## **Unified Modeling Language (UML)**

static members are underlined. abstract elements are italicized.

Access Levels		
+	public	
-	private	
#	protected	
~	default	

fields are given as access level followed by variable name, a :, then type Example: -x:int

methods are given as access level followed by name(params), a:, then return type Example: #foo(a:int,b:int):int

constructor is identified via the «constructor» stereotype Example: +«constructor»MyClass(x:int,y:int)

interfaces are given the «interface» annotation

enumerations are given the «enumeration» annotation

Relationship	Diagram	Meaning
Generalization	A A B	A generalizes B B is a subclass of A In Java this is B extends A
Realization	A	B realizes the interface defined in A In Java this is B implements A

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```
public class Example {
  private int x;
  protected int y;
  public int z;
  public Example() { ... }
  public String toString() { ... }
  private void foo(int x) { ... }
  protected int bar(int y, int z) { ... }
}
```

```
Example

-x:int

#y:int

+z:int

+«constructor»Example()

+toString():String

-foo(x:int)

#bar(y:int,z:int):int
```

```
public abstract class Example2 {
  public static final double PI = 3.14;
  public abstract void foo() { ... }
  protected void bar() { ... }
  }

  Example2
  +Pl:double = 3.14
  +foo()
  #bar()
```

```
public interface FooListener {
  public void foo();
}
```

```
«interface»
FooListener
+foo()
```