Learning Object-Oriented Programming and Design with TDD

Parentheses Vs. Square Brackets

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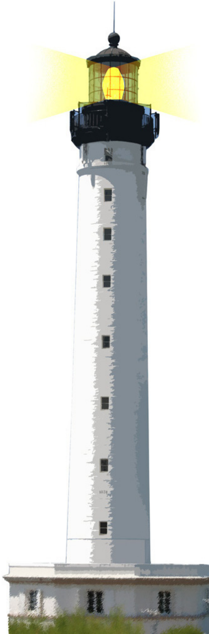

http://www.pharo.org

W2S05

( ) vs. [ ]

- (... expression ...) just changes the priority of an execution but the expression is **executed**
- [... expression ...] blocks program execution: the expression is **NOT** executed

Use [ ] for 'Unknown' Execution Occurrence

Use [expressions] when:

- expressions may not be executed at all (if, and, ...)
- expressions may be executed multiple times (while, ...)

Example

```
n timesRepeat: [ self doSomething ]
```

timesRepeat: executes a number of times its argument, therefore the argument is a block

( ) vs. [ ] Example

```
x isNil ifTrue: [ self doSomething ]
```

ifTrue: may execute or not its argument, therefore the argument is a block

( ) vs. [ ] Example

```
[ self start ] whileTrue: [ self doSomething ]
```

whileTrue: may execute both its receiver and argument multiple times, therefore they are both a block

Quiz

```
1 to: n do: ... self doSomething ...
```

```
x ifEmpty: ... self doSomething ...
```

Quiz

```
1 to: 100 do: [ :i | self doSomething ]
```

```
x ifEmpty: [ self doSomething ]
```

Summary

- ( ) is about changing the order of a computation
- [ ] is freezing the computation and controlling it

Resources

- Pharo Mooc - W2S09 Videos `http://mooc.pharo.org`
- Pharo by Example `http://books.pharo.org`

A course by Stéphane Ducasse
http://stephane.ducasse.free.fr

Reusing some parts of the Pharo Mooc by

Damien Cassou, Stéphane Ducasse, Luc Fabresse
http://mooc.pharo.org