Laboratory of Analysis and Testing
Lezione 6

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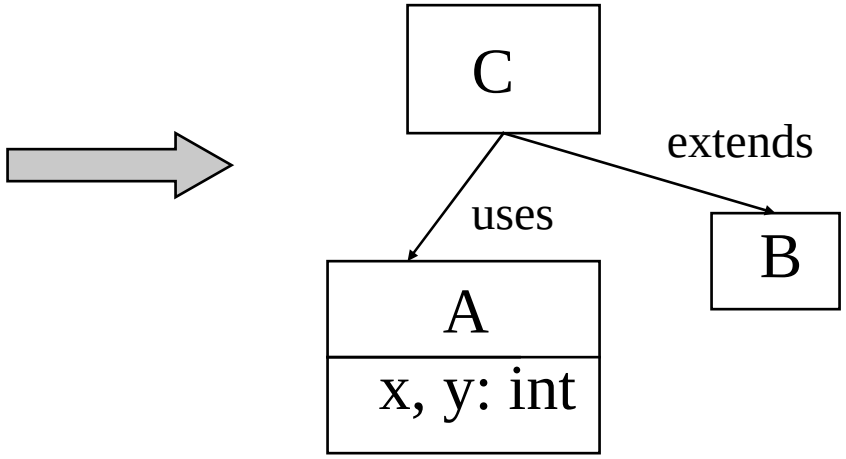
Exercise

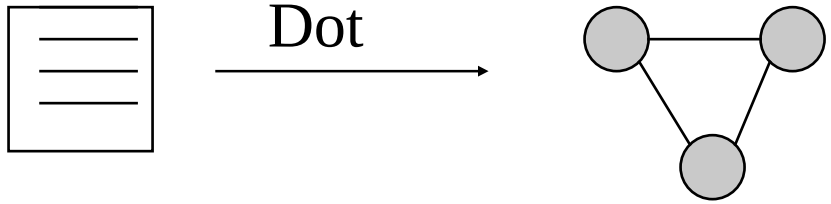
Given a Java program build the **Class Diagram (associations, extends, attributes)** of it.

```
Class A
    int x, y

Class B

Class C extend B
    A a
```



Dot

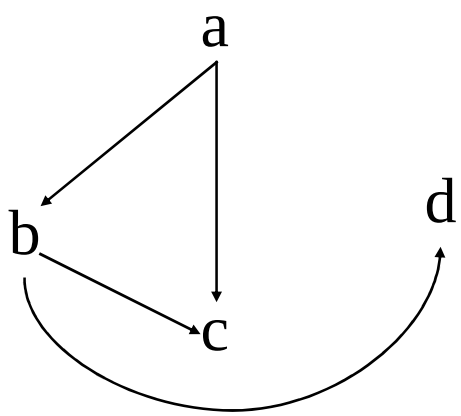
- Dot is a customizable **graph editor.**



- The dot language is intuitive.
- http://www.graphviz.org/

Dot – call graph

```
digraph g {
   a ---> b ;
   a ---> c ;
   b ---> c ;
   b ---> d ;
}
```



Exercise: step by step

1. Give a look at http://www.graphviz.org/ (see gallery)
2. Using dotty
3. Download the java grammar at http://www.txl.ca
4. Test it with small examples (parsing)
5. Implement in TXL the “getClassNames.txl” (print class names)
6. Implement in TXL the “TransformClassNamesInDotty.txl” (implement dot.Grm)
7. Adding to it **associations, extends and attributes.**
8. Test it.

getClassNames.txl

Idea:

1. Implement “getClassNames.Grm”

```
redefine class_declaration
    …
  |   ‘#class [class_name]
```

2. Implement a transformation that transform a java “class A …” in #class A for each class in the input file.