

# Laboratorio di Tecnologie dell'Informazione

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# Coding style guidelines for classes



# Classes and Objects

 Names representing types (i.e. classes) must be in mixed case starting with upper case, e.g.:

Line, SavingsAccount

 Variable names must be in mixed case starting with lower case, e.g.:

line, savingsAccount



# Classes and Objects - cont.

 The parts of a class must be sorted public, protected and private. All sections must be identified explicitly. Not applicable sections should be left out.



# Classes and Objects - cont.

- A class should be declared in a header file and defined in a source file where the name of the files match the name of the class.
- All definitions should reside in source files.

This one is hard to follow: Eclipse CDT creates the getter/setter methods within the class declaration...



#### Methods

 Names representing methods or functions must be verbs and written in mixed case starting with lower case (like Java), e.g.:

getName(), computeTotalWidth()

 The name of the object is implicit, and should be avoided in a method name, e.g.:

```
line.getLength(); // NOT:
line.getLineLength();
```



#### Attributes

 Private class variables should have underscore suffix, e.g.:

```
class SomeClass {
   private:
    int length_;
}
```

 This is HIGHLY controversial. Other acceptable approaches are: underscore prefix, m\_ prefix, no suffix/prefix



#### Credits

- These slides are (heavily) based on the material of:
  - C++ Programming Style Guidelines
     Version 4.7, October 2008
     Geotechnical Software Services
     <a href="http://geosoft.no/development/cppstyle.html">http://geosoft.no/development/cppstyle.html</a>