

1. Which pattern should be applied?

We will use Strategy design pattern to implement product search function.

The intent of Strategy design pattern is :

- Define a family of algorithms, encapsulate each one and make them interchangeable.

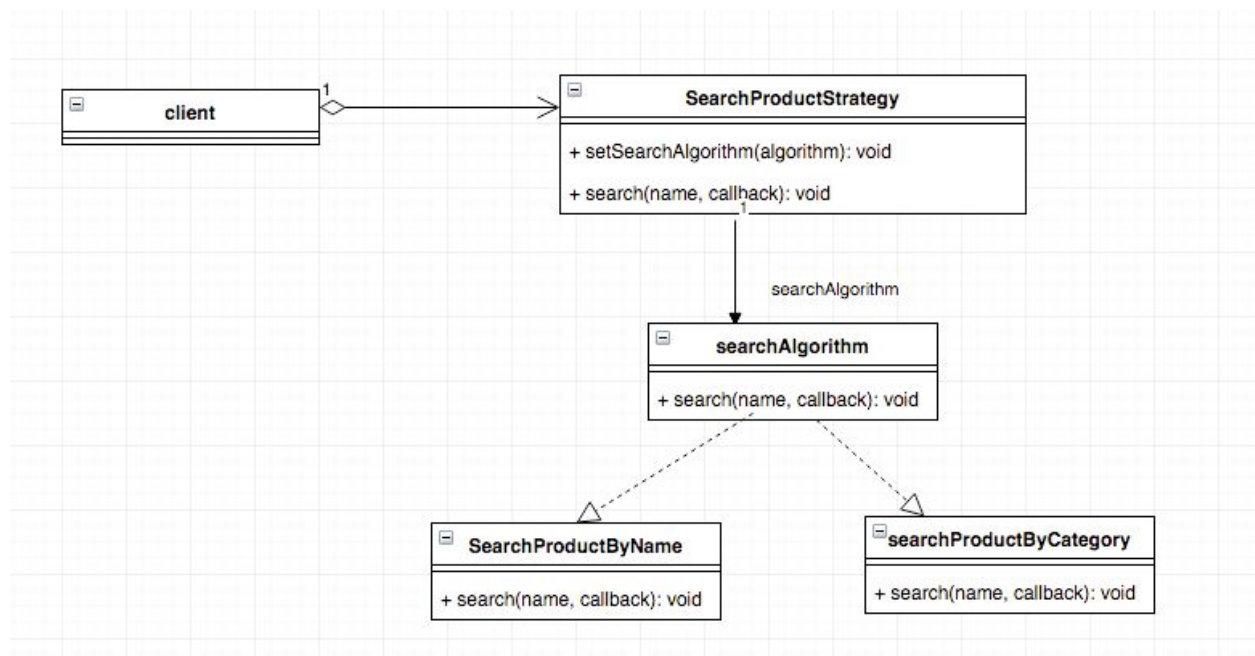
The algorithm vary from the client that use it.

- Capture the abstraction in the interface, bury detail implementation in the derived class

The main idea is we will make a lot of kinds of search function such as search by product name, search by category, search by price

With each kind, we will implement different algorithm. So the Strategy design pattern will help user choose the proper search function that they want.

2. Illustrate by means of UML diagrams.



3. Justify by code.

- My strategy applied in project shows in Module Search Product in controller/strategy folder