### Inheritance

#### **Exploring Polymorphism**

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### Lectures and Labs

- This weeks lectures and labs are based on examples in:
  - Objects First with Java A Practical Introduction using BlueJ, © David
    J. Barnes, Michael Kölling (<u>https://www.bluej.org/objects-first/</u>)

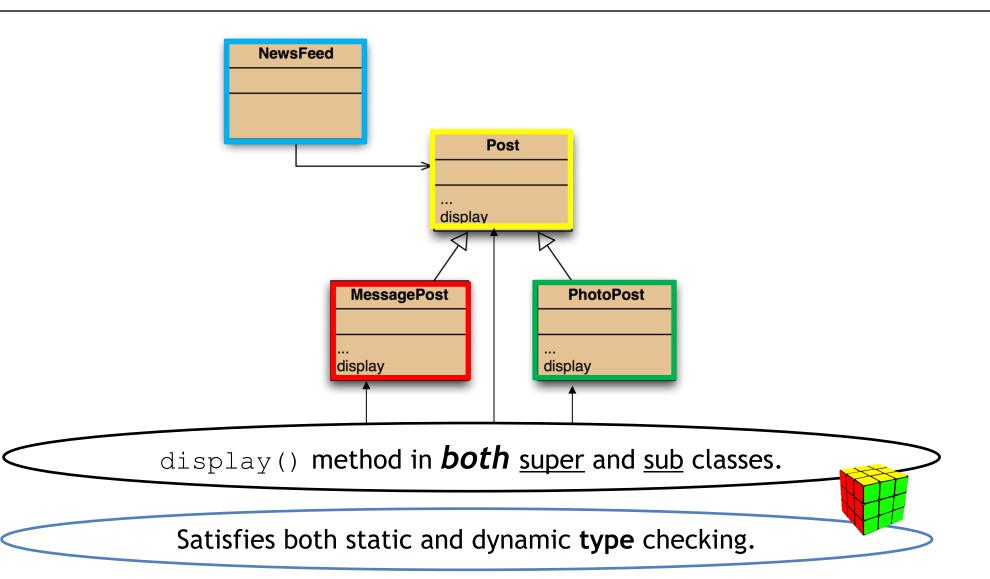
### **Topic List**

- 1. Method polymorphism
  - display()
- 2. Static and dynamic type

### 3. Overriding

- 4. Dynamic method lookup
- 5. Protected access

### **Overriding** - the solution to our problem



## Overriding

- Superclass and subclass define methods
  - with the same signature.
- Each has
  - access to the fields of its class.
- Superclass satisfies static type check.
- **Sub**class method is called at runtime – it *overrides* the superclass version.
- What becomes of the superclass version?
   Lets see...

# Any Questions?

