Understanding the Implementation of ifTrue:ifFalse:

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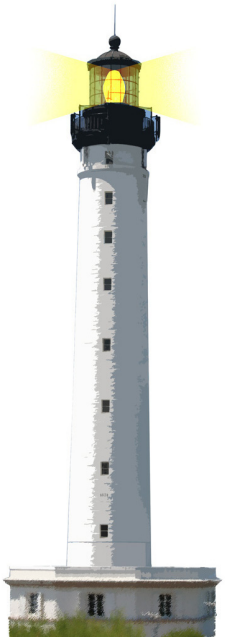
W6S02

Pharo

http://www.pharo.org



Yes ifTrue:ifFalse: is a message!

```
Weather isRaining
  ifTrue: [ self takeMyUmbrella ]
  ifFalse: [ self takeMySunglasses ]
```

- Conceptually ifTrue:ifFalse: is a message sent to an object: a boolean!
- Heavily optimised by the compiler

Exercise

- Propose an implementation of ifTrue:ifFalse:
- You only have objects, messages and closures

```
false ifTrue: [ 3 ] ifFalse: [ 5 ]
–> 5

true ifTrue: [ 3 ] ifFalse: [ 5 ]
–> 3
```

Implementing ifTrue:ifFalse:

- Remember:
  - [ ] freezes body execution
  - value kicks execution of a frozen code
- How to implement ifTrue:ifFalse:?
- Remember Not and Or?

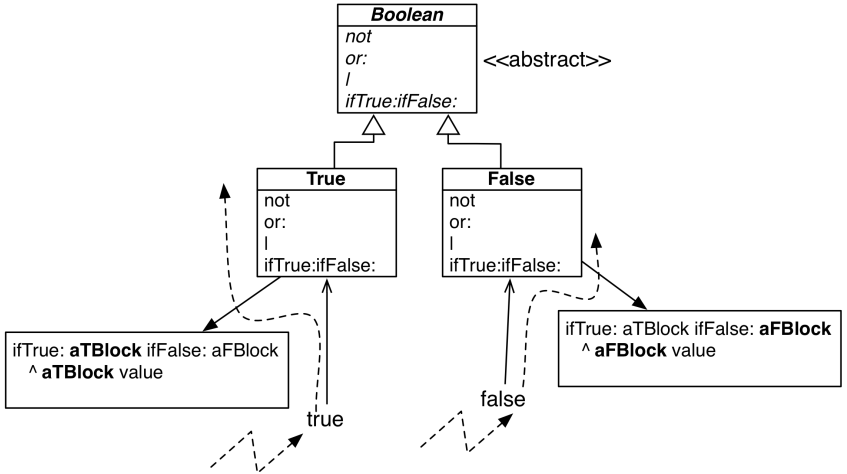
Implementation of ifTrue:ifFalse:

Let the receiver decide!

```
True >> ifTrue: aTrueBlock ifFalse: aFalseBlock
  ^ aTrueBlock value
```

```
False >> ifTrue: aTrueBlock ifFalse: aFalseBlock
  ^ aFalseBlock value
```

Implementation of ifTrue:ifFalse:



Conclusion

- Sending a message selects the right method
- Let the receiver decide
- [ ] freezes computation and `value` forces execution

A course by

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