

1. Name

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2. Project description.

Cooking helper is the website that can help people who want and like to cook. People can read and learn the cooking recipes from the website. The website will contain tons of cooking recipes provided by other users. The website can lead users to cook step by step or just give the overview of the whole recipe. This process may contain pictures or videos to further assist users. Users may communicate on each recipe. They can also record what they are cooking everyday and the adjustment they made for better taste. They can comment on the food they made under the recipe as well.

3. List the features that were implemented (table with ID and title).

1	Users can sign up
2	Users can view cooking recipes provided by website
3	Users can post their own cooking recipes
4	Users can view others cooking recipes
5	Users can record their cooking process in details

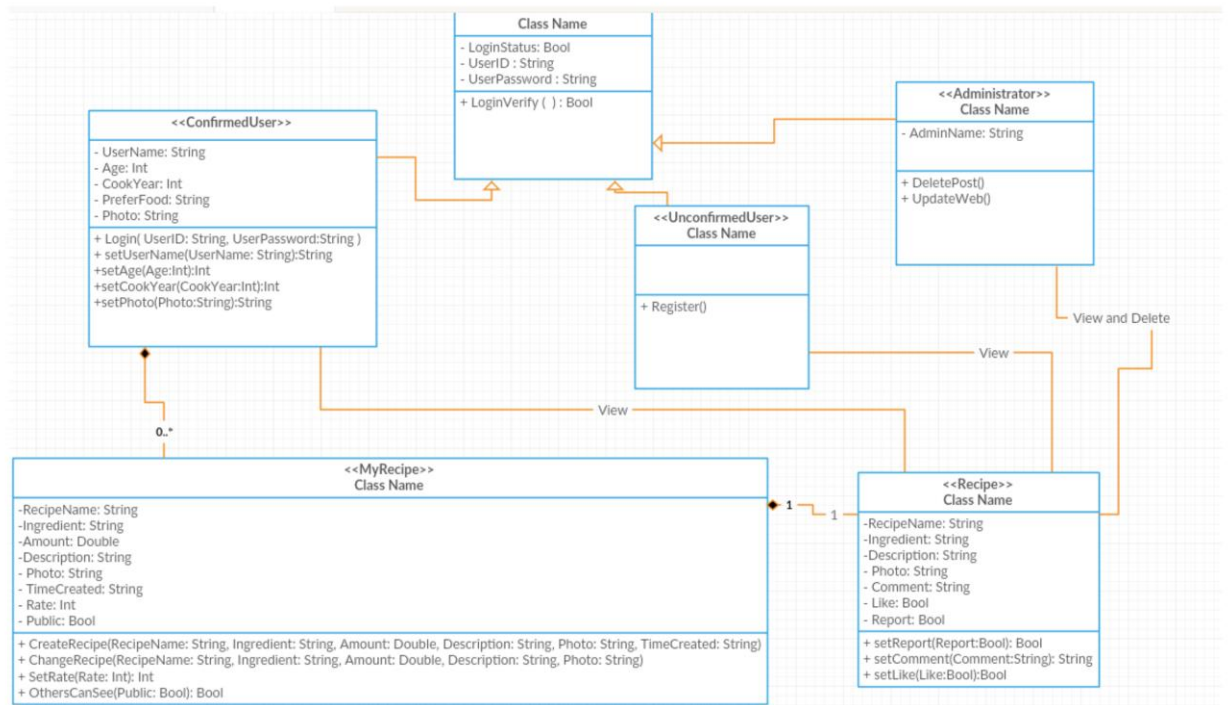
4. List the features were not implemented (table with ID and title).

1	Users can record how many times they have done the recipe
2	Users can modify their recipes
3	Users can write their own comment
4	Users can like, comment or add to favorite

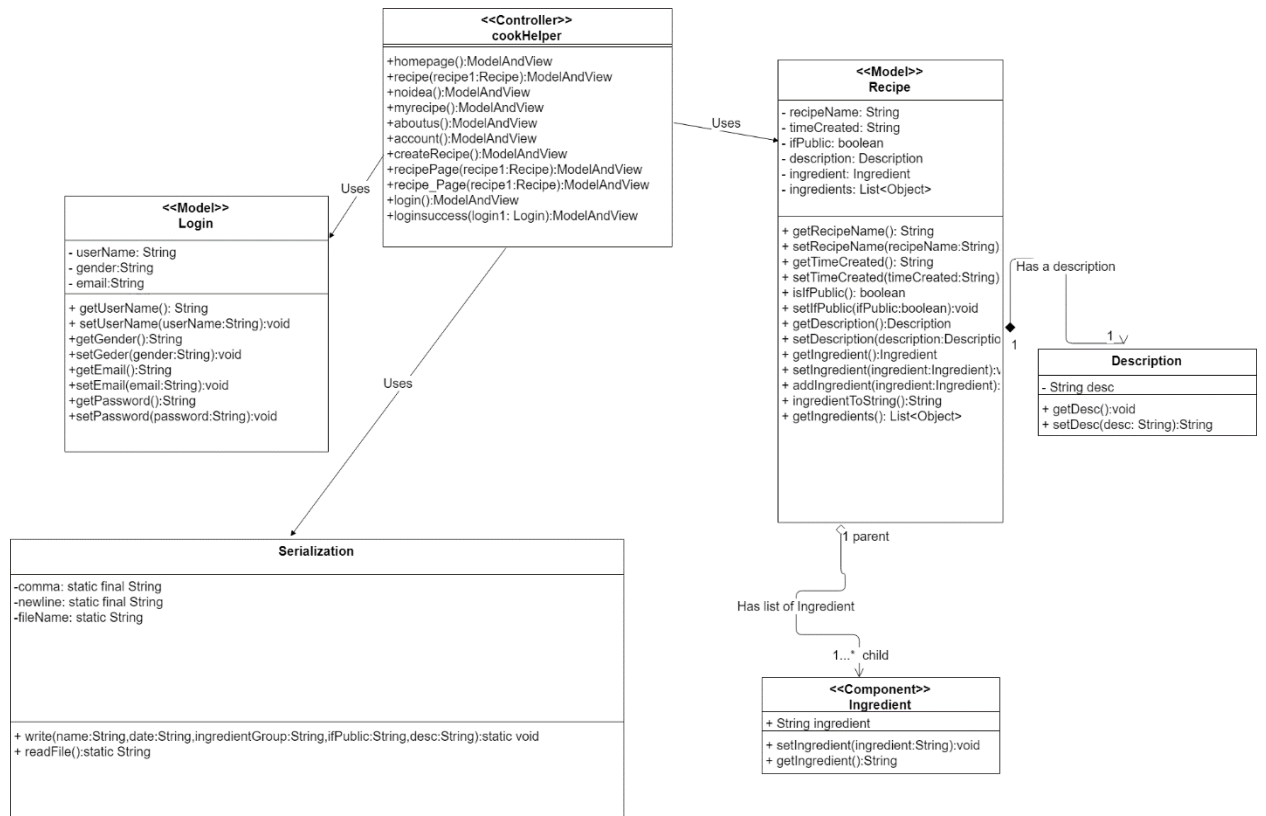
5. Show your final class diagram.

What changed? Why? If it did not change much, then discuss how doing the design up front helped in the development.

Previous class Diagram



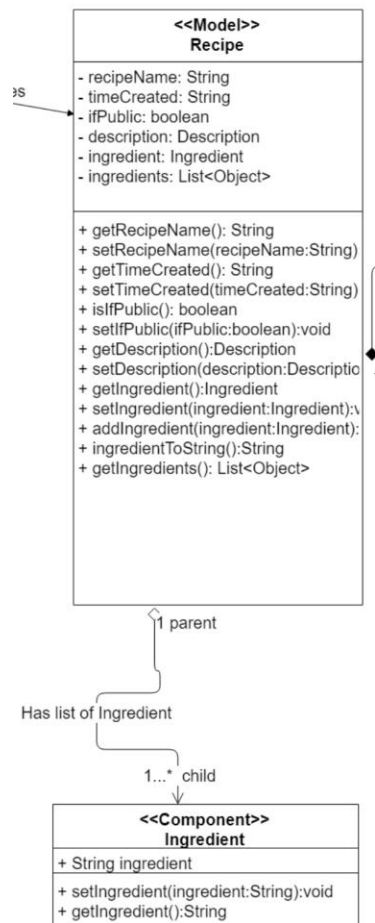
New Class Diagram



My class diagram has really changed a lot. The main reason is that my thought about the whole project structure was not clear. During the process of making my project, the structure has changed from only web pages to the Model And View structure. The structure of the Recipe class has also changed from one class to a class contains the Description class and the Ingredient class. Because there can be one or many ingredients in one recipe, so the Recipe class can have the Ingredient class value multiple times. Another thing is that as I coding my project, I learned a lot on the structure of my project which makes the whole class diagram looks much more complete and clear. My class diagram also tells people the structure and methods I have used for my project. The controller class is what really takes value from Model part of the project to the View part, which is what my previous class diagram did not show.

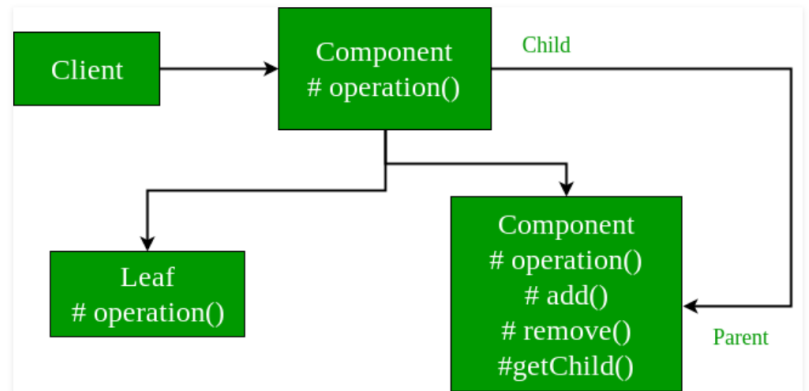
6. For each design pattern implemented,

- Show the classes from your class diagram that implement each design pattern.



- Show the class diagram for the design pattern.

UML Diagram for the Composite Design Pattern :



- Explain how you implemented the design pattern, why you selected that design pattern.

I used the Composite Design Pattern in my project. There is a parent class and the parent class can have the child class multiple times or another component class which can also have multiple leaves. However the child class which is also considered as leaf class cannot have a child class or leaf. My Recipe class is the parent class and my Ingredient class is the leaf class. The Recipe class can get value from Ingredient class multiple times and put the values into a list. I am using the Composite Design Pattern since I have to have multiple ingredients in one recipe. There are always at least one ingredients in a recipe. In the real world, each meal needs many ingredients, such as meat, vegetable, or the spicy they want to put into the meal. So Composite is a really good design pattern for me to use to implement into my project.

7. What have you learned about the process of analysis and design now that you have stepped through the process to create, design and implement a system?

Since this is my first “real world” project, I really learned a lot from this project. First of all, when I created the project, I have thought about what I want to make. This is a hard question because I do not want to make something useless. Also I want to make something that is helpful to others. I really loves cooking, and I did not find the website that is easy to use, so I think maybe I can make one. The purpose of making some kinds of technological application or website is to make people’s life convenient, and solve problems that people may have in their daily life. So this is a really great chance for me to knowing this deeply.

Second, make something is not easy. During the process of making this project, I realize that design the project is also important. How my project is used and how it looks really affect people's usage of my project. If it is really ugly like my website now, people do not want to use it and think this is a bad website even if the functionality is really good. Also if the website is good looking but it cannot do many stuffs, people are still thinking the website is bad since it is useless.

Finally, the most important thing is the design pattern I learned from this class. We can always make the project with normal codes. But this is really messy and if we are working in a group, it will also be hard for others to work on the project. The main structure, classes are really helping others understanding how the project works. Also the design pattern are good to use. For example, I have used the composite design pattern for my project to have ingredients multiple times in the recipe. I can make it without having composite, but again, it is messy and hard for others to understand what I am doing. The design pattern gives us a easy to design the structure of the project and make the project.