Project 7: Semester Project

Demonstration link: https://www.youtube.com/watch?v=_AtLO1t9OnY
Github: https://github.com/omardajani-cu/Cal_Final_Project

Name of project and team members

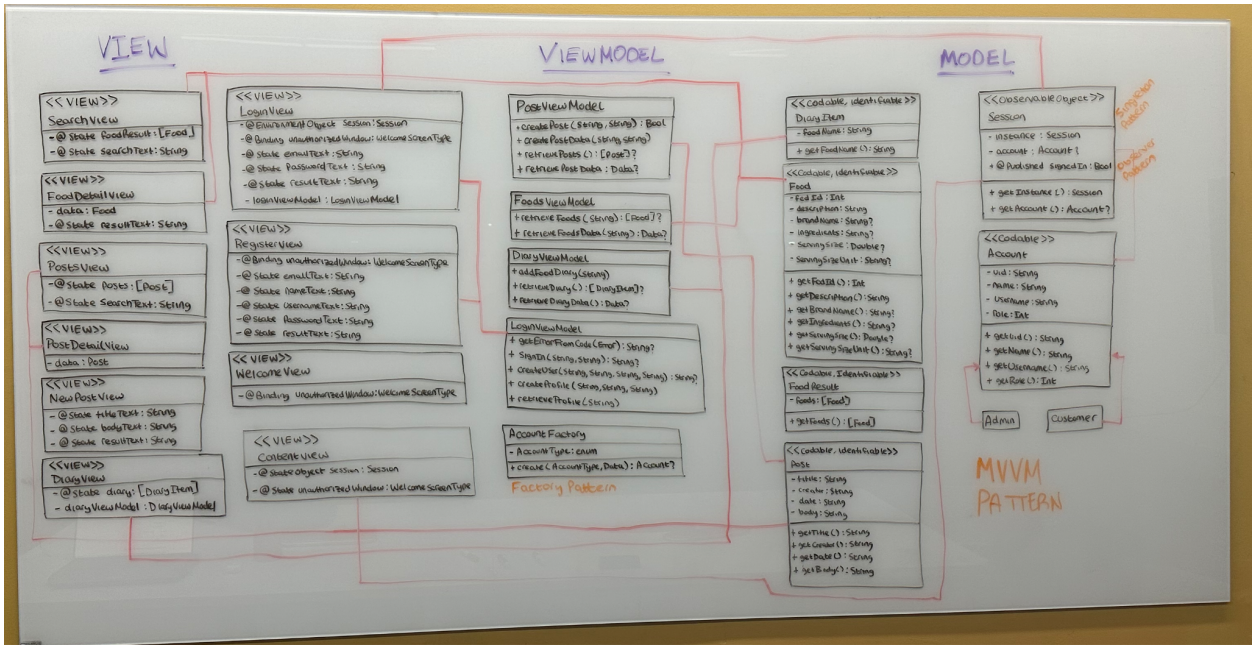
- Project name: Cal
- Team members: Omar Dajani

Final State of System Statement

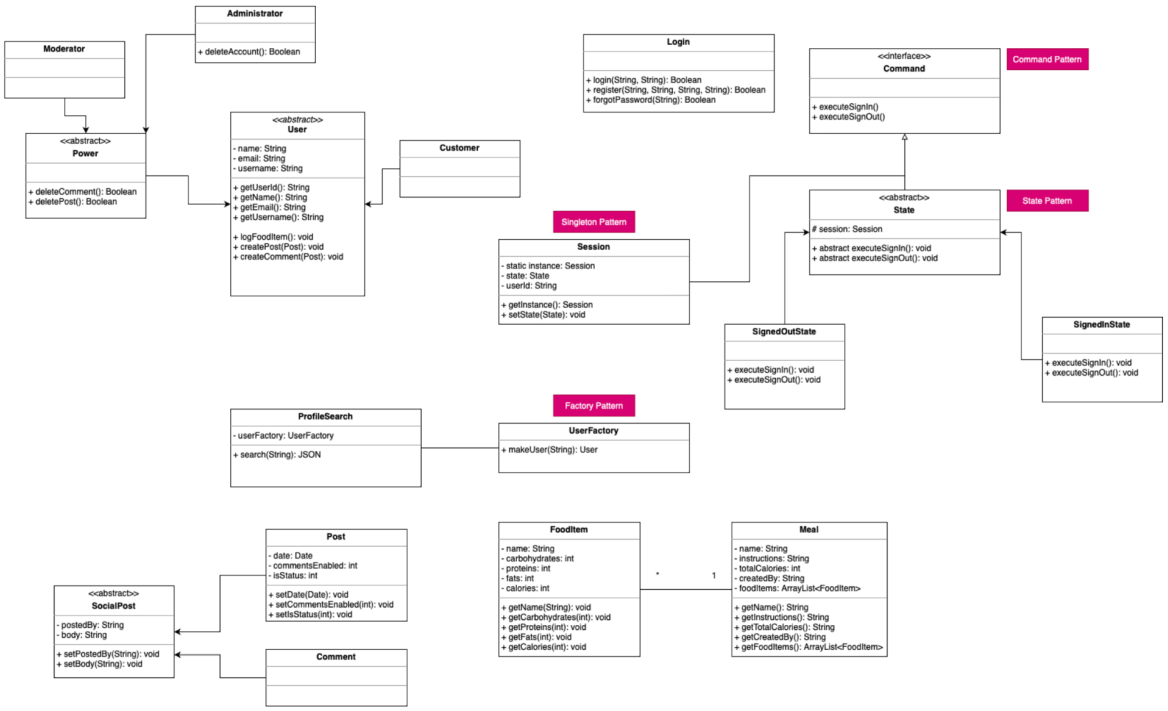
There has been a significant amount of improvement since project 6. I successfully implemented the food database API into the project allowing users to search from hundreds of thousands of food items. Moreover, users can now track what they ate in a day by adding a searched food item to their daily diary. The diary resets everyday at midnight allowing users to track the foods they consumed on a daily basis. Finally, users can now view and create posts. Due to time constraints and working alone, I was unable to implement the meal concept, view progress, the concept of following/followers and comments on a post.

Final Class Diagram and Comparison Statement

Most Recent UML class diagram (patterns are labeled in orange):



UML Diagram from Project 5:



<u>Key changes in UML Diagram From Project 5 and 6 to Project 7</u>

The main difference is that in project 5 I was planning on using the command pattern with the state pattern to sign users in and out, however I found that using the singleton pattern along with the observer pattern instead was sufficient. The final change is that the classes Meal and ProfileSearch did not get implemented due to time constraints as mentioned above.

<u>Third Party Code vs. Original Code Statement</u>

All the code written in the project was developed by myself. For reference, I used Apple's documentation: https://developer.apple.com/documentation/technologies

<u>Statement on the OOAD process for your overall Semester Project</u>

- Since I was working alone on the project, I got to experience and apply everything I learned this semester to the project on my own which solidified the knowledge learned this semester.
- Working alone added more stress to the project as it was more work overall. Having said this, it was also a great opportunity to manage my time management skills.
- Initially in project 5 I overestimated what I could get done by the project 7 deadline causing some of the features to not get implemented. This was a great learning experience to set realistic goals and expectations.