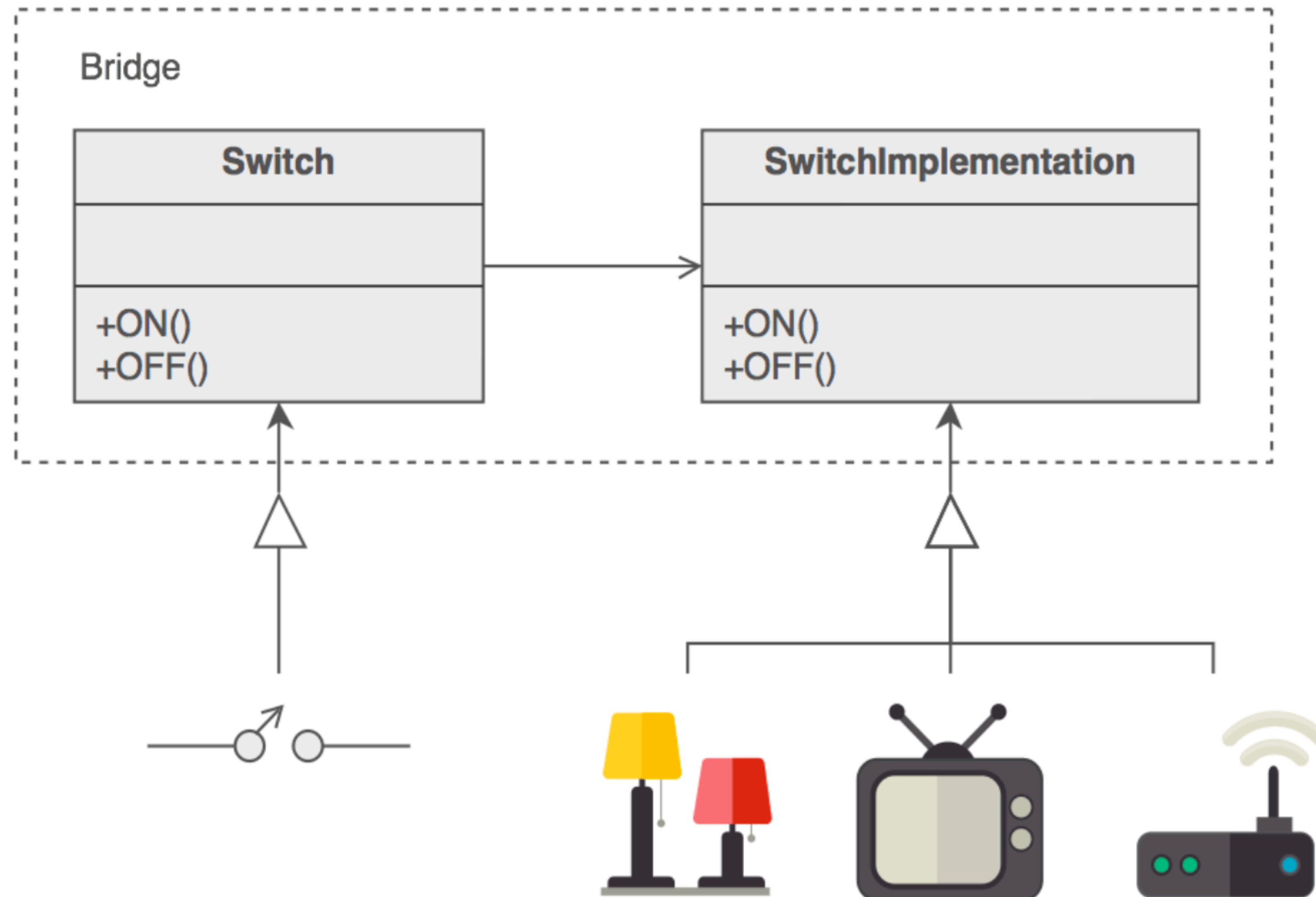# Design Pattern / Tests

Bridge, Iterator, Test: Unit, Functional, Integration

keidel@hs-worms.de, 2021-04-12

Bridge Design Pattern
https://sourcemaking.com/design_patterns/bridge

Bridge Design Pattern
https://python-interface.readthedocs.io/en/latest/index.html

```python
from interface import implements, Interface

class MyInterface(Interface):

    def method1(self, x):
        pass

    def method2(self, x, y):
        pass


class MyClass(implements(MyInterface)):

    def method1(self, x):
        return x * 2

    def method2(self, x, y):
        return x + y
```
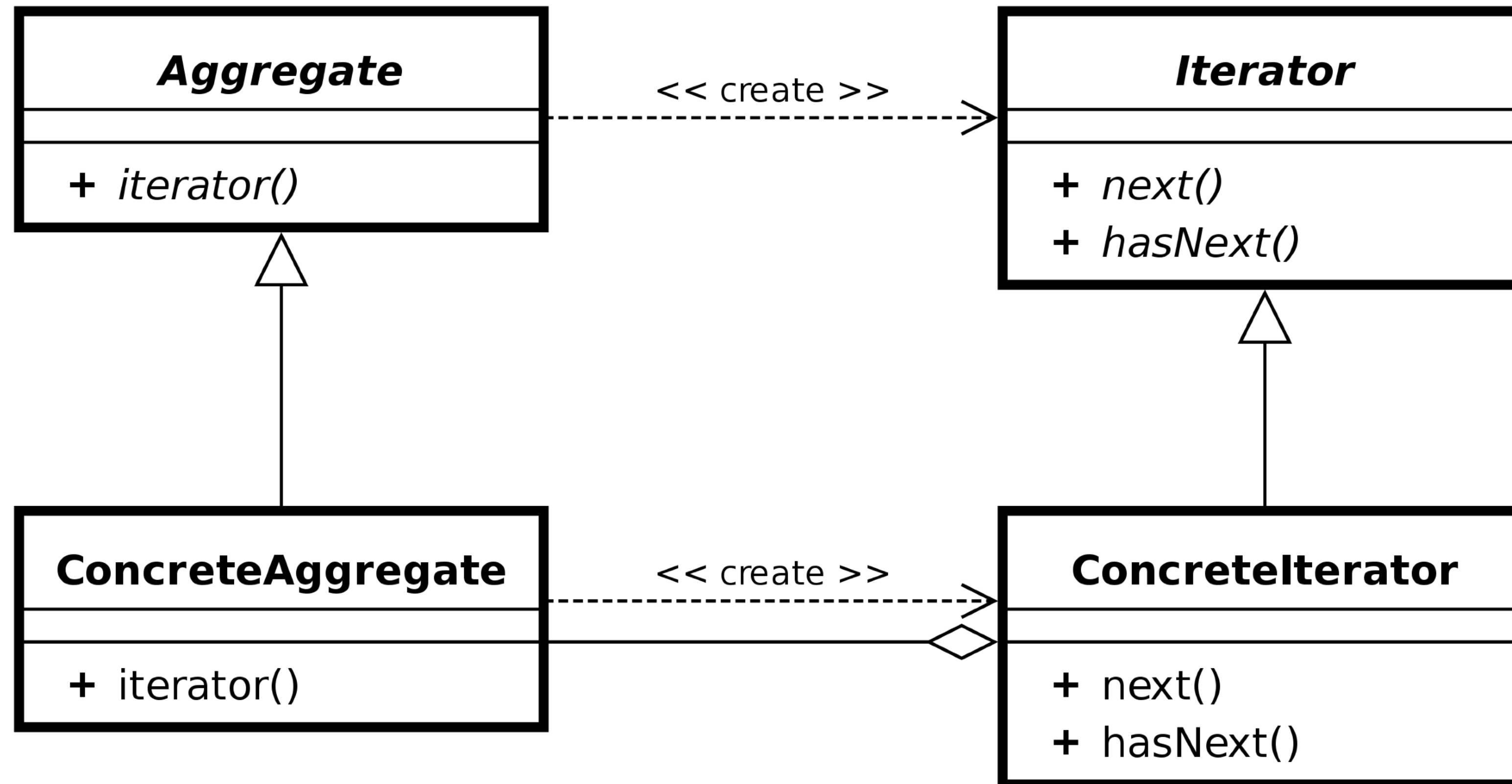
Bridge Design Pattern
https://python-interface.readthedocs.io/en/latest/index.html

The C++ interfaces are implemented using **abstract classes**

```cpp
class Box {
    public:
        // pure virtual function
        virtual double getVolume() = 0;

    private:
        double length;      // Length of a box
        double breadth;     // Breadth of a box
        double height;      // Height of a box
};
```

Iterator Design Pattern
https://en.wikipedia.org/wiki/Iterator_pattern

Tests

unit tests passing - no integration tests

Thank for you patience

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