

# INFO-H-509

## Exercises 3

SAX & DOM

# SAX

```
<customer>  
  <name>John Doe</name>  
  <address>  
    <street>31 Flowers Street</street>  
    <city>Sugartown</city>  
    <country>USA</country>  
  </address>  
</customer>
```

# SAX



# SAX

```
class MyClass extends DefaultHandler {
```

# SAX

```
class MyClass extends DefaultHandler {  
  
    public void startElement(  
        String uri,  
        String localName,  
        String qName,  
        Attributes atts) {  
  
    }  
}
```

# SAX

```
class MyClass extends DefaultHandler {  
  
    public void endElement(  
        String uri,  
        String localName,  
        String qName) {  
  
    }  
}
```

# SAX

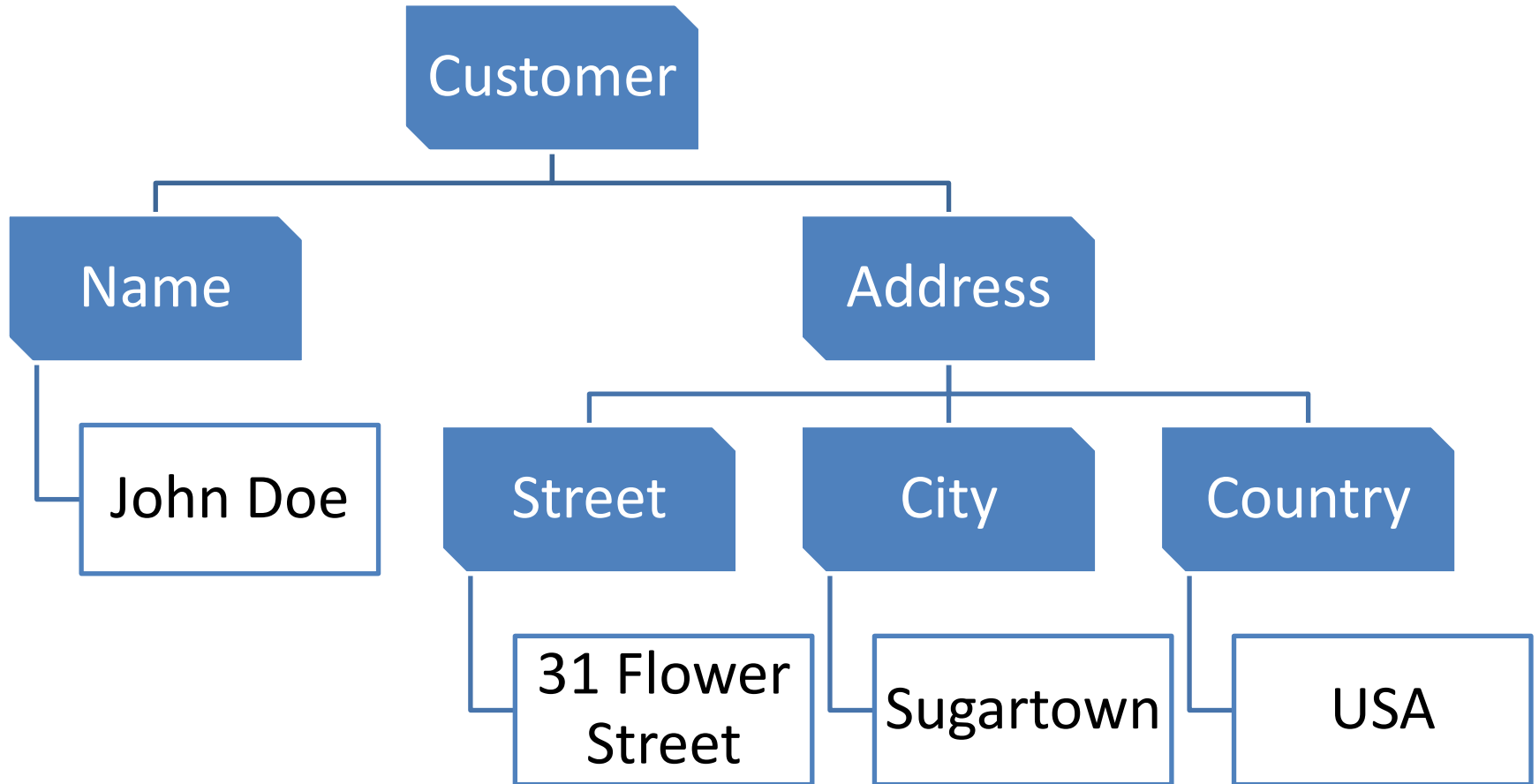
```
class MyClass extends DefaultHandler {  
  
    public void characters(  
        char[] ch,  
        int start,  
        int length) {  
  
    }  
}
```

# JDOM

```
<customer>  
  <name>John Doe</name>  
  <address>  
    <street>31 Flowers Street</street>  
    <city>Sugartown</city>  
    <country>USA</country>  
  </address>  
</customer>
```



# JDOM



# JDOM

```
Document doc;
```

```
...
```

```
// Get the Customer Element
```

```
Element cust = doc.getRootElement();
```

```
// Get the Name and Address Elements
```

```
Element name = cust.getChild("Name");
```

```
Element ad = cust.getChild("Address");
```

# JDOM

```
//Get the customer name
```

```
name.getText()
```

```
//or
```

```
cust.getChildText("name")
```

# JDOM

```
//Get each field of the address
for(Object o: ad.getChildren()) {
    Element field = (Element)o;
    ...
}

//Get the customer, from the address
cust = ad.getParentElement();
```

# Set

- A set of **unique** values

```
Set<String> mySet = new HashSet<String>();
```

```
mySet.add("a"); // mySet contains "a"
```

```
mySet.add("b"); // mySet contains "a", "b"
```

```
mySet.add("a"); // mySet still contains "a", "b"
```

```
mySet.add("c"); // mySet contains "a", "b", "c"
```

```
mySet.contains("b"); // true
```

# Map

- A set of **unique keys**, associated to **values**

```
Map<String, Integer> myMap = new HashMap<String,  
    Integer>();
```

```
myMap.put("a", 1); // a => 1
```

```
myMap.put("b", 5); // a => 1, b => 5
```

```
myMap.put("a", 2); // a => 2, b => 5
```

```
myMap.get("a"); //Returns 2
```