Data types

Data Types

Define "what" a value is

Prevent error and improve performance

Values can be stored in "containers"

Containers can be variable or constant

abcdefghijlmnopqrstuvxz

01010101010101010101

Data type	Usage	Example
String	Texts	User name, title of screen, alert message
Int	Integer numbers	User age, score in a game, notifications count
Float	32-bit floating-point number	6 decimals digits (User weight, temperature)
Double	64-bit floating-point number	15 decimals digits (3.14159265359)
Bool	Values either true or false	Result of conditionals (salary greater than bills?)
Array	Collection of values ordered by an index	Lottery system, name of the months
Dictionary	Collection of values accessed by a key	Item with multiple info (user name, age, id

Variables and constants

Variables and constants

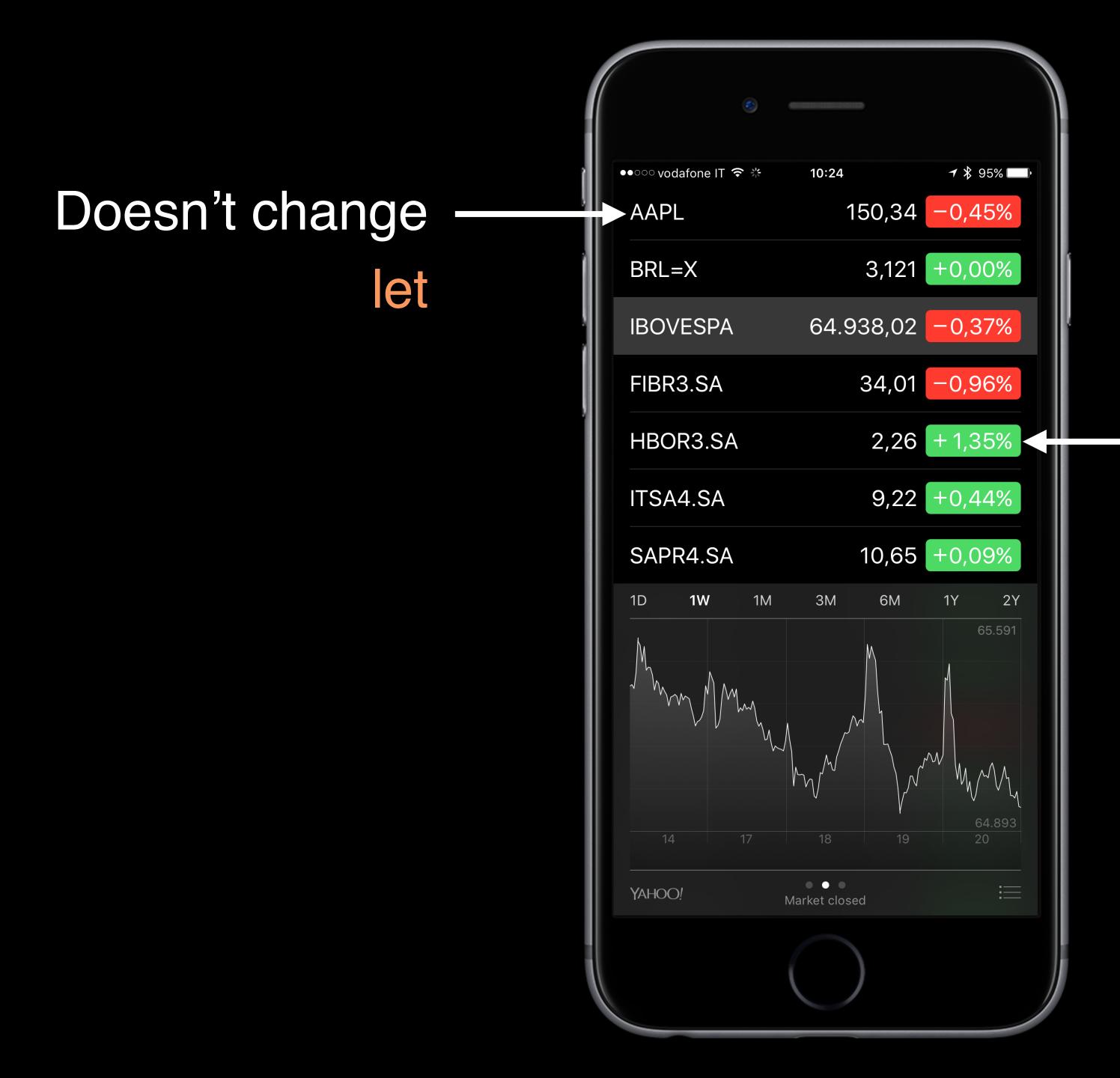
Containers to store values

var Variable is mutable, so its value can change when needed

let Constant is immutable, so its value cannot change after assigned



Number Double



Change constantly var



isSelected?

bool

true false

```
// Framework that manages data types and main objects
import Foundation
/* Declaring a variable
 keyword
                 operator value */
          name
                              10
          score
   var
/* Declaring a constant with a specific type
 keyword
                       Type
                                 operator
                                            value */
            name:
          country:
                       String
                                            "Brazil"
   let
```

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                              10
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          score
/* Declaring a constant with a specific type
```

operator

value */

"Brazil"

Type

String

keyword

let

name:

country:

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```

```
import Foundation
```

```
var score = 10
let country: String = "Brazil"
```

Hands on