BreakfastPlate	LunchPlate
+ MealType: string	+ MealType: string

DinnerPlate
+ MealType: string

Form
UserProfile users[]
UserProfile currentUser

UserProfile

Attributes:
- userID: string
- password: string
- planHandler: Planhandler

Methods:
- + CreateFoodItem(name: string, quantity: float, groups: List<int>)
- + DeleteFoodItem(name: string)
- + GetFoodItems(): List<(string, float)>
- + GetMealTypes(): List<string>
- + GetMeals(date: DateTime): List<(List<(string, float)>, string)>
- + GetDailyServings(group: int, date: DateTime): float
- + GetPlateServings(mealName: string, date: DateTime, group: int): float
- + GetMealFoods(mealName: string, date: DateTime): List<(string, float)>
- + CreateMealPlan(foods: List<(string, float)>, date: DateTime, mealType: string)
- + AddFoodToPlate(mealName: string, date: DateTime, foodName: string, servings: float)
- + RemoveFoodFromPlate(mealName: string, date: DateTime, foodName: string)
- + SetGoal(group: int, servings: float)
- + GetGoal(group: int): float
- + ChangeFoodItemServings(foodName: string, servings: float)
- + ChangeFoodItemGroups(foodName: string, groups: List<int>)
- + GetFoodGroups(foodName: string)

(partial class, right side)
- mealType...
- dailyGoals...
- mealPlans...
- availableF...
- plateFacto...

- + CreatePla...
- + AddFoodT...
- + RemoveF...
- + SetDailyG...
- + GetDailyG...
- + GetDailyS...
- + GetPlateS...
- + ChangeF...
- + CreateFo...
- + GetAvaila...
- + GetMealT...
- + GetMealF...
- + DeleteFo...
- + ChangeF...
- + ChangeF...

1   *****   **1**   **1**   **1**

Planhandler

Counts: Dictionary<(string, DateTime), int>

: Dictionary<FoodGroup, float>

: List<Plate>

oods: List<FoodItem>

ory: PlateFactory

te(date: DateTime, mealType: string): Plate

ToPlate(plate: Plate, foodItem: FoodItem)

FoodFromPlate(plate: Plate, foodItem: FoodItem)

Goal(category Category)

Goal(foodGroup: FoodGroup): float

Servings(foodGroup: FoodGroup, date: DateTime): float

Servings(mealName: string, date: DateTime, group: int): float

oodItemsInPlates(name: string, groups: List<FoodGroup>)

odItem(name: string, category: Category)

bleFoods(): List<(string, Category)>

ypes(): List<string>

Plans(): List<Plate>

odItem(name: string)

oodItemServings(name: string, newServings: float)

oodItemGroups(name: string, groups: List<FoodGroup>)

Plate

+ MealType: string

+- Foods: List<FoodItem>

+- FoodCategories: List<Category>

+- Date: DateTime

+- MealName: string

+ GetMealType(): string

+ AddFoodItem(food: FoodItem)

+ RemoveFoodItem(food: FoodItem)

FoodItem

- name: string

- category: Category

+ ChangeServings(servings: Float)

+ ChangeFoodGroups(groups: List<FoodGroup>)

PlateFactory

Dictionary<string(mealtype), Type>

CreatePlate(string mealType, DateTime date)

TraverseAvailableMealTypes(OnMealType onMealType)

1   0...*   1   0..*   0...*   1

+ MealType: string

Category
+ Groups: List<FoodGroup>
+ servings: float

0...5

5

1

1...5

1

<<enumeration>> *FoodGroup*
Fruit
Vegetable
Protein
Grain
Dairy