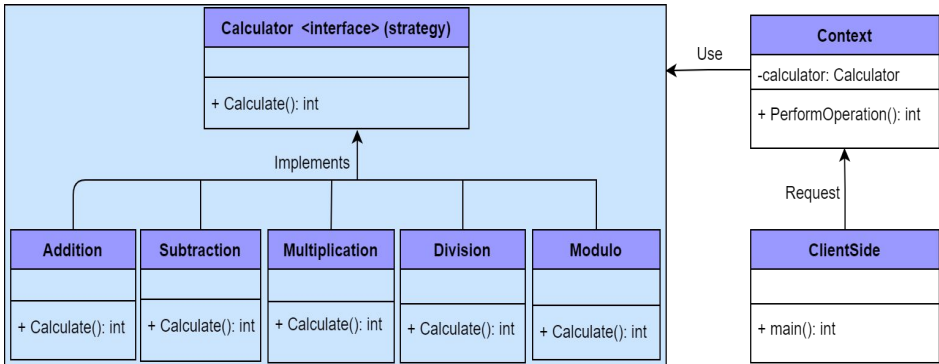
- Operations: Addition, Subtraction, Multiplication, Division and Modulo (optional).





# Calculator design

## Solution



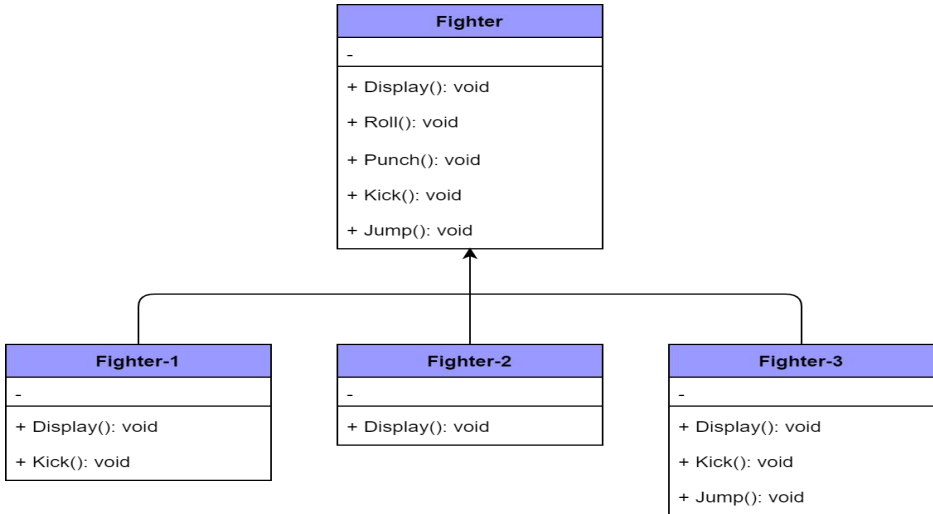


## Problem scenario

- Suppose we are building a game “Street Fighter”. For simplicity assume that a character may have four moves that is kick, punch, roll and jump. Every character has punch and roll moves, but kick (Lightning/Tornado) and jump (Long/Short) are optional.

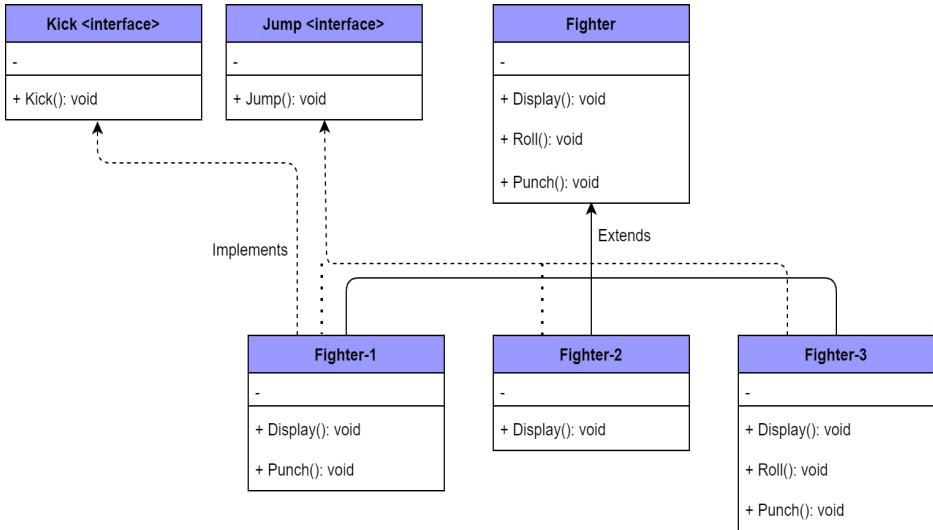


# Probable solution



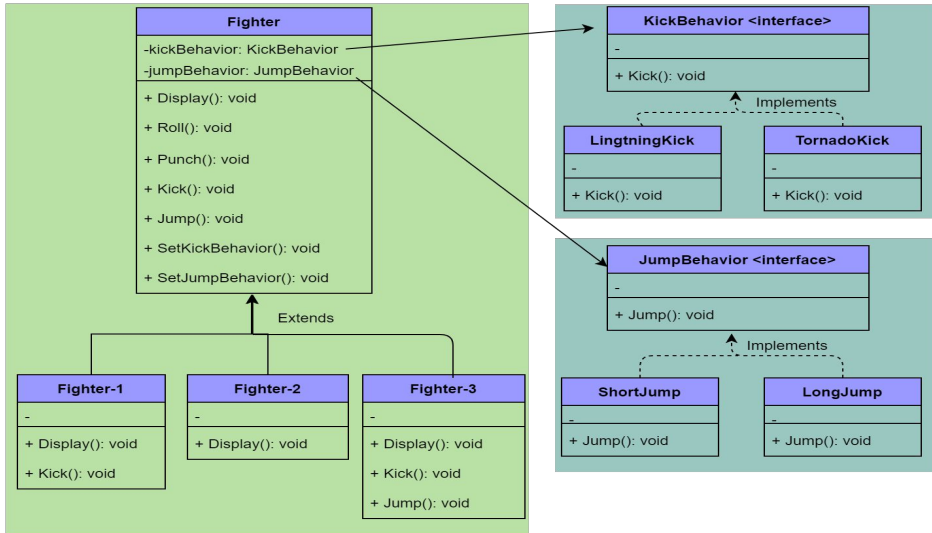


# Probable solution





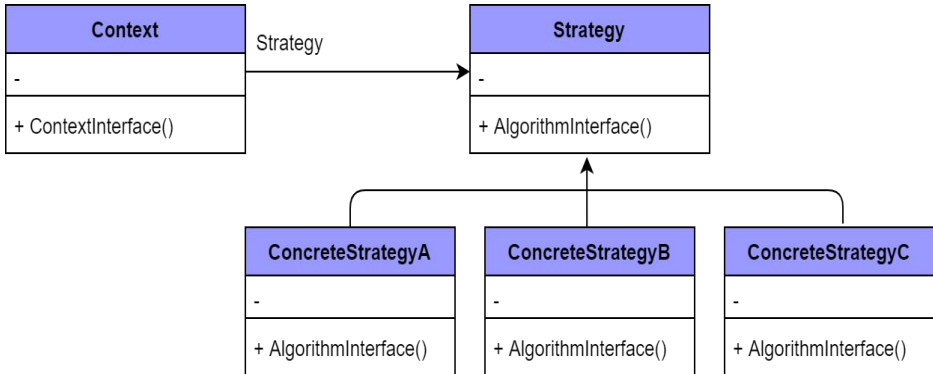
# Probable solution







# Strategy Design Pattern





**ANY QUESTION ?  
THANK YOU !**



# Acknowledgements

- [1] Gamma, Erich. Design patterns: elements of reusable object-oriented software. Addison-Wesley Professional, 1 edition, 1994.
- [2] Freeman, Eric, et al. Head first design patterns. " O'Reilly Media, Inc.", 2008.
- [3] TutorialsPoint
- [4] GeeksforGeeks