CSCI-5448 DOCTOR FINDER

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PROJECT SUMMARY

Doctor Finder is a web application that provides a service to help patients to find the right doctors based on some criteria

Functionalities:

- **Patient** can create an account, login, search for doctors, sort the searching results, view doctor's info, write reviews for doctors, locate a doctor's location on map, save/remove favorite doctors and edit account info.
- Doctor can login and update information
- Admin can add/delete/update users and doctors information.

Doctor Finder Website: http://drfinder.pythonanywhere.com/

Use Case-07: Search for Doctor

Use Case ID:	UC-07
Use Case Name:	Search for Doctor
Description:	Patient can search for a doctor based on doctor's specialty, location, and insurance accepted.

Actors:	Patient			
Pre- conditions:	Patient wants to search for a doctor based on specific search criteria either or not he has an account. Patient's current location is chosen as the default location.			
Post- conditions:	A list of doctors has been displayed based on the provided search criteria.			
Frequency of Use:	Frequently throughout the day by patients			
Flow of		Actor Action	System Response	
Events:	1	Patient selects the required specialty.		
	2	Patient chooses his current location.	DoctorFinder fills in location field (state, city, zip code) automatically.	
	3	Patient selects his type of insurance.		
	4	Patient submits his selections.	DoctorFinder displays a list of doctors based on the provided search criteria.	
Variations:	2. The Patient enters a specific location (state, city or zip code).			

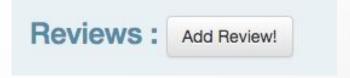


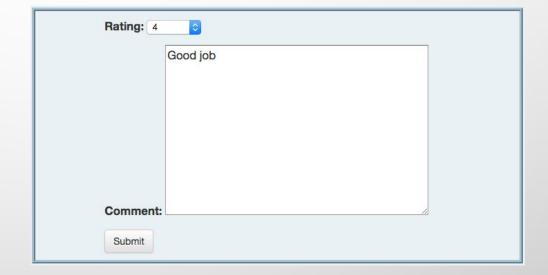
City: Denver	
State: Colorado 😊	
Zip: 80246	
Insurance: Aetna	

Use Case-13: Review and Rate Doctor

Use Case ID:	UC-13
Use Case Name:	Review and Rate Doctor
	Allow patient to rate and post a review for the doctor on the doctor's profile page

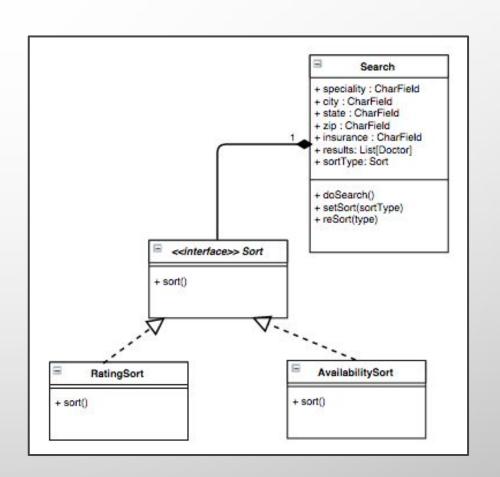
Actors:	Patient			
Pre- conditions:				
Post- conditions:	Rate and review have been added to the doctor's profile page.			
Frequency of Use:	Frequently by the patient.			
Flow of		Actor Action	System Response	
Events:	1	Patient selects "Write a Review" function.	DoctorFinder opens a dialog box for the patient to type in his review and provides options from 1 to 5 to select the doctor's rating.	
	2	Patient types in the review.		
	3	Patient gives his rating to the doctor.		
	4	Patient selects "Submit" function.	DoctorFinder saves the review and rating and posts them to the Doctor's profile page.	
Variations:				





Design Pattern - Strategy

- Sort doctor results based on sort type:
 - Sort results by doctor's rating
 - Sort results by doctor's availability



Design Pattern - Strategy

sort.py

```
class Sort():
    def sort(self, results):
        raise NotImplementedError("You have not implemented the sort method")

class RatingSort(Sort):
    #sort results in descending order by rating
    def sort(self, results):
        return sorted(results, key=attrgetter('rating'), reverse=True)

class AvailabilitySort(Sort):
    #sort results in ascending order by availability
    def sort(self, results):
        return sorted(results, key=attrgetter('availability'))
```

Design Pattern - Strategy





ABOUT PROJECT

Interesting things that we learned from our project:

- ★ Use of a Web Framework (**Django**)
- ★ Applying Object Oriented approach using Python
- ★ Learning and implementing MVC using MySQL for the database
- ★ Learning how to adopt new approaches by evaluating trade-offs









Project Demo



- Doctor Finder Website: http://drfinder.pythonanywhere.com/
- Full Demo Video: https://youtu.be/bp1lg9qfWsU (5:18)
- Short Demo Video: https://youtu.be/020MeN0jRY4 (2:33)