Kennedy Uzoho
6-1 Milestone: Dashboard Data Visualizations
CS-340 Client/Server Development

6-1 Milestone: Dashboard Data Visualizations66920i0

1. CRUD Python module that was created in Project One is ready to be used.

   Make sure the MongoDB database is up and running…

   Imports necessary libraries, then

   ```
   from animal_shelter import AnimalShelter
   ```

2. Added the functionality in the callback routine for the instantiation of the CRUD object. User authentication was applied in the CRUD object.

   ```
   #Set the username and password for mongoDB
   username = "user"
   password = "password″

   #instantiate the AnimalShelter object
   shelter = AnimalShelter(username, password)
   ```

3. Updated the code to create an interactive data table on the dashboard which shows an unfiltered view of the Austin Animal Center Outcomes data set.

   To populate the data onto the table, I utilized the CRUD Python module, from Project One, to run a "retrieve all/read/read_all" query and bring in the data from MongoDB.

   ```
   df = pd.DataFrame.from_records(shelter.read_all({}))
   ```

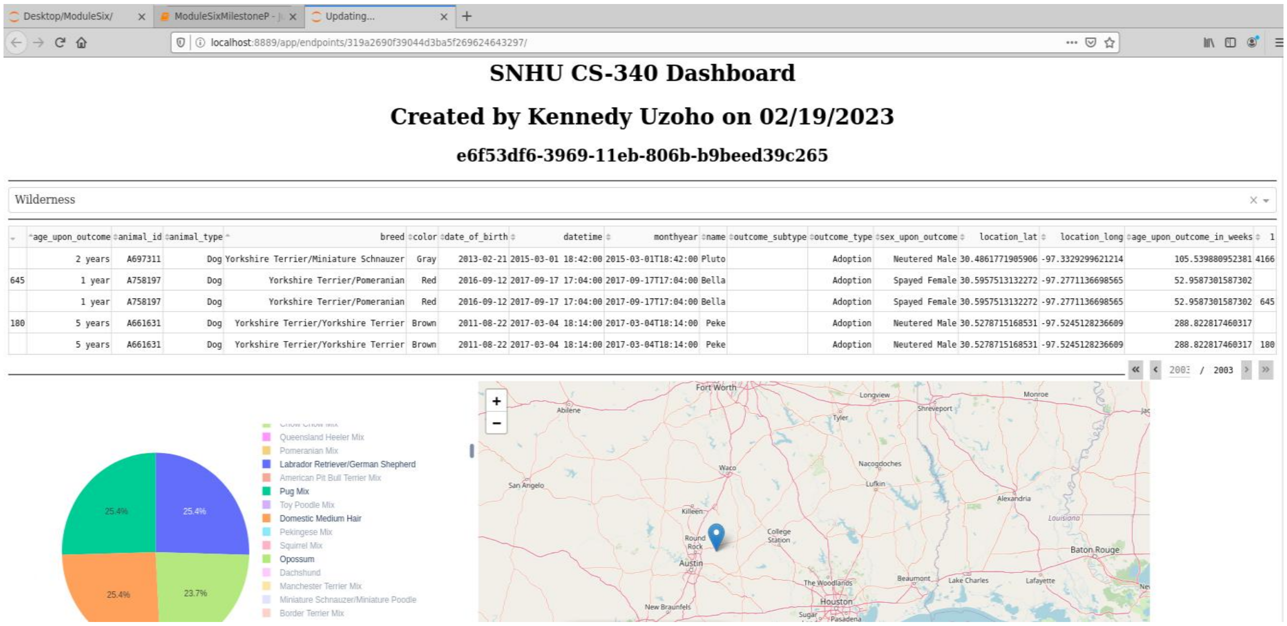
   Added code to filter interactive data table with MongoDB queries such as shelter.read(), update(), or delete()

4. Added a geolocation chart that displays data from the interactive data table in the existing dashboard using the below code snippet,

   ```
   def update_map(viewData):
       dff = pd.DataFrame.from_dict(viewData)
       # Austin TX is at [30.75,-97.48]
       return [
           dl.Map(style={'width': '1000px', 'height': '500px'}, center=[30.75,-97.48], zoom=10, children=[
               dl.TileLayer(id="base-layer-id"),
               # Marker with tool tip and popup
               dl.Marker(position=[30.75,-97.48], children=[
                   dl.Tooltip(dff.iloc[0,4]),
   ```

```
                        dl.Popup([
                            html.H1("Animal Name"),
                            html.P(dff.iloc[1,9])
                        ])
                    ])
                ])
            ]
```

IPYNB execution.



Desktop/ModuleSix/
ModuleSixMilestoneP - Ju
Updating...
localhost:8889/app/endpoints/319a2690f39044d3ba5f269624643297/

SNHU CS-340 Dashboard

Created by Kennedy Uzoho on 02/19/2023

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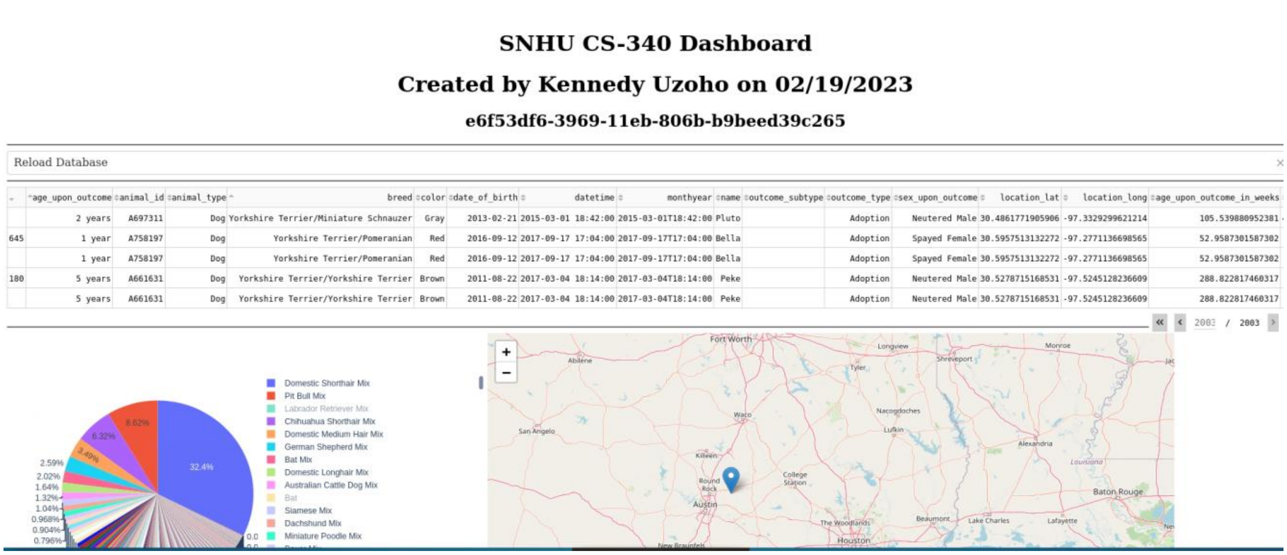
Wilderness

	age_upon_outcome	animal_id	animal_type	breed	color	date_of_birth	datetime	monthyear	name	outcome_subtype	outcome_type	sex_upon_outcome	location_lat	location_long	age_upon_outcome_in_weeks	1
	2 years	A697311	Dog	Yorkshire Terrier/Miniature Schnauzer	Gray	2013-02-21	2015-03-01 18:42:00	2015-03-01T18:42:00	Pluto		Adoption	Neutered Male	30.4861771905906	-97.3329299621214	105.539880952381	4166
645	1 year	A758197	Dog	Yorkshire Terrier/Pomeranian	Red	2016-09-12	2017-09-17 17:04:00	2017-09-17T17:04:00	Bella		Adoption	Spayed Female	30.5957513132272	-97.2771136698565	52.9587301587302	
	1 year	A758197	Dog	Yorkshire Terrier/Pomeranian	Red	2016-09-12	2017-09-17 17:04:00	2017-09-17T17:04:00	Bella		Adoption	Spayed Female	30.5957513132272	-97.2771136698565	52.9587301587302	645
180	5 years	A661631	Dog	Yorkshire Terrier/Yorkshire Terrier	Brown	2011-08-22	2017-03-04 18:14:00	2017-03-04T18:14:00	Peke		Adoption	Neutered Male	30.5278715168531	-97.5245128236609	288.822817460317	
	5 years	A661631	Dog	Yorkshire Terrier/Yorkshire Terrier	Brown	2011-08-22	2017-03-04 18:14:00	2017-03-04T18:14:00	Peke		Adoption	Neutered Male	30.5278715168531	-97.5245128236609	288.822817460317	180



SNHU CS-340 Dashboard

Created by Kennedy Uzoho on 02/19/2023

e6f53df6-3969-11eb-806b-b9beed39c265

Reload Database

	age_upon_outcome	animal_id	animal_type	breed	color	date_of_birth	datetime	monthyear	name	outcome_subtype	outcome_type	sex_upon_outcome	location_lat	location_long	age_upon_outcome_in_weeks
	2 years	A697311	Dog	Yorkshire Terrier/Miniature Schnauzer	Gray	2013-02-21	2015-03-01 18:42:00	2015-03-01T18:42:00	Pluto		Adoption	Neutered Male	30.4861771905906	-97.3329299621214	105.539880952381
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