

Winter Equipper

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Final State:

Almost every feature that we were planning on implementing has been implemented. The features that were implemented are login, signup, posting equipment, renting equipment, and scheduling drop off/pick up times. A feature that was not implemented was the Stripe payments integration because we ran out of time trying to implement this feature. Another feature that was not implemented was the user profiles because we thought it was unnecessary as we began developing the app. We did not think that it was necessary to show user profile information once an account was created. The biggest change that was made from our plans in project 5 was omitting the Stripe payments integration.

Third-Party Code:

There was some third-party code that was used within our project. We have used multiple Java frameworks in our backend which include: javax.servlet-api, mysql-connector-java, commons-dbutils, gson, commons-io.

We also used some third-party code for AWS S3 file uploading with swift, image resizing, image picking from photo libraries, and sending HTTP requests. The code was found in these tutorials:

- <https://www.swiftdevcenter.com/upload-image-video-audio-and-any-type-of-files-to-aws-s3-bucket-swift/>
- <https://www.advancedswift.com/resize-uiimage-no-stretching-swift/>
- <https://www.hackingwithswift.com/read/10/4/importing-photos-with-uiimagepickercontroller>
- <https://stackoverflow.com/questions/26364914/http-request-in-swift-with-post-method>

I also used code from an internship to connect to MySQL using JDBC and make queries to the database. The internship was with Spinneret. I was given permission to use the code in any project I wanted including school and my startups.

- <https://www.spinneret.com/>

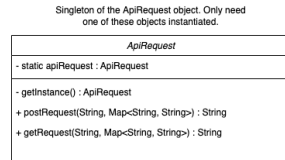
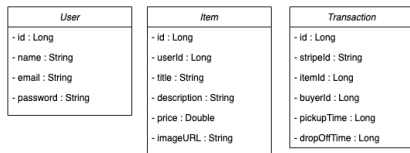
The rest of the code in the project is original.

OOAD Process:

- An element of our OOAD process that was helpful was the use of UML sequence diagrams. For project 5 we needed to create a couple of sequence diagrams and these diagrams helped us keep our thought process organized while building out our project.
- An element of the OOAD process that was helpful was the use of the UML class diagram that we created for project 5. This diagram allowed us to just build out what was listed in this diagram which allowed the build process to be straightforward and organized.
- Another element of our OOAD process that was helpful was the use of the activity diagram that we created. This activity diagram helped us stay organized in the development because we understood how our system should behave with the different possible actions.

UML Class Diagrams:

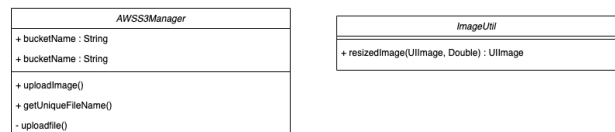
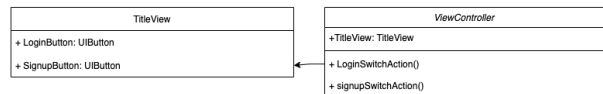
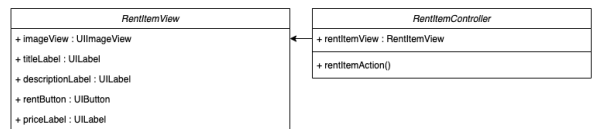
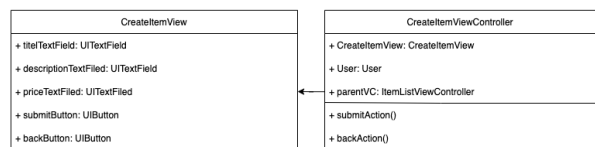
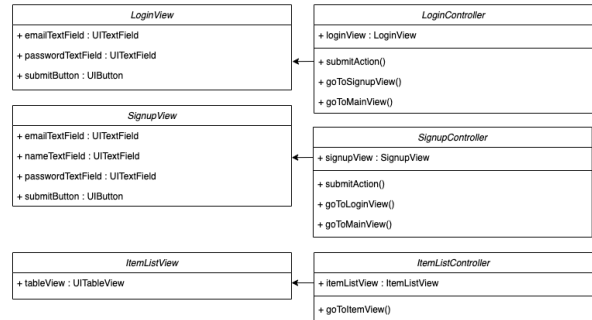
Final diagram:



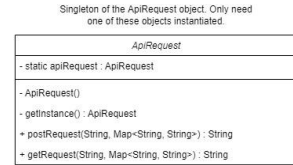
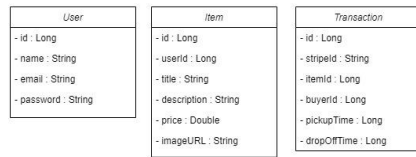
There is a observer pattern between the server and the app where the server is the subscriber and the app client is the publisher. The app client is pushing updates to the server.

Our API is a Facade because it creates an abstraction to only provide functionality to the client that the client needs.

We are using the MVC pattern.



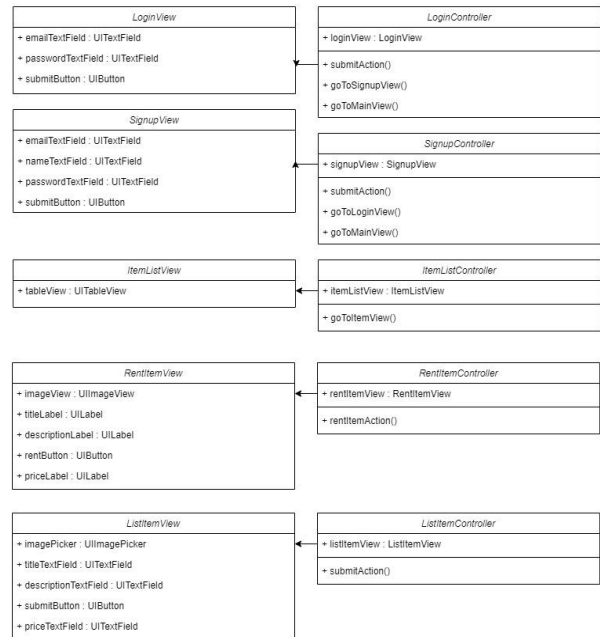
Project 5 diagram:



There is a observer pattern between the server and the app where the server is the subscriber and the app client is the publisher. The app client is pushing updates to the server.

We are going to use the iterator pattern on the list of items we will receive from calling our API.

We are using the MVC pattern.



There have not been many changes between project 5 and the current UML class diagrams. There was a view and controller added for the title screen. As well as the ListItemController and ListItemView were renamed to CreateItemView and CreateItemViewController. The AWSManager was added which handles the uploading of files to the S3 bucket. The ImageUtil class was also added to handle the image resizing for uploading images.