

Lab #3 – Conceptual Models

Ontario Tech University

Sibi Sabesan 100750081

Osamah Albayati 100782415

Brenden Muldowney 100707148

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Instructor: Dr. Anwar Abdalbari

TA: MD Maruf

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### C. Deliverables

#### *Adding Objects*

1. Choose one particular scenario that you described in Lab 3. Copy the scenario and perform the following (use different colour schemes if necessary).
  - Underline each noun or noun phrase in the statement and treat it as a potential object. Objects identified in this way can be put into four categories:
    - Objects or Classes of interest
    - Actors
    - Irrelevant objects
    - Attributes of objects

The kitchen organizer application is a kitchen products organizer that is accessible via any mobile device with the app installed. The kitchen organizer is able to store expiration dates and makes sure to warn the user of up-coming expiration dates, as such saving the money over time. The kitchen organizer can also provide to date product information from worldwide recognized food/product databases.

The kitchen organizer is able to store grocery lists and give an estimate price of the products. Also, recipes are able to be stored to keep track of products the recipe needs. Since the app is keeping track of all products in the kitchen it is able to discern if a recipe can be made with products already at the kitchen.

The user is able to:

- Add Item – add items quickly by name.
- Remove Item – Remove item quickly by name.
- Use item – Use a portion of a product (example 100g of white flour)
- Add Recipe – add a custom recipe down to the seasonings.

- Remove recipe – Remove any recipes not in use anymore.
- Add recipe to grocery list – adds all recipe items to grocery list.
- Make Grocery list – make a custom grocery list which will give an estimate price.
- Login – login to be able to access account from any future phone.
- Register – register an account.
- Access settings - allows user to customize app or contact support.

2. Create a table capturing the noun phrases and their category. In the category column add comments about the noun phrases not simply yes or no. An example is presented below of the Caldera software.

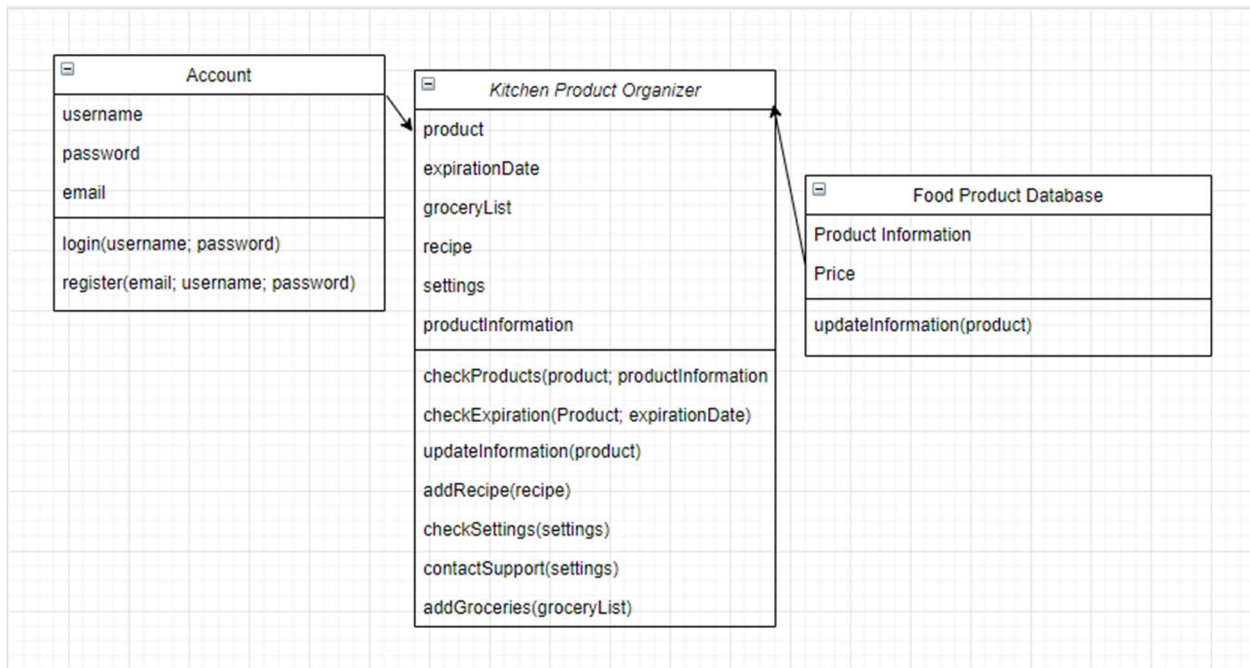
Noun Phrases	Object	Attribute	Actors	Irrelevant
Kitchen products organizer, App	Important concept			
Product, Item	Program made around the products/items			
Expiration dates, Grocery list, Recipe		Attribute of the kitchen organizer		
User			Important actor	
Product information, Price		Attribute of Food/Product Database		
Food/product database			Important actor	
name		Attribute of the products/items		
White flour, seasonings				Irrelevant just an example of commonly used product the system can store.
Login, Register		Attribute of the Account		
Account, settings	Important part of the customizability and usability of the app			
support		Attribute of the settings		

- Take the results of this table and group any of objects that might be represented by a single class. For example, you might find that you have 2 objects that are of the same type.

for first draft:

Kitchen Product Organizer  
 Stored Products  
 Stored Grocery Lists  
 Stored Recipes  
 Settings  
 Support  
 Account  
 Login  
 Register  
 Product Database  
 Product Information  
 Product Price

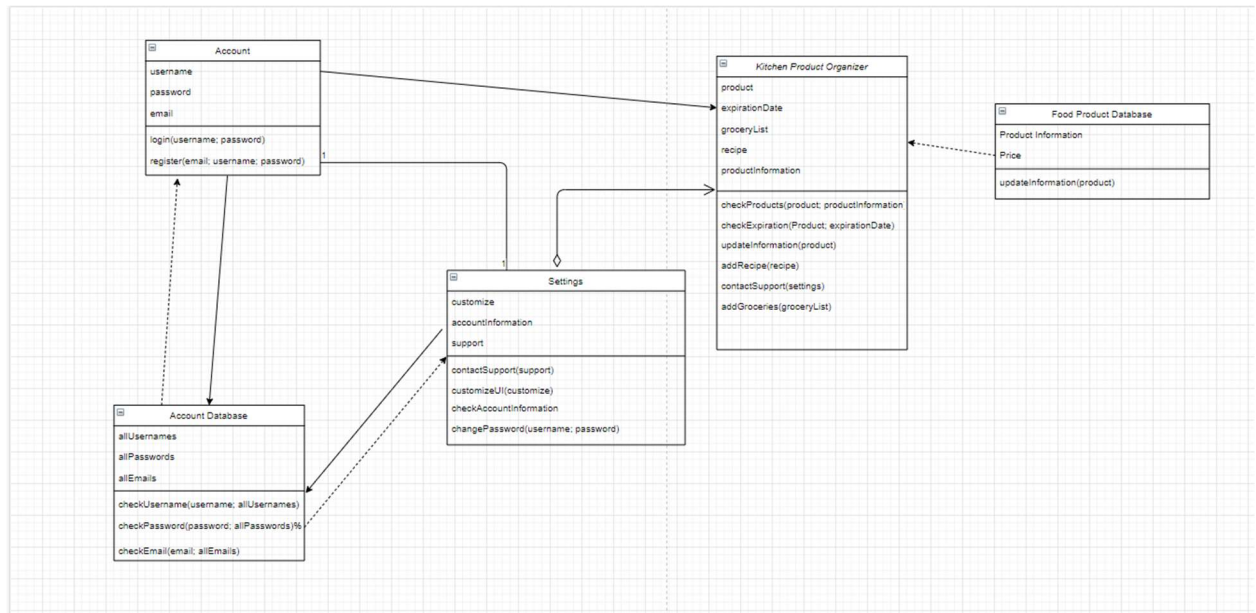
- Create the first draft of the conceptual classes of your project using a UML design tool.



- Go through the attributes defined in the table you produced to define classes and decide if these attributes should be represented as a primitive or an object.

Primitive	product, groceryList, recipe, productInformation, expirationDate
Object	Settings, Account database

6/7/8.



9.

Class/Module	Responsibilities
Account	Prompt the user to make and account or log-on a pre-existing account. Asks the user for a username, password, and email. If registering account, Account sends new username password and email to Account Database to be added for future login. If user is logging in Account sends username and password to Account Database to verify users' inputs. Account receives yes or no. If yes, then account lets user into app. If no, asks for inputs again.
Account Database	Stores all usernames, passwords, emails. Verifies login inputs from Account. Add newly registered accounts. Also, checks conflicting usernames and emails (already in use).
Settings	Gives access to the customize option to customize the UI (colour, tab locations, etc..). Shows the account information. Allows for the change of password feature. Sends password and new password to Account Database. Receives a verification that the password change was successful. Also, the user is able to contact support from the Settings.

Kitchen Product Organizer	<p>Stores Product and Product information of all registered products. Product information is sourced from the Food product Database. The kitchen Product Organizer updates this information with the click of a button. Product expiration date is stored to inform user if product is close to expiration date. Grocery list can be made by the user and stored in the Kitchen Product Organizer. Recipe can be made by the user and stored in the Kitchen Product Organizer. Product of Recipe can be added to grocery list with one click.</p>
Food Product Database	<p>A database of all food products that the Kitchen Product Organizer uses for up to date information on products registered.</p>