

PROJECT-6 | CSCI 5448 | Object Oriented Analysis and Design

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This project :

The project is titled Boulder Apartment Finder. Team members for this project include Divya Sivani Pragadaraju, Mukund Kalantri, and Shreyas Kapoor. The main objective of this project is to create a website that can find the availability of apartments in Boulder. Taking the idea from popular websites like Zillow, apartmentList, or our own ralphieList, we plan to learn how to design and maintain any website end to end.

Status summary :

Work done :

So far we have created a user interface that will enable the customer to create an account on our website in case he is visiting our site for the first time, otherwise let the customer sign in if he is an existing customer/user. Following, we have created an interface where the customer can update his information and all this data will then be collected to be stored in our database. Also, we have created an interface for a page that would display the list of available apartments to the customer by fetching it from the sql database. To create all these we made use of Spring MVC Architecture which is well known to help develop enterprise level applications, Hibernate Architecture which is a powerful high performance object Relational Persistence and query service for java application.

As a team we have divided these tasks such that Shreyas Kapoor has worked on developing the backend part of this project while Divya Sivani Pragadaraju, Mukund Kalantri have worked on the front end part of this project.

Changes or Issues Encountered :

Not many significant changes so far as we are adhering to the ideas and approaches we planned in the initial phase of this project except for wanting to use factory pattern while implementing the functionality of the controller which is responsible for processing the requests of users while building appropriate models and finally pass them to the view for further processing instead of using strategy in this project.

As this is our first time ever doing this, it took almost 2 days to have the initial setup done in our machines. We had to install maven, MySQL, Tomcat and have basic architecture of MVC + SpringBoot + Hibernate ready before we could actually start coding for our project.

Patterns:

While implementing this project, we have made use of MVC pattern which stands for Model view controller pattern wherein the model part consists of application data, the controller for processing the user requests and building proper models while for View, we will have a UI screen for the web application from where users will interact. All this is done with the help of spring MVC Architecture. For implementing the functionality of the controller we would want to use the factory pattern. Further, We are maintaining a logger file which will store all the actions taken on the application per day. We also have a tracker where we will maintain a list of schedules for apartment tours. All actions taken by any user will generate a notification that would be sent to both of these. It is important to have one logger file for each day for all the users and one tracker file throughout the life of this application. Thus, making use of observer pattern in this process. Also, We have different actions that would be performed on the SQL Databases thereby code refactoring with sql would be handled with singleton.

Plan for next Iteration:

In order to meet our objective of building an effective Apartment finder website, we have to work on creating an interactive reservation interface which would enable the customer to book an appointment from the available list of apartments and a review page wherein the customer would provide a review from his experience along with giving it some rating.

Class Diagram:



