Class Diagram

## ENUM RequestStatus

Description

Properties Edit MultiLine

+ CREATED
+ UNDER_ANALYSIS
+ APPROVED
+ REJECTED
+ CANCELLED
+ EXECUTED

Methods Edit MultiLine

## ENUM IncomeType

Description

Properties Edit MultiLine

+ SALARY
+ FREELANCE
+ BUSINESS
+ OTHERS

Methods Edit MultiLine

## <<abstract>> User

Description

Properties Edit MultiLine

- id: string
- username: String
- password: String
- email: String
- created_at: Date

Methods Edit MultiLine

+ login(): boolean
+ register(): void

## Customer

Description

Properties Edit MultiLine

- rg: String
- cpf: String
- name: String
- address: String
- profession: String

Methods Edit MultiLine

+ addOrder(order: Order): void
+ modifyOrder(order: Order): void
+ getOrder(order: Order): void
+ cancelOrder(order: Order): void
+ addEmployer(employer: EmployerEntity): void

## EmployerEntity

Provides information on food sustainability.

Properties Edit MultiLine

- id: string
- name: String
- cnpj: String
- address: String

Methods Edit MultiLine

+ validateData(): boolean

## Agent

Description

Properties Edit MultiLine

- corporateReason: string
- cnpj: string

Methods Edit MultiLine

+ modifyOrder(order: Order): void
+ rateOrder(order: Order): void
+ financiallyAnalyze(order: Order): void

## Income

Provides information on food sustainability.

Properties Edit MultiLine

- id: string
- value: Double
- type: IncomeType
- startDate: Date
- endDate: Date

Methods Edit MultiLine

+ calculateAnnualIncome(): Double

## RentalRequest

Records details of food donations to centres.

Properties Edit MultiLine

- id: string
- desiredStartDate: Date
- desiredEndDate: Date
- status: RequestStatus
- creationDate: Date
- estimatedValue: Double
- observations: String

Methods Edit MultiLine

+ calculateValue(): Double
+ changeStatus(status: RequestStatus): void
+ validateDates(): boolean

## Bank

Description

Properties Edit MultiLine

- bankCode: String

Methods Edit MultiLine

+ grantCredit(contract: CreditContract):boolean
+ evaluateRentalRequest(request: RentalRequest): boolean

## Company

Description

Properties Edit MultiLine

- sector: String

Methods Edit MultiLine

+ evaluateRentalRequest(request: RentalRequest): boolean

## Automobile

Records details of food donations to centres.

Properties Edit MultiLine

- id: string
- registration: String
- year: int
- brand: String
- model: String
- licensePlate: String
- available: boolean
- dailyRate: Double

Methods Edit MultiLine

+ checkAvailability(startDate: Date, endDate: Date): boolean
+ calculatePeriodValue(days: Integer): Double

## RentalContract

Stores information on centers accepting donations.

Properties Edit MultiLine

- id: string
- StartDate: Date
- endDate: Date
- value: Double
- signingDate: Date
- terms: String

Methods Edit MultiLine

+ calculateTotalValue(): Double
+ renew(newEndDate: Date): void
+ finalize(): void

## CreditContract

Stores information on centers accepting donations.

Properties Edit MultiLine

- id: string
- value: Double
- interestRate: Double
- term: int
- grantDate: Date
- status: String

Methods Edit MultiLine

+ calculateInstallment(): Double
+ checkStatus(): String

1-N
1 - N
0..N
0..3
1-1
0..N
1-N