IIC2113 - Diseño Detallado de Software

# Presentación Final Grupo 4

# 1. Introducción

# **Contexto**







## **Contexto**



Código funcional



Refactor

# 1. Nuestro código inicial

No estamos orgullosos...

class InvestmentJob < ApplicationJob include HTTParty format :ison base\_uri "https://guarded-wildwood-14760.herokuapp.com/api/v1/" queue\_as :default def perform api\_key = "sQ9ceqzXkyH\_2eK6M1Z\_" all\_accounts = Account.all total\_investment\_money = 0 all\_accounts.each do |account| #Le quitamos el 5% a cada usuario money\_to\_invest = account.saving\_balance \* 0.05 account.saving\_balance -= money\_to\_invest account.save total\_investment\_money += money\_to\_invest path\_get\_prices = "/prices?token=#{api\_key}" sale\_price = 0 purchase price = 0 self.class.get(path\_get\_prices).each do [price] sale\_price = price["saleprice"] purchase\_price = price["purchaseprice"] end path\_get\_balance = "/balances?token=#{api\_key}" amount\_to\_buy = (total\_investment\_money / purchase\_price.to\_f).to\_f path\_purchase\_btf = "/buy?token=#{api\_key}&amount=#{amount\_to\_buy}" message\_to\_show = self.class.post(path\_purchase\_btf)["msg"] puts message\_to\_show #compra BTF clp\_before = self.class.get(path\_get\_balance)["balances"]["CLP"].to\_f btf\_after\_purchase = self.class.get(path\_get\_balance)["balances"]["BTF"].to\_f path\_sell\_btf = "/sell?token=#{api\_key}&amount=#{btf\_after\_purchase}" message\_to\_show\_2 = self.class.post(path\_sell\_btf)["msg"] puts message\_to\_show\_2 #venta BTF clp\_after = self.class.get(path\_get\_balance)["balances"]["CLP"].to\_f earning\_clp = clp\_after -clp\_before amount\_of\_total\_users = all\_accounts.length() clp\_each\_user = (earning\_clp / amount\_of\_total\_users) all\_accounts.each do |account| account.saving\_balance += clp\_each\_user account.save end end end

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```
class InvestmentJob < ApplicationJob</pre>
  def perform
    api_key = "sQ9ceqzXkyH_2eK6M1Z_"
    all_accounts = Account.all
    total_investment_money = 0
    all_accounts.each do |account|
      #Le quitamos el 5% a cada usuario
      money_to_invest = account.saving_balance * 0.05
      account.saving_balance -= money_to_invest
      account.save
     total_investment_money += money_to_invest
    end
    path_get_prices = "/prices?token=#{api_key}"
    sale_price = 0
    purchase_price = 0
    self.class.get(path_get_prices).each do [price]
      sale_price = price["saleprice"]
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    end
  end
end
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    path_purchase_btf = "/buy?token=#{api_key}&amount=#{amount_to_buy}"
    message_to_show = self.class.post(path_purchase_btf)["msg"]
    puts message_to_show #compra BTF
    clp_before = self.class.get(path_get_balance)["balances"]["CLP"].to_f
    btf_after_purchase = self.class.get(path_get_balance)["balances"]["BTF"].to_f
    path_sell_btf = "/sell?token=#{api_key}&amount=#{btf_after_purchase}"
   message_to_show_2 = self.class.post(path_sell_btf)["msg"]
    puts message_to_show_2 #venta BTF
    clp_after = self.class.get(path_get_balance)["balances"]["CLP"].to_f
    earning_clp = clp_after -clp_before
    amount_of_total_users = all_accounts.length()
    clp_each_user = (earning_clp / amount_of_total_users)
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# **Code Smells**

# 1. Large class

- InvestmentJob tiene excesivas líneas de código
- Tiene toda la responsabilidad  $\rightarrow$  No cumple SOLID

### **Code Smells**

#### 1. Large class

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- Tiene toda la responsabilidad  $\rightarrow$  No cumple SOLID

#### 2. Long Method

- Método perform tiene excesivas líneas de código

# 2. Nuestro código refactorizado

Este si es nuestro orgullo

# **Soluciones**

## 1. Large class

- Crear otra clase para manejo de API

#### 2. Long Method

- Descomponer en funciones
- Mover el código correspondiente a cada clase

class ApiJob include HTTParty format : json base\_uri "https://guarded-wildwood-14760.herokuapp.com/api/v1/" def initialize @api\_key = "sQ9ceqzXkyH\_2eK6M1Z\_" def get\_purchase\_price path\_get\_prices = "/prices?token=#{@api\_key}" purchase\_price = self.class.get(path\_get\_prices)[0]["purchaseprice"] purchase\_price rescue StandardError => e puts "Error: #{e}" end def get\_balance(currency) path\_get\_balance = "/balances?token=#{@api\_key}" balance = self.class.get(path\_get\_balance)["balances"][currency].to\_f balance rescue StandardError => e puts "Error: #{e}" end def buy\_btf(amount) path\_purchase\_btf = "/buy?token=#{@api\_key}&amount=#{amount}" message\_to\_show = self.class.post(path\_purchase\_btf)["msg"] puts message\_to\_show # compra BTF rescue StandardError => e puts "Error: #{e}" end def sell\_btf(amount) path\_sell\_btf = "/sell?token=#{@api\_key}&amount=#{amount}" message\_to\_show = self.class.post(path\_sell\_btf)["msg"] puts message\_to\_show # venta BTF rescue StandardError => e puts "Error: #{e}" end end

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```

class InvestmentJob < ApplicationJob queue as :default @@api = ApiJob.new @@all\_accounts = Account.all def perform total\_investment\_money = get\_investment\_money purchase\_price = @@api.get\_purchase\_price amount\_to\_buy = (total\_investment\_money / purchase\_price.to\_f).to\_f @@api.buy\_btf(amount\_to\_buy) clp\_before\_sell = @@api.get\_balance("CLP") amount\_to\_sell = @@api.get\_balance("BTF") @@api.sell\_btf(amount\_to\_sell) clp\_after\_sell = @@api.get\_balance("CLP") earning\_clp = clp\_after\_sell - clp\_before\_sell divide\_earnings\_between\_users(earning\_clp) end private def divide\_earnings\_between\_users(earnings) amount\_of\_total\_users = @@all\_accounts.length clp\_each\_user = (earnings / amount\_of\_total\_users) @@all\_accounts.each do |account| account.saving\_balance += clp\_each\_user account.save end end def get\_investment\_money total\_investment\_money = 0 @@all\_accounts.each do |account| # Le quitamos el 5% a cada usuario para invertir money\_to\_invest = account.saving\_balance \* 0.05 account.saving\_balance -= money\_to\_invest account.save total\_investment\_money += money\_to\_invest total\_investment\_money end end

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class InvestmentJob < ApplicationJob
  queue as :default
  @@api = ApiJob.new
  @@all_accounts = Account.all
  def perform
   total_investment_money = get_investment_money
   purchase_price = @@api.get_purchase_price
   amount_to_buy = (total_investment_money / purchase_price.to_f).to_f
   @@api.buy_btf(amount_to_buy)
   clp_before_sell = @@api.get_balance("CLP")
   amount_to_sell = @@api.get_balance("BTF")
   @@api.sell_btf(amount_to_sell)
   clp_after_sell = @@api.get_balance("CLP")
   earning_clp = clp_after_sell - clp_before_sell
   divide_earnings_between_users(earning_clp)
  end
  private
  def divide_earnings_between_users(earnings)
   amount_of_total_users = @@all_accounts.length
   clp_each_user = (earnings / amount_of_total_users)
   @@all_accounts.each do |account|
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   @@api.buy_btf(amount_to_buy)
   clp_before_sell = @@api.get_balance("CLP")
   amount_to_sell = @@api.get_balance("BTF")
   @@api.sell_btf(amount_to_sell)
   clp_after_sell = @@api.get_balance("CLP")
   earning_clp = clp_after_sell - clp_before_sell
   divide_earnings_between_users(earning_clp)
  end
  private
  def divide_earnings_between_users(earnings)
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   total_investment_money = get_investment_money
   purchase_price = @@api.get_purchase_price
    amount_to_buy = (total_investment_money / purchase_price.to_f).to_f
   @@api.buy_btf(amount_to_buy)
   clp_before_sell = @@api.get_balance("CLP")
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   earning_clp = clp_after_sell - clp_before_sell
   divide_earnings_between_users(earning_clp)
  private
  def divide_earnings_between_users(earnings)
   amount_of_total_users = @@all_accounts.length
   clp_each_user = (earnings / amount_of_total_users)
   @@all_accounts.each do |account|
     account.saving_balance += clp_each_user
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  def get_investment_money
   total_investment_money = 0
   @@all_accounts.each do |account|
     # Le quitamos el 5% a cada usuario para invertir
     money_to_invest = account.saving_balance * 0.05
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## **Desafíos**

- No introducir más code smells
  - Era difícil introducir object-orientation-abusers
  - Mucho cuidado con dispensables
  - Cuidado con excesivos comentarios
  - Cuidado con código duplicado
  - Cuidado con lazy class
  - Cuidado con dead code y speculative generality

# **Desafíos**

- No introducir más code smells
- Testeo manual para comprobar el funcionamiento del código

# Gracias!

**Preguntas?** 

#### **Credits**

This is where you give credit to the ones who are part of this project.

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