

# **Chapter 4.2 – Coding Conventions**

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# Why Coding Conventions?

- A **consistent style** improves readability,
- speeds up **familiarization** if personnel changes, or when re-acquainting with old software
- **saves time** when searching for bugs, extending and maintaining software,
- “A clean style is matter of honor”
- must be applied consistently:
  - Adherence to conventions should be checked during program reviews and inspections.
  - or use Checkstyle
- Careful: Don't overdo it! Apply rules only where sensible.

# Which conventions should I use?

- K&R (Kernighan & Ritchie) Style, or “Kernel style” (Unix Kernel)

```
if (<condition>){  
    <body>  
}
```

- “Whitesmiths Style”

```
if (<Condition>){  
    <body>  
}
```

- “Allman Style” (Eric Allman), or “BSD Style”

```
if (<condition>){  
    <body>  
}
```

- “GNU Style”, (GNU Emacs)

```
if (<condition>){  
    <body>  
}
```

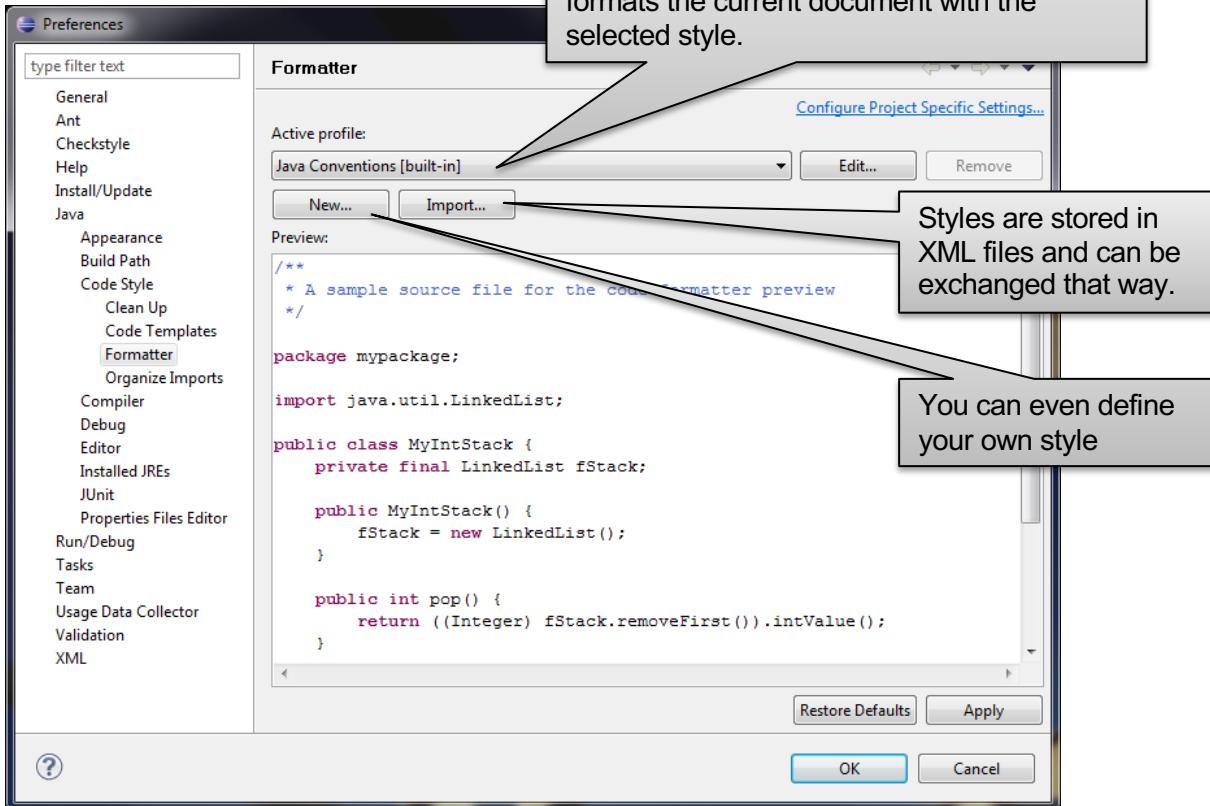
Answer: pick one and stick to it.

Or better: use the one your organization (everyone else) is using.

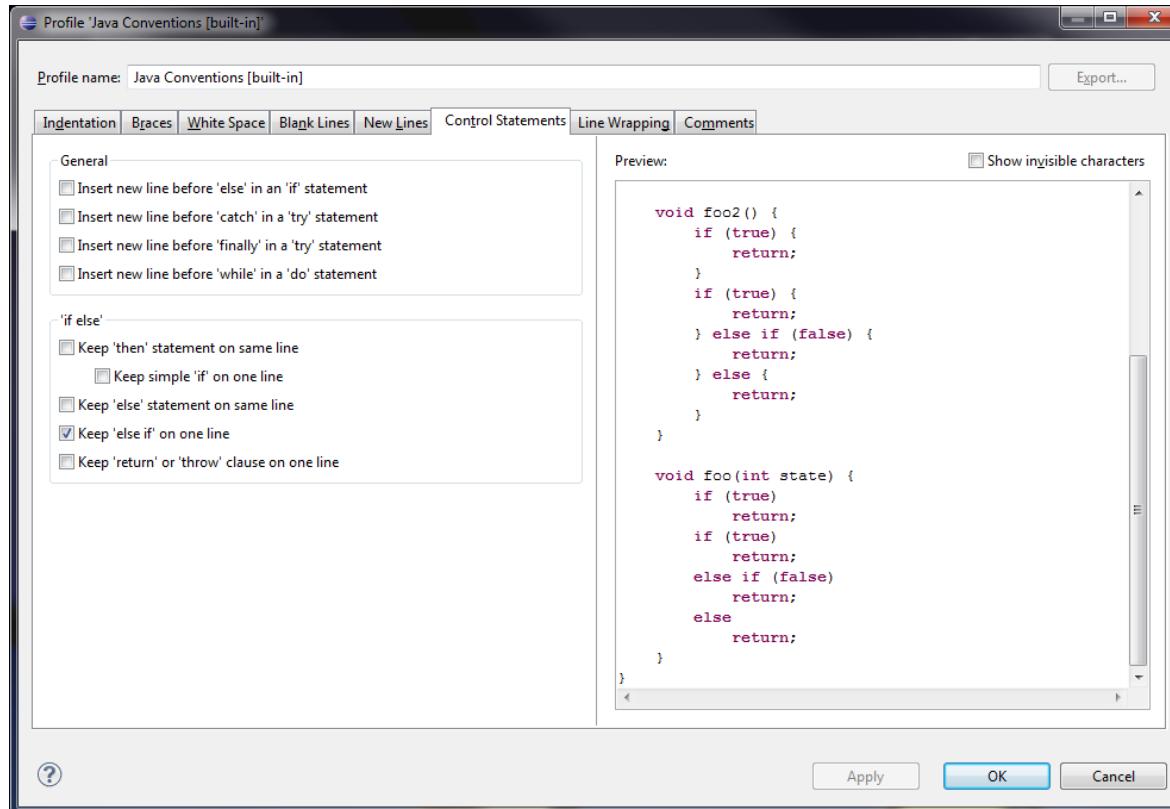
# Tool support

- Programming environments have a built-in code formatter
  - Eclipse
  - IntelliJ
  - Visual Studio
  - Emacs
- These can be adjusted to one's needs

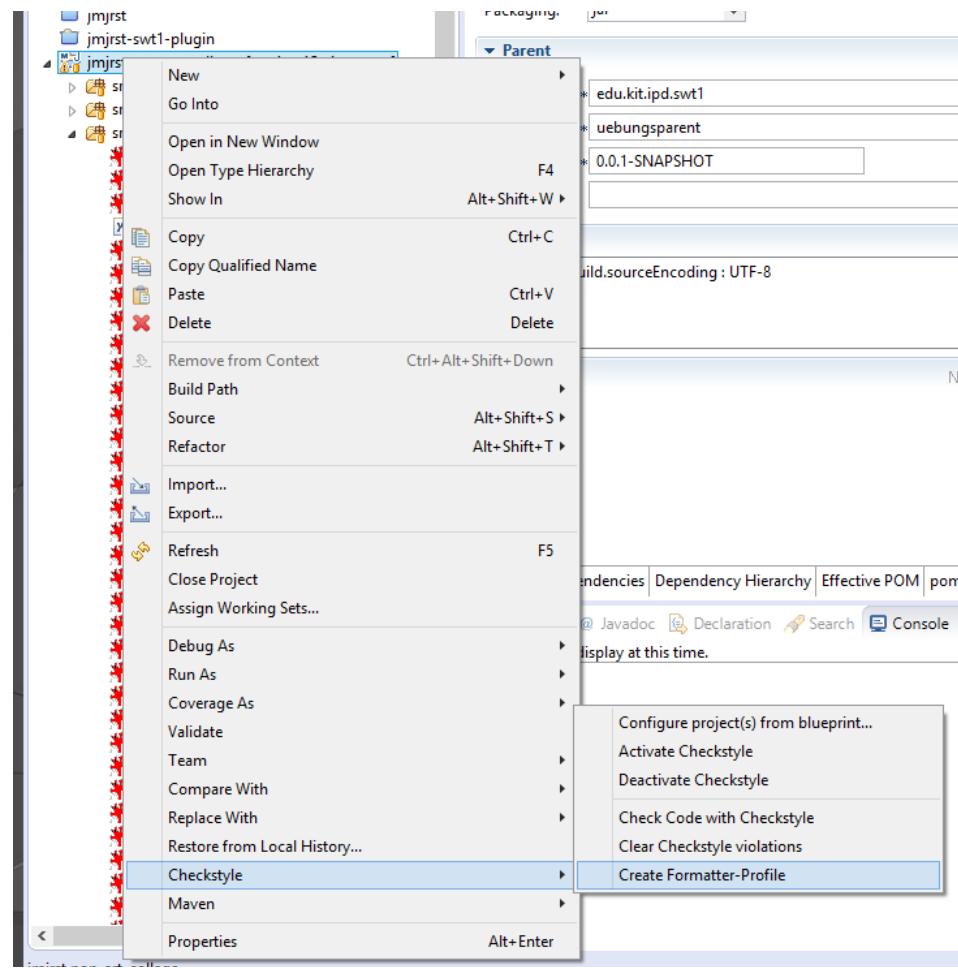
# Example: Eclipse-Formatter



# Example Eclipse-Formatter: Settings



# Example Eclipse

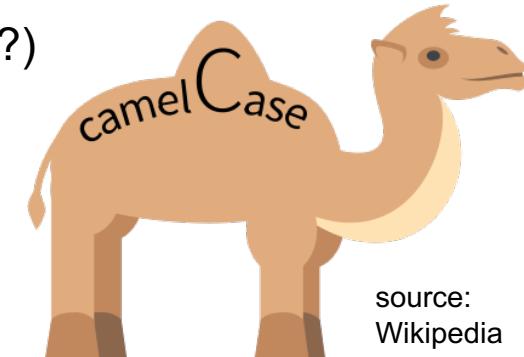


# Naming Conventions

There are conventions for

- class identifiers (noun or noun phrase in singular, starting with upper case letter),
- method identifiers (verb or verb phrase, starting with lower case letter)
- attributes, variables (lower case)
- constant identifiers and enumerations sometimes all capitalized (RED,BLUE, GREEN, const PI=3.14159)
- types sometimes with capital T at the end (ColorT)
- Compound identifiers:
  - words separated by underbar (Widget\_Company)
  - or capitalization (Camel case, or inner majuscule, as in softwareEngineering, eBay, johnSmith, WidgetCompany),
- acronyms are capitalized (IBMComputers or IBMcomputers?)

Stick to the conventions!



source:  
Wikipedia