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Template Method in C++



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Template Method design pattern

- 1. Standardize the skeleton of an algorithm in a base class "template method"
- 2. Steps requiring peculiar implementations are "placeholders" in base class
- 3. Derived classes implement placeholder methods

```
#include <iostream>
using namespace std;
class Base
    void a()
        cout << "a ";
    void c()
        cout << "c ";
    void e()
        cout << "e ";
    // 2. Steps requiring peculiar implementations are "placeholders" in base class
    virtual void ph1() = 0;
    virtual void ph2() = 0;
  public:
    // 1. Standardize the skeleton of an algorithm in a base class "template method"
    void execute()
        a();
        ph1();
        c();
        ph2();
        e();
   }
};
class One: public Base
    // 3. Derived classes implement placeholder methods
    /*virtual*/void ph1()
    {
        cout << "b ";
     /*virtual*/void ph2()
        cout << "d ";
    }
};
class Two: public Base
{
     /*virtual*/void ph1()
```

```
{
        cout << "2 ";
    }
     /*virtual*/void ph2()
        cout << "4 ";
    }
};
int main()
  Base *array[] =
     &One(), &Two()
  };
  for (int i = 0; i < 2; i++)
    array[i]->execute();
    cout << '\n';</pre>
  }
}
```

Output

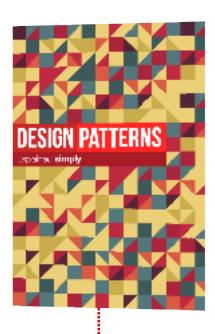
```
a b c d e
a 2 c 4 e
```

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All of the design patterns are compiled there. The book is written in clear, simple language that makes it easy to read and understand (just like this article).

We distribute it in PDF & EPUB formats so you can get it onto your iPad, Kindle, or other portable device immediately after your purchase.





Code examples

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