Projeto de BD – Parte 2

Grupo 22

Turno BD2L02

Prof: João Caldeira

Artur Martins (102503) (40%) (3 horas)

Francisco Fortunato (102938) (30%) (2 horas)

Duarte Marques (103262) (30%) (2 horas)

Modelo Relacional:

Customer(cust\_no, name, email, phone, address):

* UNIQUE(email)

Order(order\_no, date):

* IC-6:Every Order (order\_no) must participate in the contains association

Sale(order\_no):

* order\_no: FK(Order.order\_no)

Employee(ssn, TIN, bdate, name):

* UNIQUE(TIN)
* IC-5:Every Employee (ssn) must participate in the works association

Department(name)

Workplace(address, lat, long):

* UNIQUE(lat, long)

Office(address):

* Address: FK(Workplace.address)

Warehouse(address):

* Address: FK(Workplace.address)

Product(sku, name, description, price)

* IC-7:Every Product (sku) must participate in the supply-contract association

EAN Product(sku, ean):

* sku: FK(Product.sku)

Supplier(TIN, address, name, sku, date)

* TIN: FK(Product.TIN)
* Sku: FK(Product.sku)

process(ssn, order\_no)

* ssn: FK(Employee.ssn)
* order\_no: FK(Order.order\_no)

places(cust\_no, order\_no)

* cust\_no: FK(Customer.cust\_no)
* order\_no: FK (Order.order\_no)

pay(cust\_no, order\_no)

* cust\_no: FK(Customer.cust\_no)
* order\_no: FK(Order.order\_no)
* (IC-1) Customers can only pay for the Sale of an Order they have placed themselves

works(address, ssn, name)

* address: FK(Workplace.address)
* ssn: FK(Employee.ssn)
* name: FK(Department.name)

contains(order\_no, sku, qty)

* order\_no: FK(Order.order\_no)
* sku: FK(Product.sku)

delivery(TIN, address)

* TIN: FK(Supplier.TIN)
* adress: FK(Warehouse.address)

Álgebra Relacional:

1. Listar nomes dos clientes que fizeram pedidos em 2023 cujo preço é superior a 50€.
2. Listar nomes dos empregados que trabalham exclusivamente em armazéns e processaram encomendas em janeiro de 2023.
3. Listar o nome do produto mais vendido.
4. Indique o valor total de cada venda.