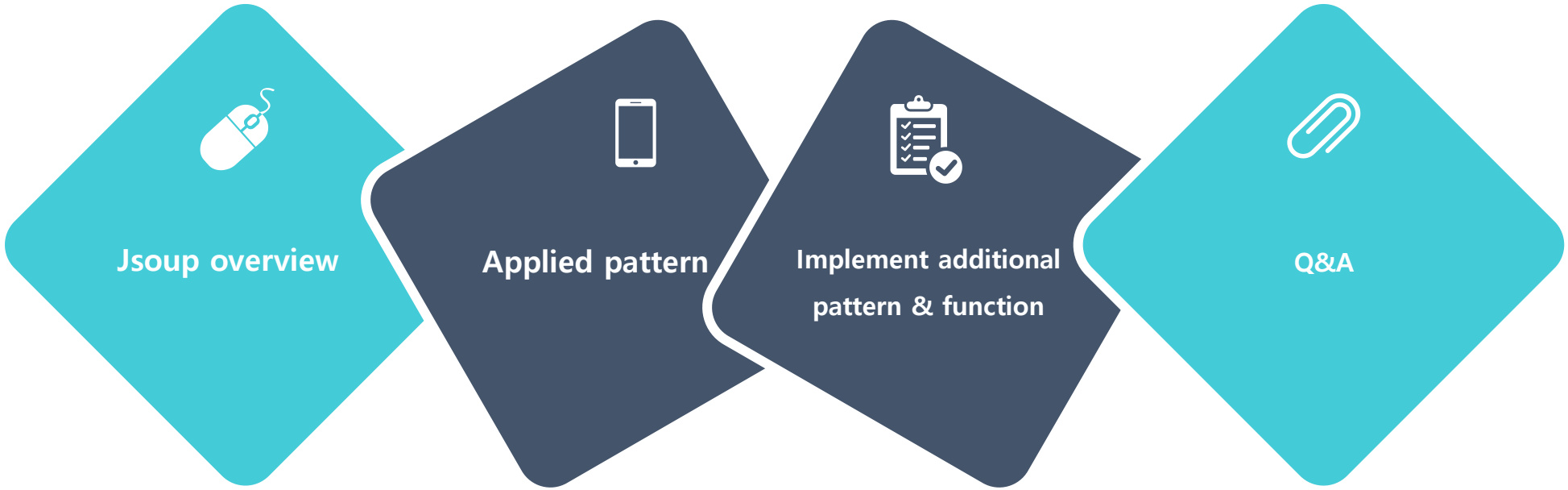
Jsoup DesignPattern

김지민
이성민
발표자 : 하태윤

Jsoup Designpattern

INDEX



Jsoup OVERVIEW

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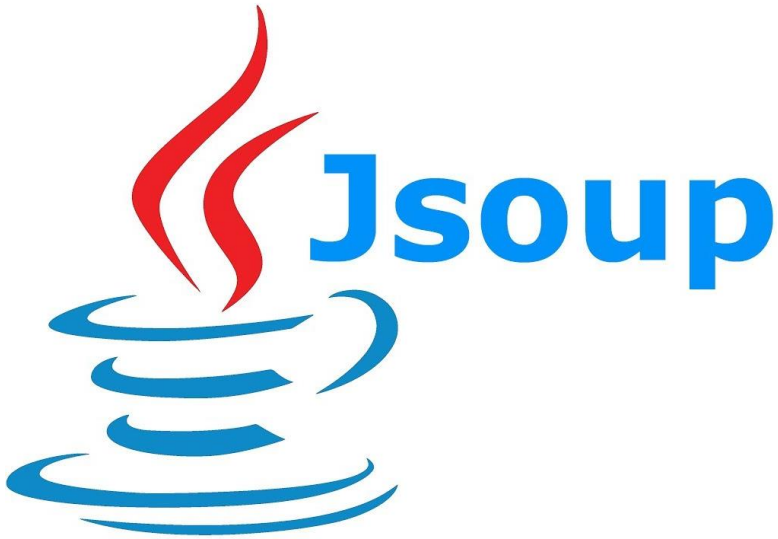
Jsoup Overview

Jsoup은 기본적으로 HTML형식의 string을 받아와 JAVA에서 사용할 수 있는
DOM객체로 만들어 주는 source이다.



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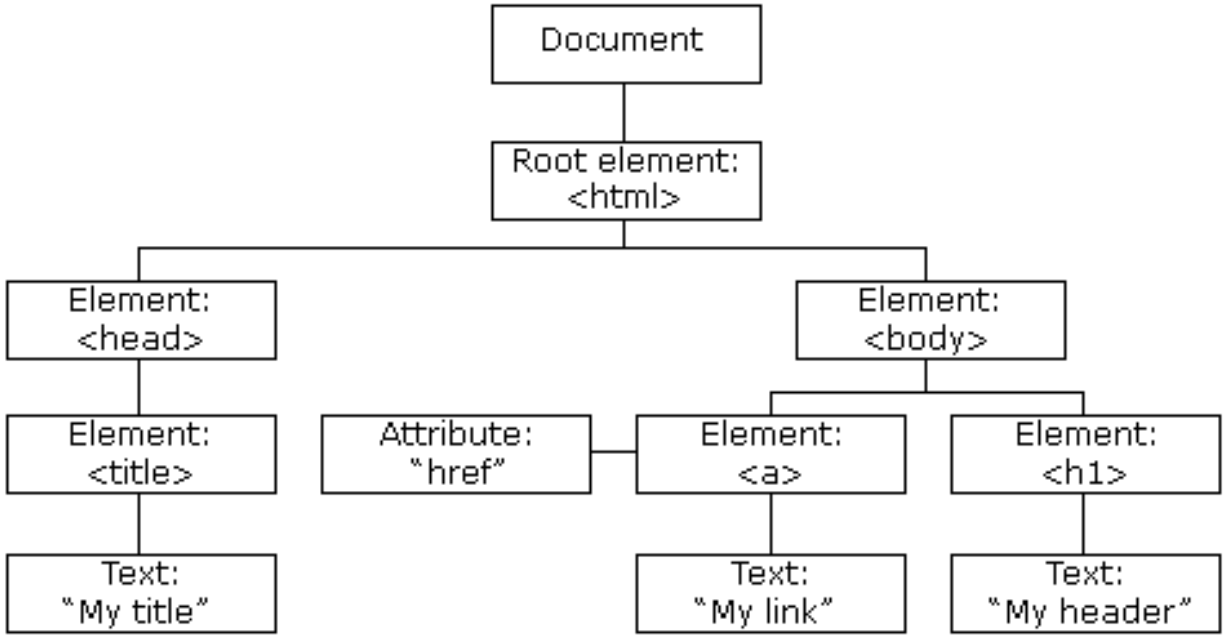
Jsoup Overview

DOM(DOCUMENT OBJECT MODEL)의 개체 구조는 NODE TREE형태로 나타나게 된다.



Applied Pattern

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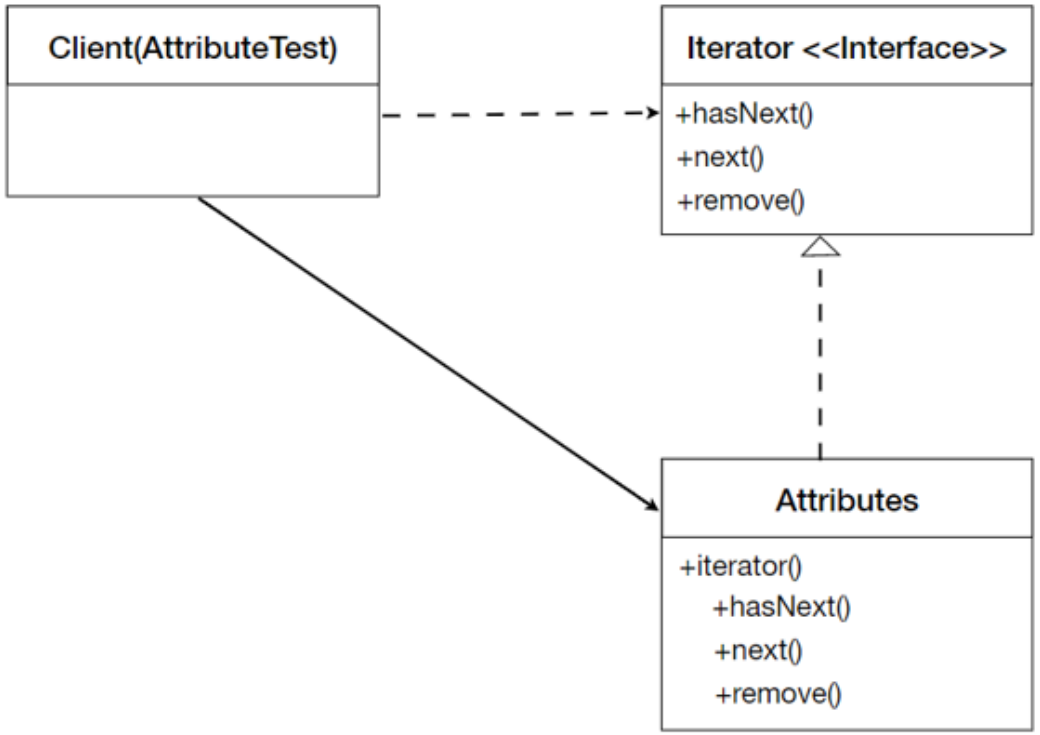
Applied Pattern (iterator pattern)



Attributes class가 Iterator interface를 implement 한다.

(hasNext(), next(), remove())

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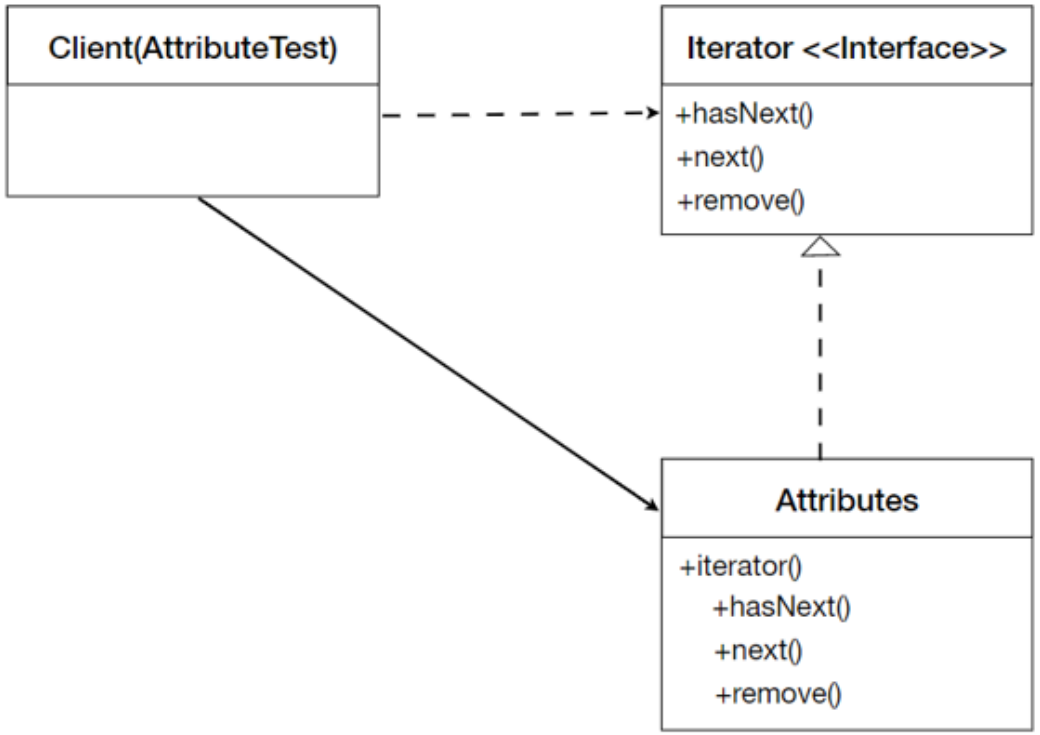
Applied Pattern (iterator pattern)



Attributes class의 iterator()는 iterator의 method를 override하는 동시에 create한다.

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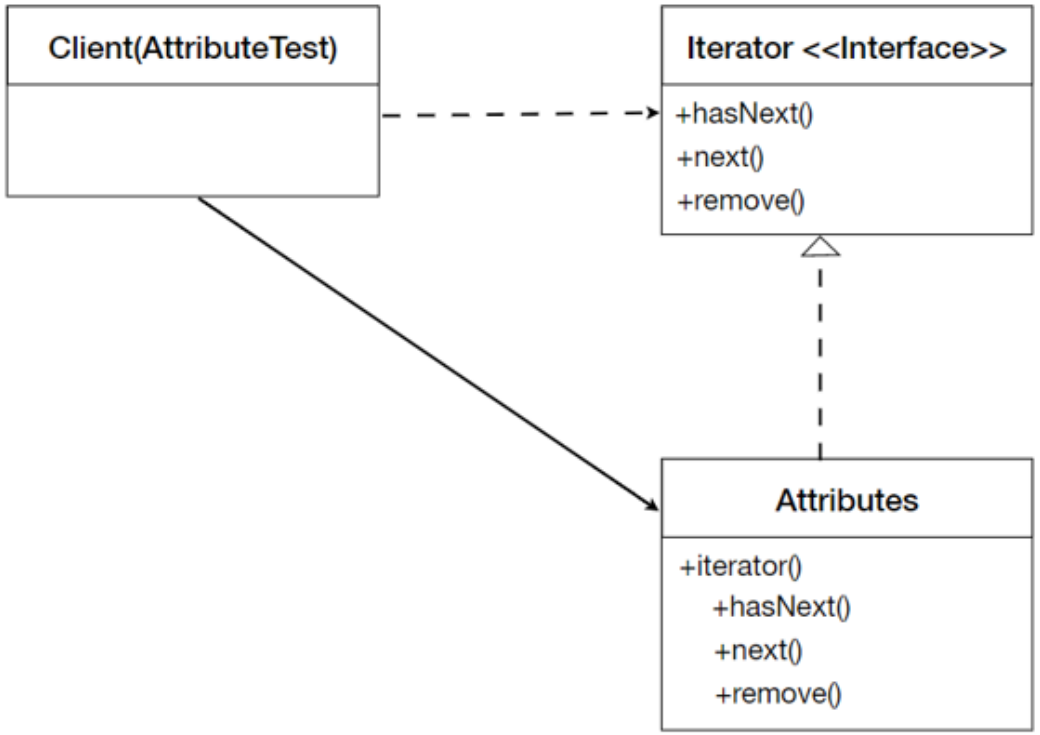
Applied Pattern (iterator pattern)



AttributeTest class에서 Attribute 객체를 사용하여 implement한 iterator를 사용한다.

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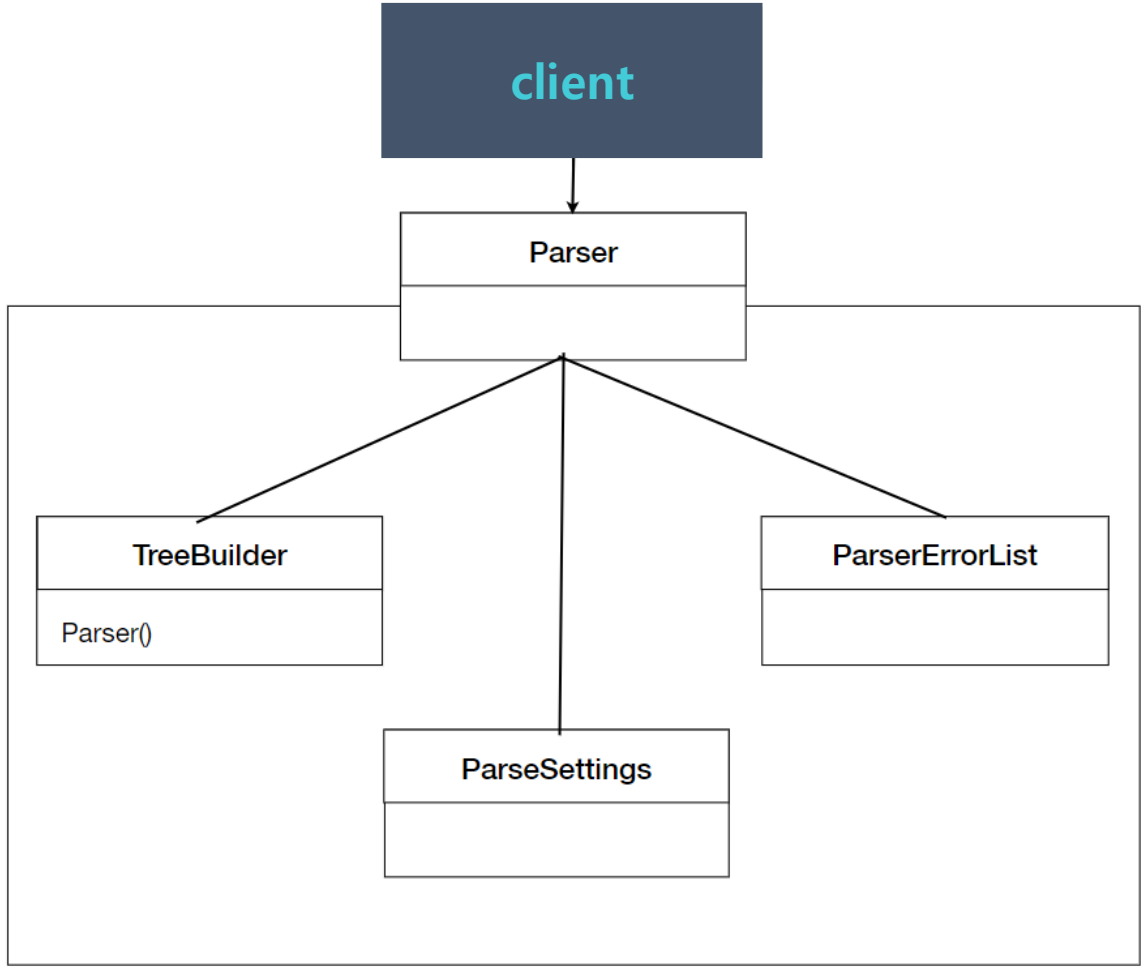
Applied Pattern (Façade Pattern)



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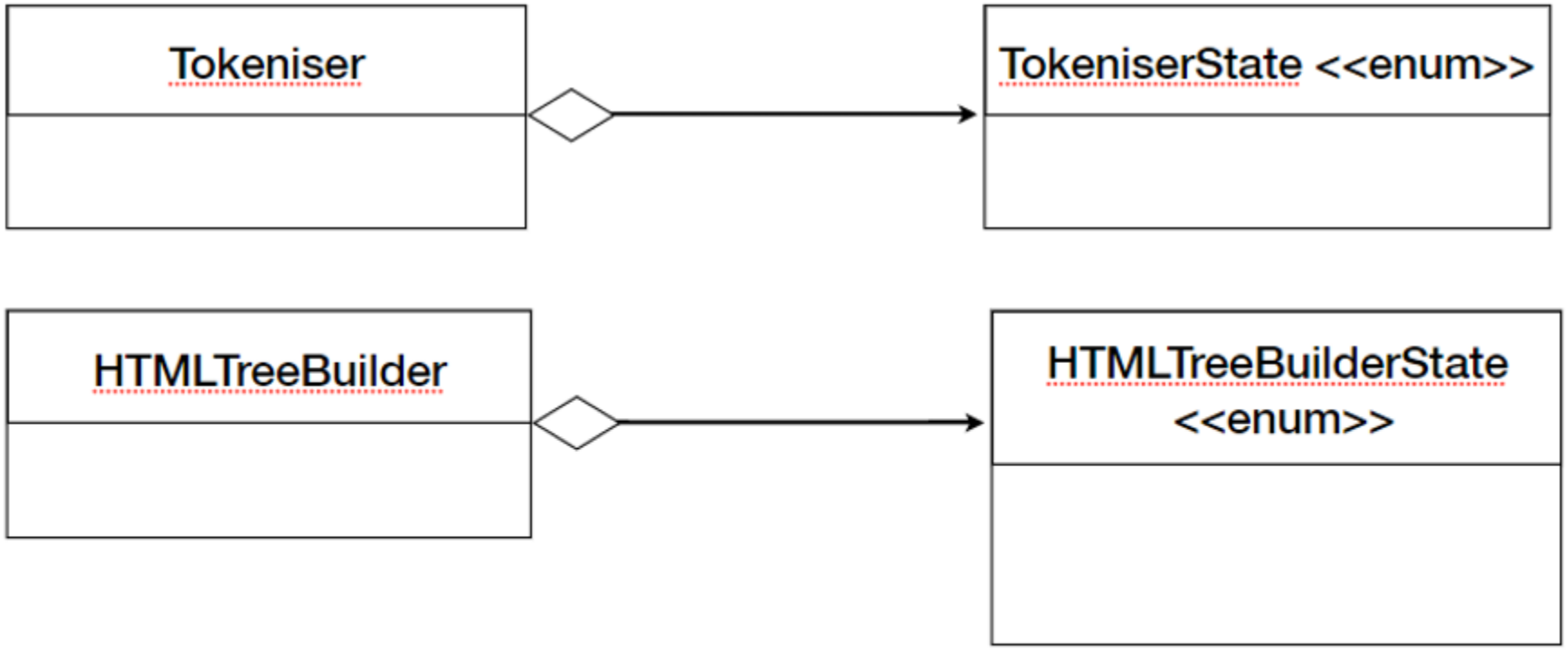
Applied Pattern (State Pattern)



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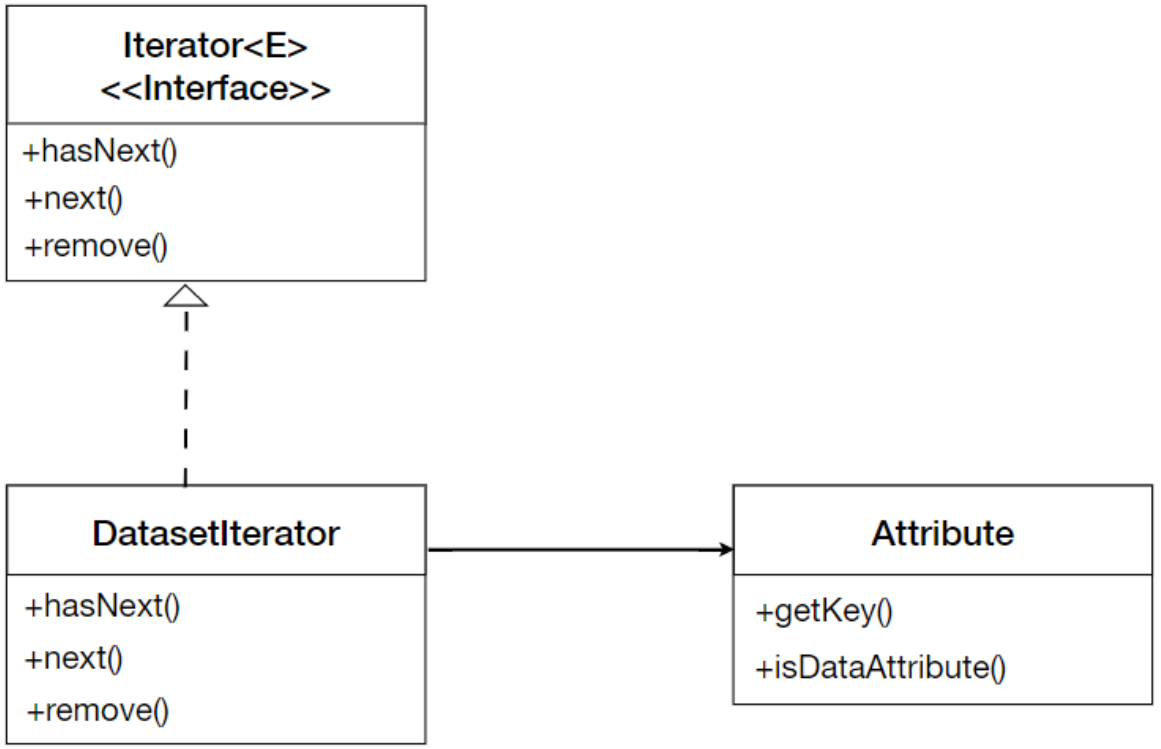
Applied Pattern (Adaptor Pattern)



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Applied Pattern (Adaptor Pattern)

```
private class DatasetIterator implements Iterator<Map.Entry<String, String>> {
    private Iterator<Attribute> attrIter = attributes.iterator();
    private Attribute attr;
    public boolean hasNext() {
        while (attrIter.hasNext()) {
            attr = attrIter.next();
            if (attr.isDataAttribute()) return true;
        }
        return false;
    }

    public Entry<String, String> next() {
        return new Attribute(attr.getKey().substring(dataPrefix.length()), attr.getValue());
    }

    public void remove() { attributes.remove(attr.getKey()); }
}
```

Implement additional pattern & function

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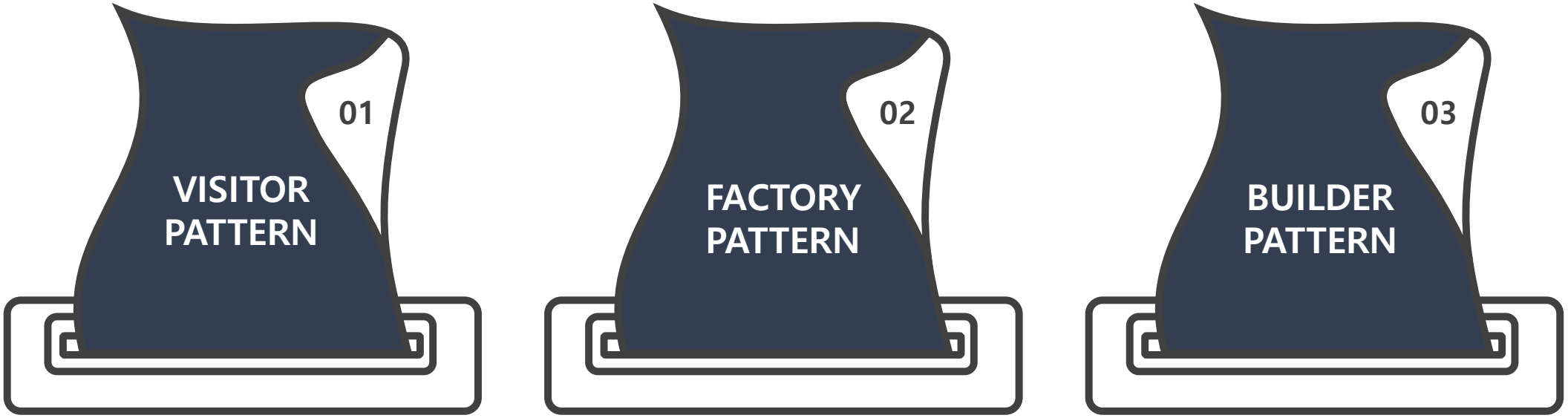
Additional Pattern



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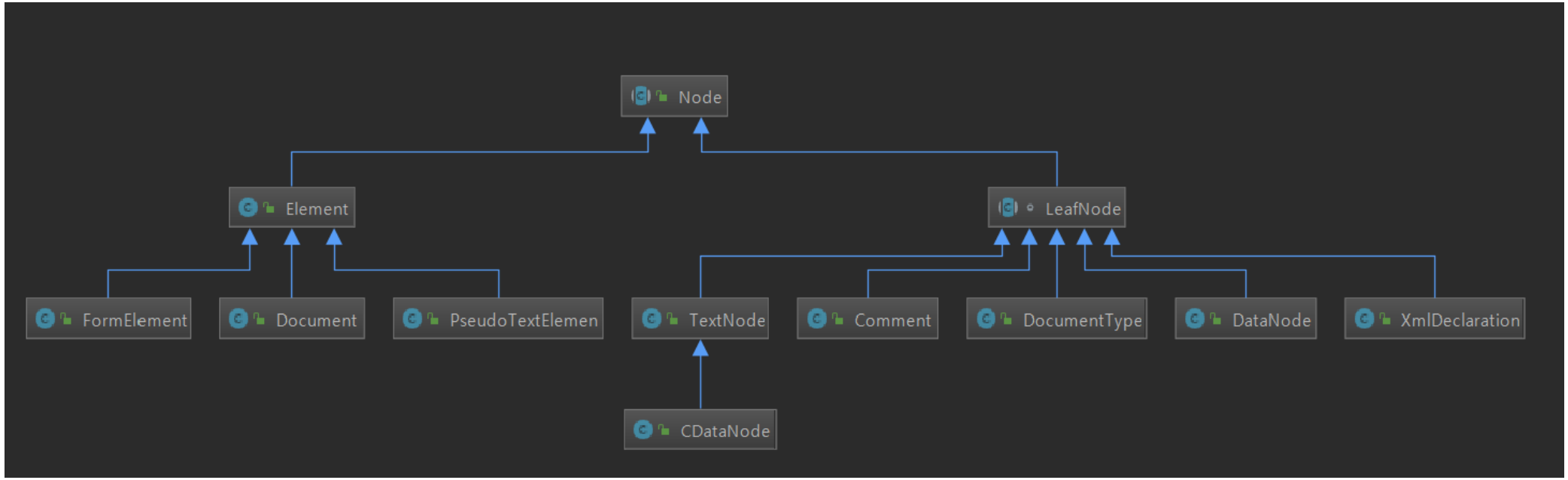
Additional Pattern (Visitor Pattern)

Jsoup에서 NODE라는 abstract class를 Element와 Leafnode라는 두가지의 class가 상속을 받아 해당 abstract method를 구현한다.

또한, Element , Leafnode class 를 상속을 받아 다양한 concrete한 class가 만들어진다.



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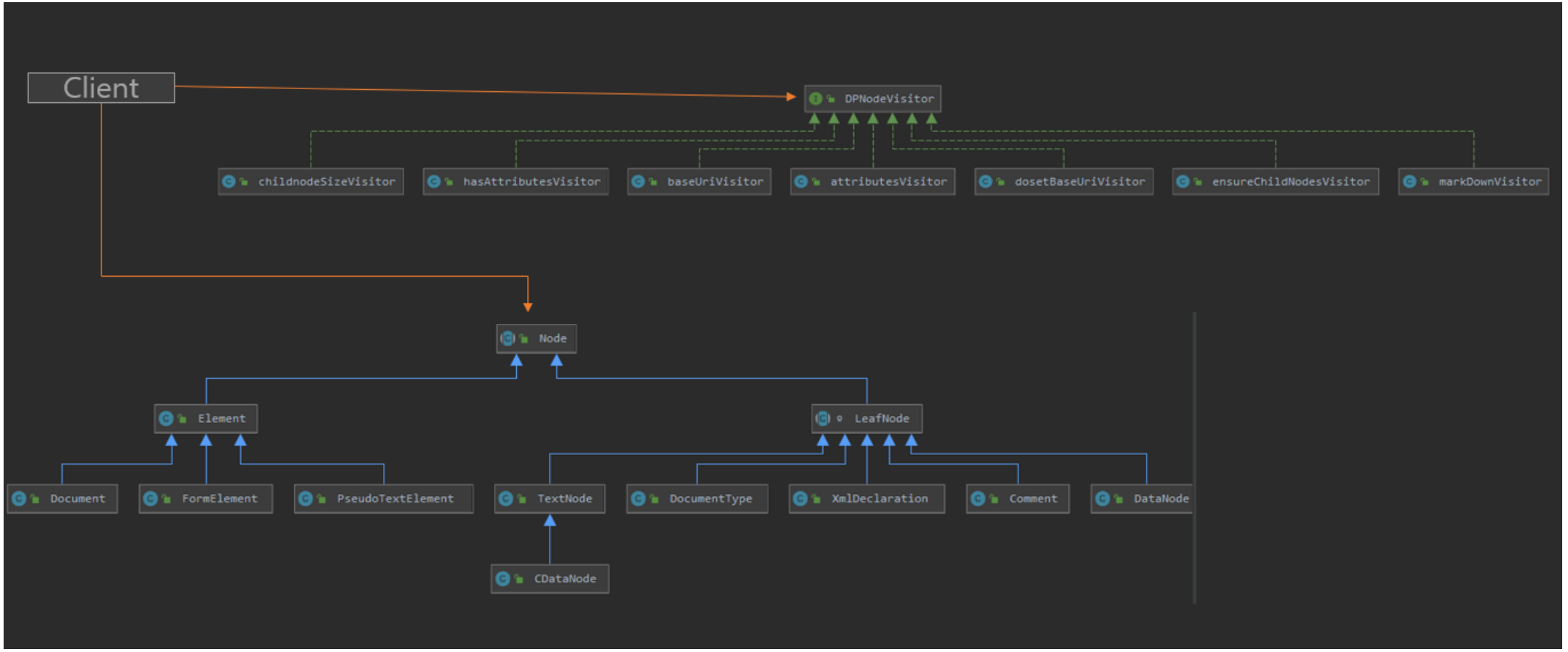
Additional Pattern (Visitor Pattern)



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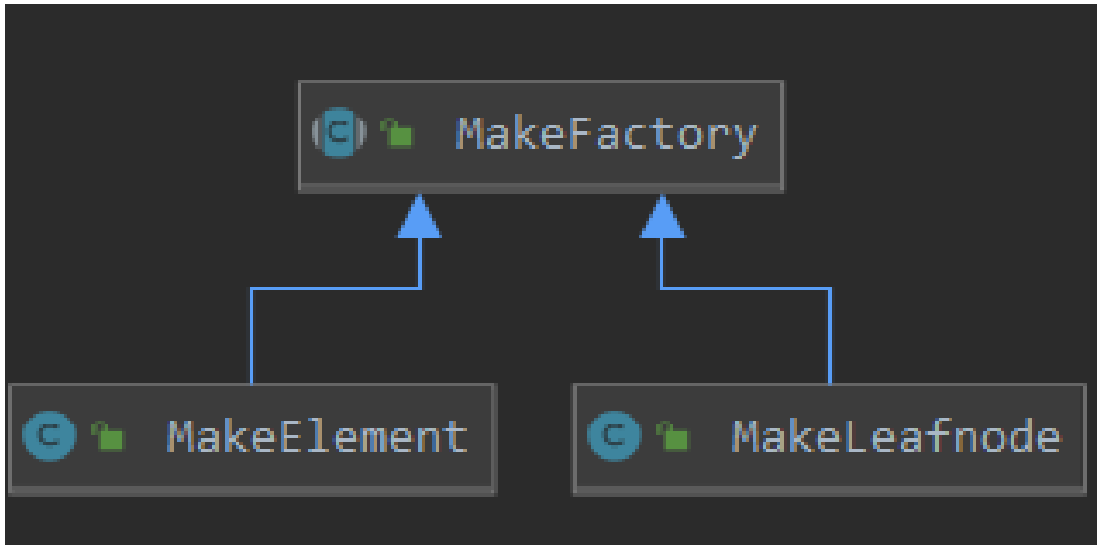
Additional Pattern (factory Pattern)



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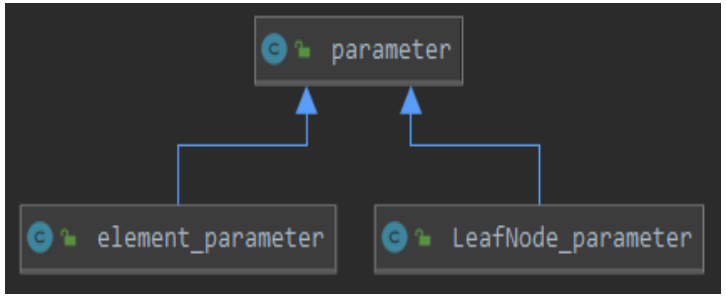
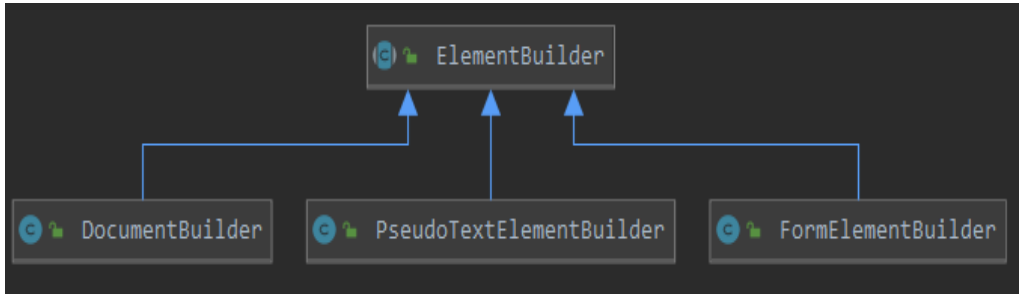
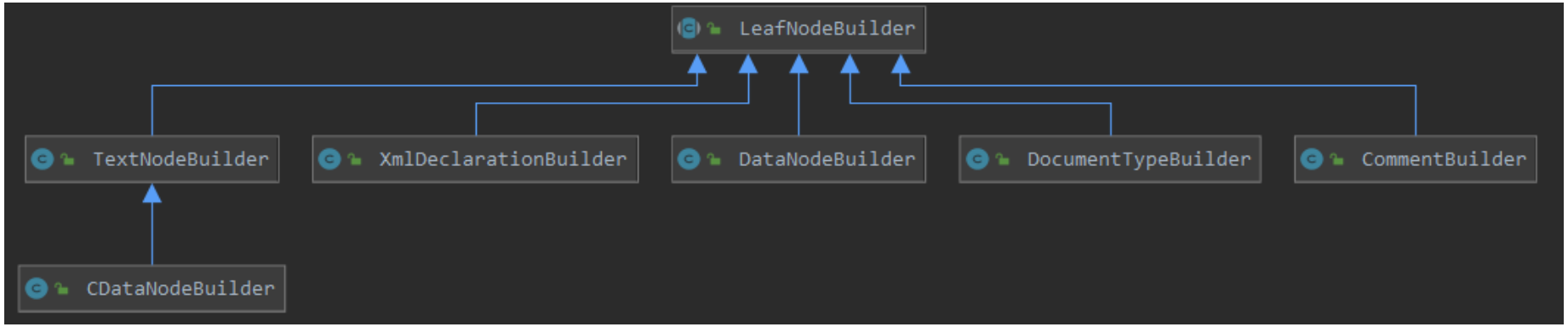
Additional Pattern (Builder Pattern)







Jsoup Designpattern

Additional Function

Mark Down

Html ->

DOM ->

MarkDown

(visitor pattern)

Image node

additional LeafNode

for save Image.

(Factory & Builder)

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Additional function (MarkDown)

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File Edit View Selection Find Packages Help

COOKIETEST.md

```
#초코 공룡쿠기 만들기
####간편하지만 정성이 가득한 만들기 세트를 만나보세요.

![](https://i.imgur.com/OHAZxMa.jpg)
###재료
* 하트쿠키믹스
* 달걀 노른자 1개
* 버터 40g
* 우유 20ml
* 다크커버처초콜릿 30g
* 초코펜(화이트/3개)
* 공룡쿠키커터 3종세트
<br/>

1. 볼에 실온상태의 버터, 달걀노른자, 우유, 녹인초콜릿, 하트쿠키믹스를 넣고 핸드믹서 거품기로30초 섞어주세요.
1. 반죽을 비닐에 넣고 손으로 눌러가며 한 덩어리로 뭉친 다음 냉장고에서 30분 이상 휴지시켜주세요.
1. 반죽을 두께 3mm정도가 되도록 밀대로 얇게 밀어 펴주세요.
1. 쿠키커터로 공룡 모양을 찍어준 뒤, 180도로 예열한 오븐에서 10-12분간 구워 식혀준뒤, 초코펜으로 장식해주면 완성!

---------------------------------------------------------------------------<br/>


태윤:공룡쿠키잘만들었어요^^
```

COOKIETEST.md preview

재료

- 하트쿠키믹스
- 달걀 노른자 1개
- 버터 40g
- 우유 20ml
- 다크커버처초콜릿 30g
- 초코펜(화이트/3개)
- 공룡쿠키커터 3종세트

1. 볼에 실온상태의 버터, 달걀노른자, 우유, 녹인초콜릿, 하트쿠키믹스를 넣고 핸드믹서 거품기로30초 섞어주세요.
2. 반죽을 비닐에 넣고 손으로 눌러가며 한 덩어리로 뭉친 다음 냉장고에서 30분 이상 휴지시켜주세요.
3. 반죽을 두께 3mm정도가 되도록 밀대로 얇게 밀어 펴주세요.
4. 쿠키커터로 공룡 모양을 찍어준 뒤, 180도로 예열한 오븐에서 10-12분간 구워 식혀준뒤, 초코펜으로 장식해주면 완성!

태윤:공룡쿠키잘만들었어요^^

Jsoup Designpattern

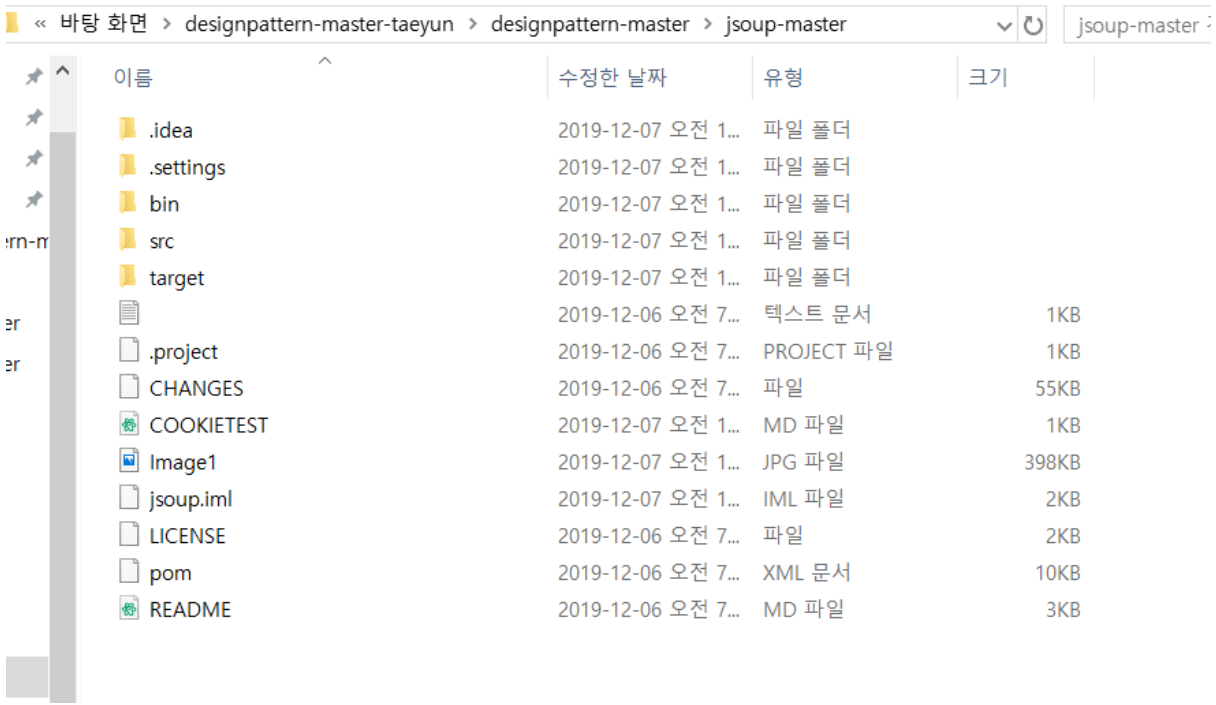
Additional function (MarkDown)

```
public class markDownVisitor implements DPNodeVisitor{

    @Override
    public Object visit(Element element) {
        if(element.tag.toString() == "h1") {
            return "#" + element.text() + "\n";
        } else if(element.tag.toString() == "h2") {
            return "##" + element.text() + "\n";
        } else if(element.tag.toString() == "h3") {
            return "###" + element.text() + "\n";
        }else if(element.tag.toString() == "h4") {
            return "####" + element.text() + "\n";
        }else if(element.tag.toString() == "br") {
            return "<br/>\n\n";
        }else if(element.tag.toString() == "img") {
            return "  \n![]("+element.absUrl( attributeKey: "src").toString()+")\n";
        }else if(element.tag.toString() == "li") {
            if(element.parentNode().toString().startsWith("<ol>"))
                return "* " + element.text() + "\n";
            else if(element.parentNode().toString().startsWith("<ul>"))
                return "1. " + element.text() + "\n";
            return null;
        }
```

Additional function (MarkDown)

```
doc.markdown("COOKIETEST.md");
```



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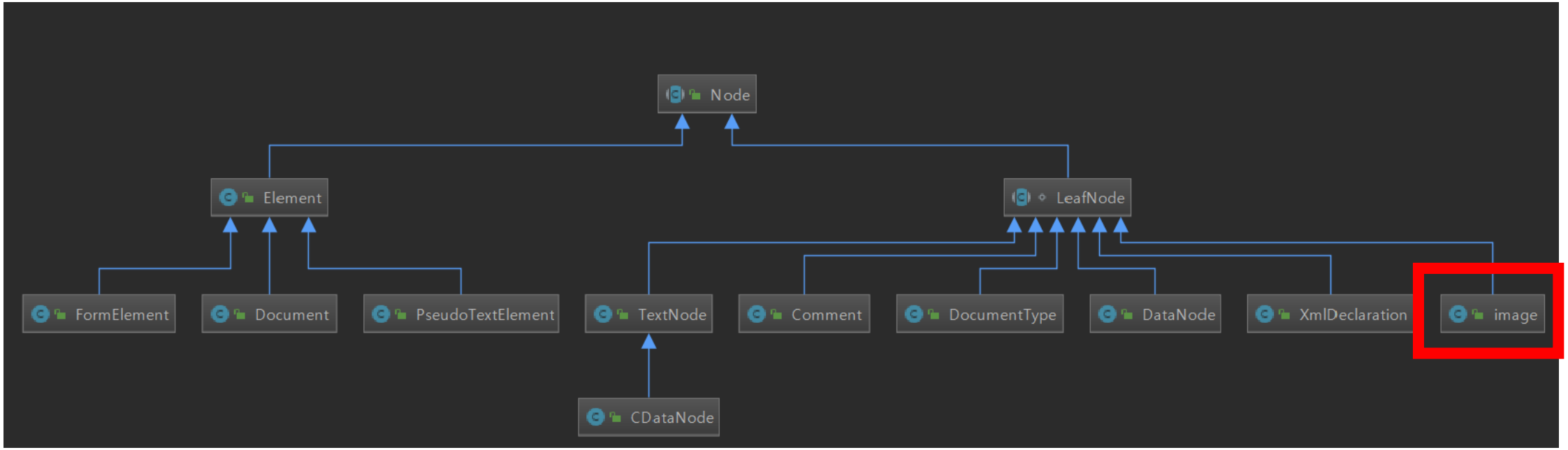
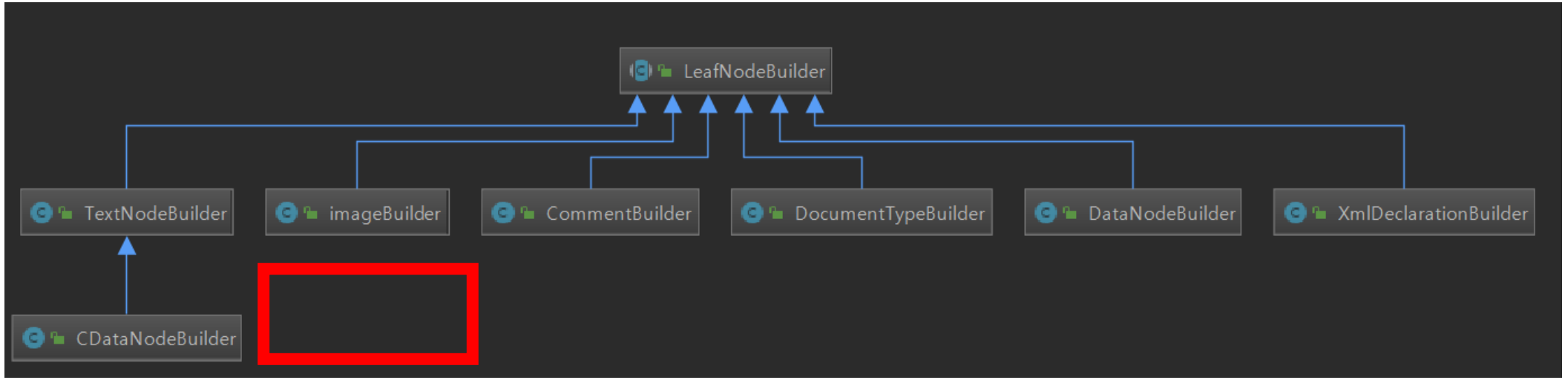
Additional function (Image Node)



Jsoup Designpattern

Additional function (Image Node)



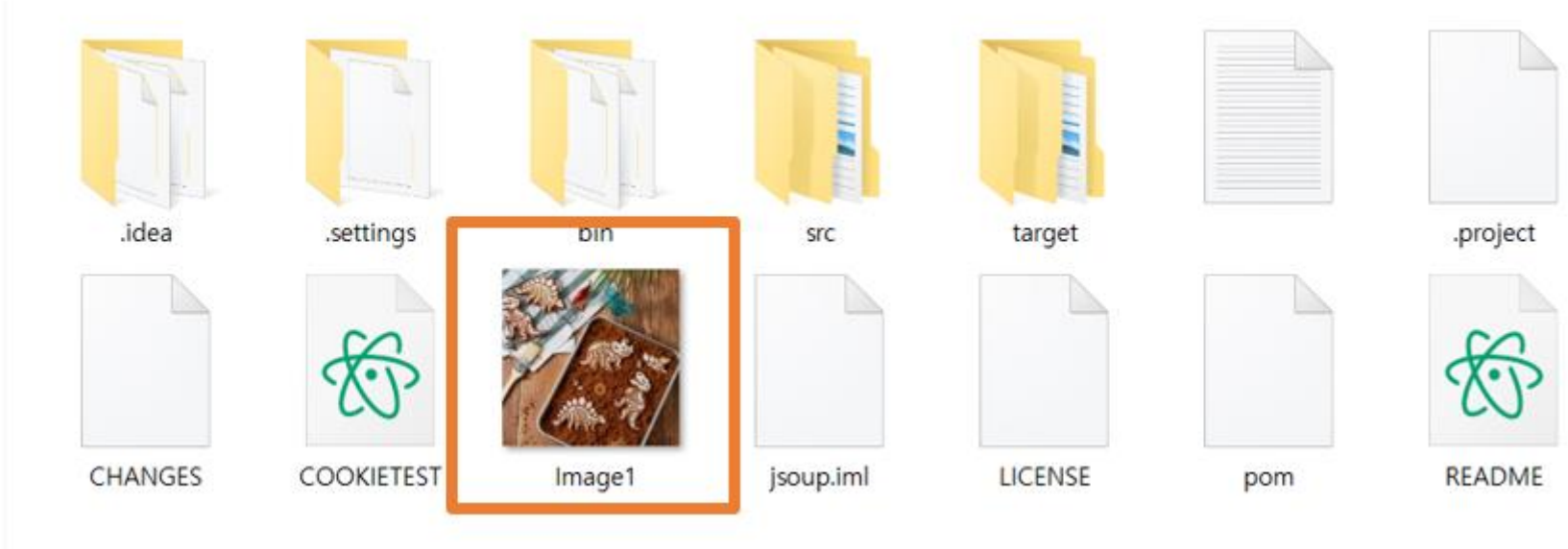

```
if(t.tagPending.tagName.equals("img")){

    LeafNodeDirector leaf = new LeafNodeDirector();
    LeafNodeBuilder image = new imageBuilder( _type: "image",value.toString());
    leaf.setLeafNodeBuilder(image);
    leaf.constructparameter();
    LeafNode_parameter params = leaf.getelement();

    MakeLeafnode factory = new MakeLeafnode();
    org.jsoup.nodes.image a  = (image) factory.createnode(params);
}
```

Jsoup Designpattern

Additional function (Image Node)



Q & A