Nutrition App CRC Cards

User Class (Entity)	
Responsibilities	Collaborators
Store information about a User, including username, name, passwordHash, gender, weight, height, age, and goal.	

FoodItem Class (Entity)	
Responsibilities	Collaborators
Store nutritional information about a food item including its name, amount (in grams), type, and nutrients.	

Utils Class (Entity)	
Responsibilities	Collaborators
Contains useful utility methods for the program such as getHash, which gets the SHA256 hash of a string.	

Meal Class (Entity)	
Responsibilities	Collaborators
Stores the information about a meal which contains a list of FoodItem.	• FoodItem • MealIterator

MealIterator Class (Entity)	
Responsibilities	Collaborators
An Iterator for Meal.	

FoodItems Class (Use Case)	
Responsibilities	Collaborators
Temporary database to store food items (FoodItem).	• FoodItem

LoginDataHandler Class (Use Case)	
Responsibilities	Collaborators
Manages MySQL table that stores login information.	• User • MyDBHandler

MealCourse Class (Use Case)	
Responsibilities	Collaborators
Creates an instance of the MealCourse object, using a list of Meal objects, one for each type.	• Food Item • Meal • MealCourse Iterator

MealCourseIterator Class (Use Case)	
Responsibilities	Collaborators
Iterator for MealCourse.	• Meal

MyDBHandler Class (Use Case)	
Responsibilities	Collaborators
Manages the MySQL database for the program.	• FoodItem • FoodItems

MealDataHandler Class (Use Case)	
Responsibilities	Collaborators
Manages the FoodItem MySQL table	• FoodItem • MyDBHandler

LoginSystem Class (Controller)	
Responsibilities	Collaborators
Acts a boundary between the activities and the LoginDataHandler. It validates user login credentials and can return a User instance.	- User - Utils - LoginDataHandler

MealManager Class (Controller)	
Responsibilities	Collaborators
Manages a User's MealCourse and acts as a boundary between activities and MealCourse.	- MealCourse - User

HomePageActivity class (UI)	
Responsibilities	Collaborators
Contains all code that runs when the home page is opened, loads the corresponding XML file.	- LoginSystem - User

MainActivity Class (UI)	
Responsibilities	Collaborators
Contains all code that runs when the login page is opened, loads the corresponding XML file.	- LoginSystem - MealDataHandler - User

RegisterActivity Class (UI)	
Responsibilities	Collaborators
Contains all code that runs when the registration page is opened, loads the corresponding XML file.	- LoginSystem - User - Utils

MealGeneratorActivity Class	
Responsibilities	Collaborators
Contains all code that runs when the meal generation page is opened, loads the corresponding XML file.	- LoginSystem - MealManager - MealCourse - Meal - User - FoodItem - Utils

ProfileActivity Class (UI)	
Responsibilities	Collaborators
Contains all code that runs when the profile page is opened, loads the corresponding XML file.	- LoginSystem - User