Restaurante

#menu: List<Produto>
#clients: List<Cliente>
#cash_register: Caixa

+menu: List<Produto> (property)
+clients: List<Cliente> (property)
+cash_register: Caixa (property)
+add_product_to_menu(product: Produto): void
+remove_product_from_menu(product: Produto): void
+register_client(client: Cliente): void
+get_product_by_name(product_name: str): Produto
+get_client_by_name(client_name: str): Cliente
+get_menu_size(): int
+get_total_clients(): int
+validar(): bool
+__repr__(): str

Combo

#name: str
#items: List<Produto>
#price: float

+name: str (property)
+items: List<Produto> (property)
+price: float (property)
+apply_discount(discount: float): void
+get_time_to_prepare(): int
+add_item(item: Produto): void
+remove_item(item: Produto): void
+get_items_count(): int
+validar(): bool
+__repr__(): str

<> EntidadeBase

#id: int
#data_criacao: datetime

+id: int (property)
+data_criacao: datetime (property)
+validar(): bool {abstract}
+__repr__(): str

Caixa

#total_revenue: float

+total_revenue: float (property)
+process_payment(client: Cliente): float
+validar(): bool
+__repr__(): str

<> Produto

#name: str
#price: float
#available: bool

+name: str (property)
+price: float (property + setter)
+available: bool (property + setter)
+apply_discount(discount: float): void
+validar(): bool
+__repr__(): str

Pedido

#items: List
#total_price: float
#status: StatusPedido

+items: List (property)
+total_price: float (property)
+status: StatusPedido (property)
+add_item(item): void
+remove_item(item): void
+change_status(new_status: StatusPedido): void
+go_to_next_status(): void
+get_total(): float
+validar(): bool
+__repr__(): str

Cozinha

#orders_in_progress: Dict<int, Pedido>
#orders_in_queue: List<Pedido>
#number_of_chefs: int
#number_of_orders_in_progress: int

+orders_in_progress: Dict<int, Pedido> (property)
+orders_in_queue: List<Pedido> (property)
+number_of_chefs: int (property)
+number_of_orders_in_progress: int (property)
+full_capacity: int (property)
+is_at_full_capacity(): bool
+start_next_order(): Pedido
+add_order_to_queue(order: Pedido): void
+add_priority_order_to_queue(order: Pedido): void
+complete_order(order: Pedido): void
+get_queue_size(): int
+get_available_capacity(): int
+validar(): bool
+__repr__(): str

Alimento

#expiration_date: str
#calories: int
#time_to_prepare: int
#alimentary_restrictions: List<RestricaoAlimentar>
#is_ingredient: bool
#additional_ingredients: List<Alimento>

+expiration_date: str (property)
+calories: int (property)
+time_to_prepare: int (property)
+alimentary_restrictions: List<RestricaoAlimentar> (prc
+is_ingredient: bool (property)
+additional_ingredients: List<Alimento> (property)
+is_expired(current_date: str): bool
+add_ingredient(ingredient: Alimento): void
+remove_ingredient(ingredient: Alimento): void
+validar(): bool
+__repr__(): str

Bebida

#volume_ml: int
#is_alcoholic: bool

+volume_ml: int (property)
+is_alcoholic: bool (property)
+validar(): bool
+__repr__(): str

Comida

#persons_served: int

+persons_served: int (property)
+validar(): bool
+__repr__(): str

<<enumeration>> StatusPedido

CANCELED = -1
ORDERING = 0
PENDING_PAYMENT = 1
WAITING = 2
PREPARING = 3
READY = 4
BEING_DELIVERED = 5
DELIVERED = 6

Cliente

#name: str
#balance: float
#cart: Pedido
#address: str
#alimentary_restrictions: List<RestricaoAlimentar>

+name: str (property)
+balance: float (property)
+cart: Pedido (property)
+address: str (property + setter)
+alimentary_restrictions: List<RestricaoAlimentar> (proper
+add_alimentary_restriction(restriction: RestricaoAlimentar
+remove_alimentary_restriction(restriction: RestricaoAlime
+clear_alimentary_restrictions(): void
+can_consume(product: Produto): bool
+add_funds(amount: float): void
+remove_funds(amount: float): void
+pay_cart(): void
+validar(): bool
+__repr__(): str

<<enumeration>> RestricaoAlimentar

NONE = 1
VEGETARIAN = 2
VEGAN = 3
GLUTEN_FREE = 4
NUT_ALLERGY = 5
DAIRY_FREE = 6
HALAL = 7
KOSHER = 8