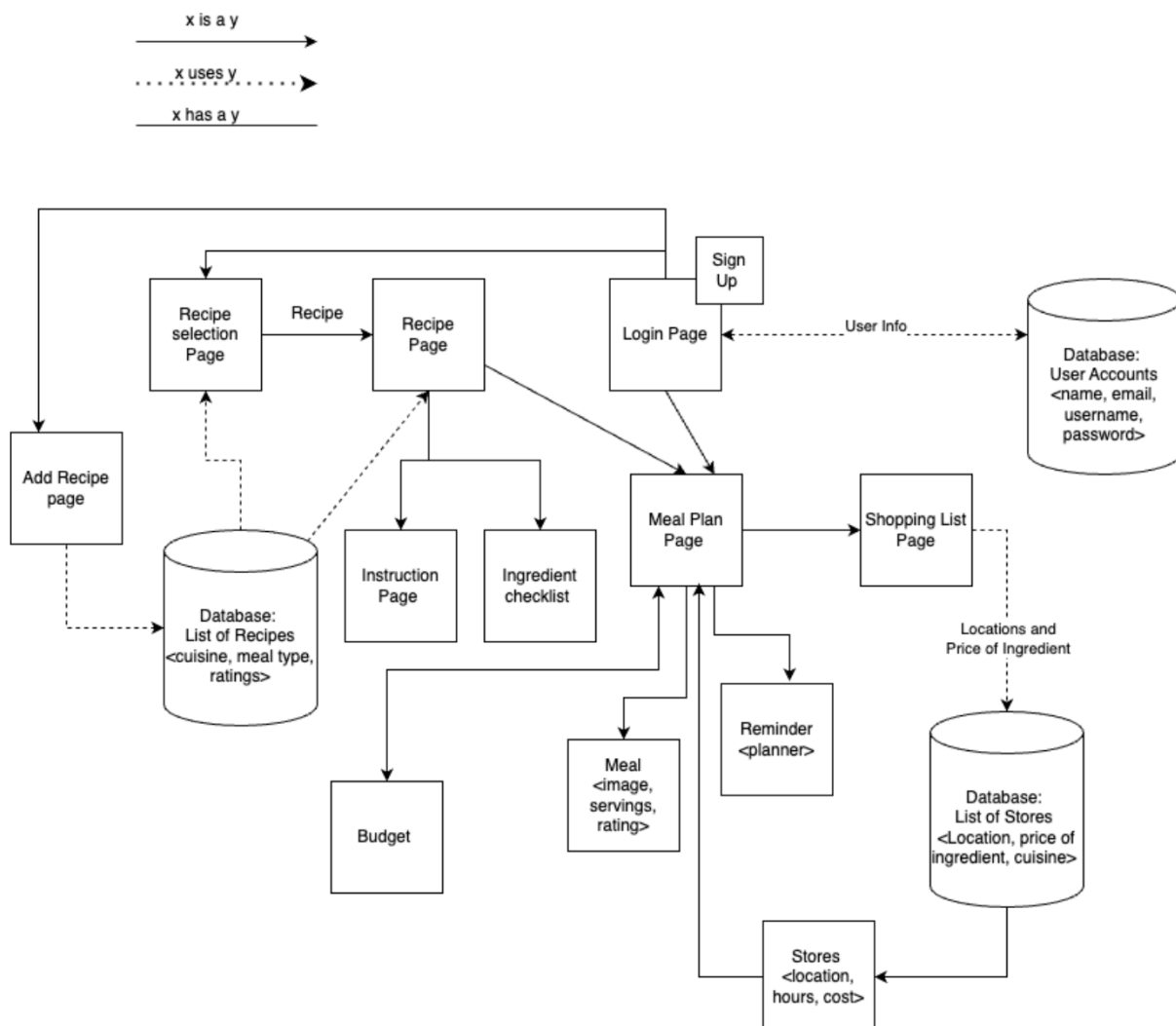# FindMyMeal

TEAM MEMBERS:
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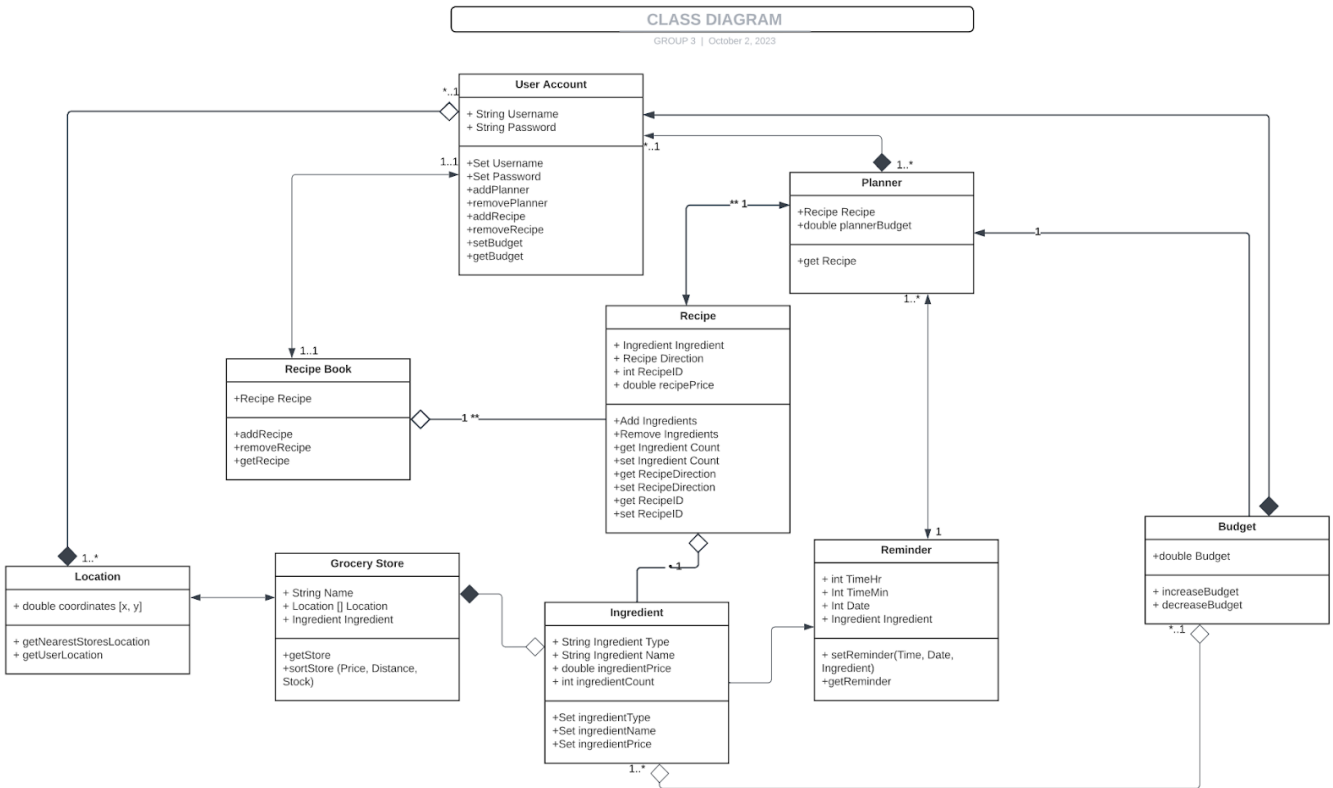
SYSTEM DESCRIPTION

FindMyMeal provides a way for users to organize their recipes, track their ingredients, track their budget, set Weekly Planners, and remind them on when to buy more ingredients.

Architecture Diagram

UML Class Diagram

User Account
*..1
+ String Username
+ String Password

1..1
*..1
+Set Username
+Set Password
+addPlanner
+removePlanner
+addRecipe
+removeRecipe
+setBudget
+getBudget

Planner
1..*
** 1
+Recipe Recipe
+double plannerBudget

+get Recipe

1..*
1

Recipe
+ Ingredient Ingredient
+ Recipe Direction
+ int RecipeID
+ double recipePrice

+Add Ingredients
+Remove Ingredients
+get Ingredient Count
+set Ingredient Count
+get RecipeDirection
+set RecipeDirection
+get RecipeID
+set RecipeID

1..1
Recipe Book
+Recipe Recipe

+addRecipe
+removeRecipe
+getRecipe

1 **

Budget
+double Budget

+ increaseBudget
+ decreaseBudget
*..1

Reminder
1
+ int TimeHr
+ Int TimeMin
+ Int Date
+ Ingredient Ingredient

+ setReminder(Time, Date, Ingredient)
+getReminder

1..*
Location
+ double coordinates [x, y]

+ getNearestStoresLocation
+ getUserLocation

Grocery Store
+ String Name
+ Location [] Location
+ Ingredient Ingredient

+getStore
+sortStore (Price, Distance, Stock)

Ingredient
+ String Ingredient Type
+ String Ingredient Name
+ double ingredientPrice
+ int ingredientCount

+Set ingredientType
+Set ingredientName
+Set ingredientPrice

1..*

Description of Classes
UserAccount - is the Class of the user Account
Planner - Represents the weekly meal planner that holds recipes
Recipe - Class that represents The Recipe Objects. Made up of Ingredients, ingredient count, and Instruction.
Budget - Is the representation of the budget dollar value. Affected by Ingredient Price. 1 to 1 relationship with Planners
Ingredient - Represents the object of an ingredient used for cooking. Made up of name, price, count.
Recipe Book - Class that holds every Recipe ever entered by the user
Reminder - Object that holds date and time and what to remind. Created whenever Ingredients are low
Store - represents establishments that contain ingredients
Location - This class holds location data. Used in Store and UserAccount

Description of Attributes
UserName - String Variable holds username of account
Password - String Variable holds password of account
Recipe - the Planner Class holds objects of the Recipe Class. Each recipe is given a Recipe ID

IngredientType - String Value for Type of Ingredient
IngredientCount - Int value of Ingredient quantity
IngredientPrice - Double value of dollar amount for price of ingredient
Coordinates - Holds x and y values for coordinates
Store Name - String Value for Store name
Time Hr/Time Min - Int value that holds data for representing hours and minutes in time
Date - Int Value that represents calendar date
Budget - Double Value that holds dollar amount for user and planner
Recipe Direction - Holds String Value of descriptions for recipe instructions.

Description of Operations
Getters and Setters - Username, Password, Location, Date, Time, Budget, Ingredient Type, Ingredient Count, Recipe, Planner, Reminder
Budget - Increase or decrease whenever recipes are added to planners. Ingredient prices are the values that the Budget changes by
Planner - Add and remove Recipes from Planner.
Recipe Book - Add and Remove Recipes from Recipe Book

Development Plan

Slad & Jaycue - Class Diagram

Jennie & Emily - Architecture Diagram

Wolf - Class and System Descriptions