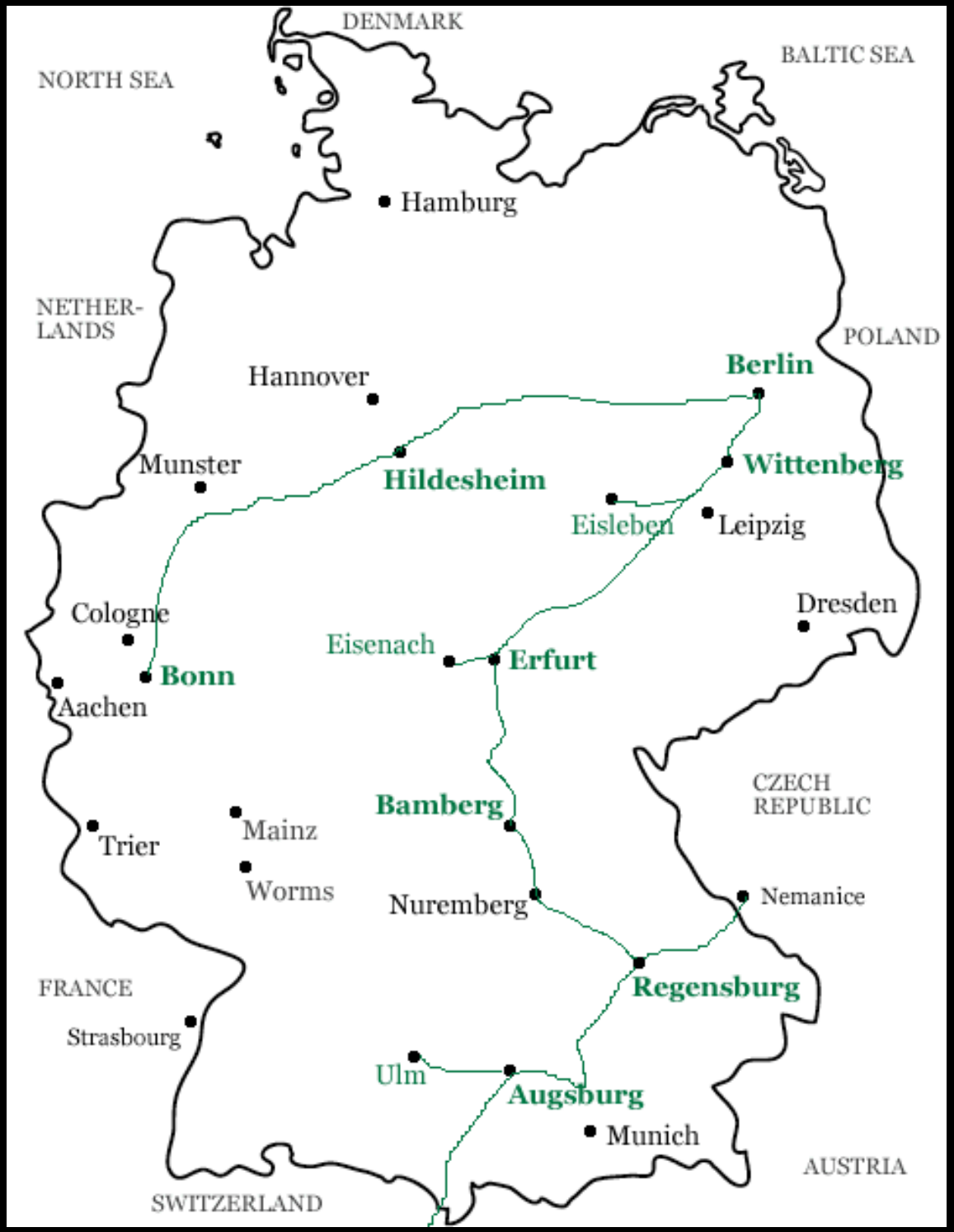
Be Careful,
Your Java is Showing

Joe O'Brien, artisan
EdgeCase, LLC


DENMARK
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“A language that doesn't affect the way you think about programming, is not worth knowing. “

Alan J. Perlis, Yale University


A

.NET / Java Background

EIA / SOA

ThoughtWorks

Columbus Ruby Brigade

EdgeCase

conventions

```
ClassNames

method_names

@instance_variables
```

$global_variables

SOME_CONSTANTS

OtherConstants

```
if_asking_a_question?
```

String

all?
any?
between?
empty?
include?
...

```
if_doing_something_dangerous!
```

String

capitalize
capitalize!

chomp
chomp!

...

two spaces

```ruby
namespace "p4" do
  desc "Display a list of files that are not in p4."
  task :missing do
    puts P4.new.missing.collect { |fn| fn.sub(/^/, '? ') }
  end

  desc "Files to be ignored by p4"
  task :ignored do
    puts P4.new.ignore_files
  end

  desc "Add all missing files to p4."
  task :add_missing => :require_run_from_root do
    P4.new.missing.each do |fn|
      system "p4 add #{fn}"
    end
  end
```

convert

tabs

to

spaces

idioms

```
if ! something?
  do_more_stuff
  and_even_more
end
```

```
unless something?
  do_more_stuff
  and_even_more
end
```

```
if something?
  do_more_stuff
end

unless something?
  do_more_stuff
end
```

```
do_more_stuff if something?

do_more_stuff unless something?
```

```
nil == false
```

```
if this_object.nil?
  do_more_stuff
  and_even_more
end
```

```
unless this_object
  do_more_stuff
  and_even_more
end
```

```
def get_age
  @age
end

def set_age(age_in)
  @age = age_in
end
```

```
attr_accessor :age
attr_reader   :age
attr_writer   :age
```

```
foo ||= Foo.new
```

```
e = “oh’

s = “Me ” + e + “ my”
```

```
e = “oh’

s = “Me #{e} my”
```

loops

```
for item in @items
  puts item.name
end
```

```
@items.each do |item|
  puts item
end
```

```
# watch the dots!

(1..100).each do |i|
  puts “#{i} time”
end
```

```
99.times do |i|
  puts “#{i} time”
end
```

code == data

```
@items.each do |item|
  puts item
end
```

```
 try {
     Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
     String url = "jdbc:odbc:SSPer";
     Connection con =
          DriverManager.
          getConnection(url,"username","password");
     Statement stmt = con.createStatement();
     ResultSet rs = stmt.executeQuery
       ("SELECT name, age FROM user");

     while (rs.next()) {
         // HERE IS WHAT I NEED
     }
     stmt.close();
 } catch (java.lang.Exception ex) {
     // Error handling
 } finally {
     con.close();
}
```

```
File.open("myfile") do |file|
  file.each_byte { ...}
end
```

interfaces

```
module MyInterface
  def method_one
    raise “not implemented yet”
  end
end

class MyJavaClass
  include MyInterface
end
```

config files

```
RAILS_GEM_VERSION = '2.0.2' unless defined? RAILS_GEM_VERSION

require File.join(File.dirname(__FILE__), 'boot')

Rails::Initializer.run do |config|
  # config.frameworks -= [ :active_record, :active_resource, ...

  # config.plugins = [ :exception_notification, :ssl_requirement, ...

  # config.load_paths += %W( #{RAILS_ROOT}/extras )
  # config.log_level = :debug

  config.action_controller.session = {
    :session_key => '_black_book_session',
    :secret      => 'my_secret'
  }
  # config.action_controller.session_store = :active_record_store
  # config.active_record.schema_format = :sql

  # config.active_record.observers = :cacher, :garbage_collector

  # config.active_record.default_timezone = :utc
end
```

class methods

```
class Contact
  def Contact.count
    # ...
  end
  def Contact.find_some
    # ...
  end
end
```

```
class Contact
  def self.count
    # ...
  end
  def self.find_some
    # ...
  end
end
```

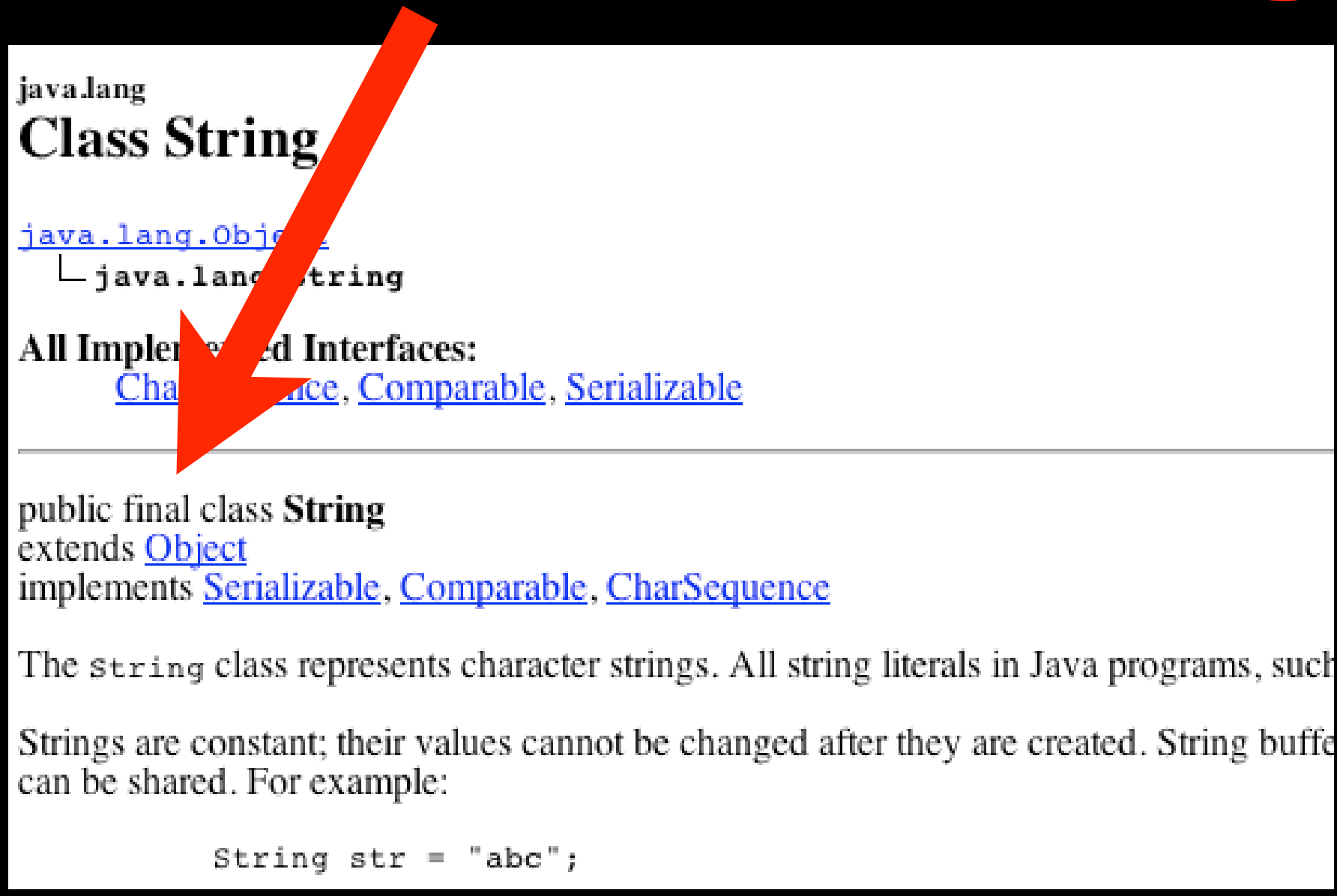
```ruby
class Contact
  class << self
    def count
      # ...
    end
    def find_some
      # ...
    end
  end
end
```

```
class Contact
  class << self
    def count
      # ...
    end
    def find_some
      # ...
    end
  end
end
```

behavior

Utility Classes

are you kidding?



java.lang

Class String

java.lang.Object
  └ java.lang.String

All Implemented Interfaces:
CharSequence, Comparable, Serializable

---

public final class **String**
extends Object
implements Serializable, Comparable, CharSequence

The `String` class represents character strings. All string literals in Java programs, such

Strings are constant; their values cannot be changed after they are created. String buffe
can be shared. For example:

```
String str = "abc";
```

```
def pm(hour)
  # ...
end

pm(3)
```

```
class Numeric
  def am
    # ...
  end
  def pm
    # ...
  end
end
```

```
3.pm

4.am

30.days.from_now
```

```ruby
module Kernel
  private

  def noon
    12.pm
  end

  def midnight
    12.am
  end
end
```

changing functionality

```
class ExistingClass


  def out

    # ...
  end

end
```

```
class ExistingClass

  alias_method :old_out, :out

  def out
    old_out if conditions_not_right
    # do your stuff
  end

end
```

```
def method_missing(name, *args)
  super(*args) if conditions_not_right
  # do your stuff
end
```

meta programming

```
class Resident
  has_many :entitlements
end
```

```
def test_resident_should_have_many_entitlements
  association = Resident.
    reflect_on_association(:entitlements)

  assert_not_nil association,
    "Could not find an association for entitlements"

  assert_equal :has_many, association.macro

  assert association.klass.
    column_names.include?
    (association.primary_key_name),
    'Expected the association to have' +
    'a column referencing the class'
end
```

```
def assert_model_has_many(model, association_name)
  association = Resident.
    reflect_on_association(association_name.to_sym)

  assert_not_nil association,
    "Could not find an association for
    #{association_name}"

  assert_equal :has_many, association.macro

  assert association.klass.
    column_names.include?
    (association.primary_key_name)
end
```

```
class ResidentTest < ActiveSupport::TestCase

  def test_resident_should_have_many_entitlements

    assert_model_has_many Resident, :entitlements

  end

end
```

```ruby
class Resident < ActiveRecord::Base
  has_many :entitlements
end

class ResidentTest < ActiveSupport::TestCase
  def test_resident_should_have_many_entitlements
    assert_model_has_many Resident, :entitlements
  end
end
```

“If I can write it in one line, I want to test it in one line”

Stuart Halloway, Relevance LLC
thinkrelevance.com

```
class Resident < ActiveRecord::Base
  has_many :entitlements
end

class ResidentTest < ActiveSupport::TestCase
  test_should_have_many :entitlements
end
```

```
class Test::Unit::TestCase
   class << self
 # ...
    def test_has_many(association_name)
      evaluate create_association_test(association_name, :has_many)
    end
 # ....
    private
    def create_association_test(association_name, association_type)
      class_under_test = self.to_s.gsub('Test', '').constantize
      meth =  "def test_should_have_association_#{assoc....
      meth << "  model_name = #{class_under_test}\n"
      meth << "  association = model_name.reflect_on_association....
      meth << "  assert_not_nil association, \"Could not find an ...
      meth << "  assert_equal :#{association_type}, association.mac...
      meth <<    add_custom_checks(association_type, class_under_test)
      meth << "end"
      meth
    end
     def evaluate(string)
       puts "\n\n#{string}\n\n" if ENV['DEBUG']
       class_eval string, __FILE__, __LINE__
     end
  end
```

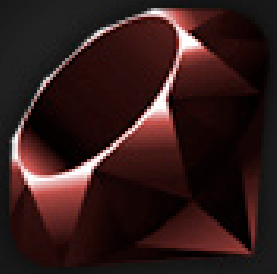

Default
class Resident < ActiveRecord::Base
has_many :entitlements
has_many :weigh_ins
belongs_to :resident_type
belongs_to :maritial_status
belongs_to :ethnicity
validates_presence_of :first_name
validates_presence_of :last_name
validates_presence_of :social_security_number
validates_presence_of :gender
validates_inclusion_of :gender, :in => %w{ Male Female Unk\
nown }
def us_citizen
(read_attribute(:us_citizen) ? "Yes" : "No")
end
-11-:%%-F1 resident.rb Top L1 (Ruby)----------
Loading /Users/objo/.elisp/packages/rubydb3x.el (source)...d\

Default

```
require File.dirname(__FILE__) + '/../test_helper'

class ResidentTest < ActiveSupport::TestCase
  test_has_many :entitlements
  test_has_many :weigh_ins
  test_belongs_to :resident_type
  test_belongs_to :maritial_status
  test_belongs_to :ethnicity

  test_should_validate_presence_of :first_name
  test_should_validate_presence_of :last_name
  test_should_validate_presence_of :social_security_number
  test_should_validate_presence_of :gender

  def test_resident_returns_citizen_as_yes_or_no
    assert_equal 'Yes', resident_with_citizenship(true).us_c\
itizen
    assert_equal 'No', resident_with_citizenship(false).us_c\
itizen
-11-:%%-F1  resident_test.rb    Top L1      (Ruby)-------------
```

method_missing

class_eval



erubycon

SUMMER 2008

"The Enterprise is not ready for Ruby, it is desperate for it."

– Glenn Vanderburg

What I hear, I forget.
What I see, I remember.
What I do, I understand.

- Kung Fu Tzu (Confucius)

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