Service Layers-revised

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       I plan on using MERN stack to construct a three tier architecture of my application-frontend, backend, and the database.
React will be used for the frontend /UI of the application while Express and Node make up the server side, and MongoDB will handle my database. I will be implementing Express.js models for URL routing matching an incoming URL with a server function and handling HTTP requests and responses to post
and retrieve ad for pet sitters.

I will also use routes in order to allow my users to move between component to preserve user state and improve your app's user experience by simplifying site navigation. The controllers will allow my application to get data from the database and views to render the data onto the browser.

Pets Route: to forward the supported requests to the appropriate controller functions.

Method: GET

GET : Purpose of this method is so that people who are interested in pet sitting can search for pet based on pet breed or size(lb) . Controller functions will to get the requested data from the models, create an HTML page displaying the data, and return it to the user to view in the browser.


```
{
"id": 0,
"category": {
"id": 0,
"name": "string"
},
"name": "doggie",
"photoUrls": [
"string"
]
```

POST: : add new ad to find pet sitters and/or to create user profile for the first time. They will fill out a form and upload picture , and hit submit . Once the ad is posted users will be able to see their ad.

```
{
"id": 0,
"username": "string",
"firstName": "string",
"lastName": "string",
"email": "string",
"password": "string",

}
```

Method PUT :

Once an ad has been posted , user will be given the option to update and make some changes to it. Once they hit submit , the ad will be rendered onto the ad page once again. Purpose: When an users clicks on the update button on the pets ad page, they will be redirected to an update Dog page with a pre-filled form with current data. When they make the necessary changes and click submit this endpoint will be called with the modified data.

Example requests: curl --request PUT \
 capstone22.herokuapp.com/api/pets/adid

Method: DELETE

Purpose: When an users clicks on the delete button on the pet sitters ad, details page of this endpoint will be called with ad id parameter . The users will then be redirected to the pet ad home page upon successful processing of the request by this endpoint.

```
                                          ┌──────────┐       HTTP
                                          │  Routes  │◄──── Request
                                          └────┬─────┘
                                               │
                                        Forward request to
                                        appropriate controller
                                               │
                                               ▼
   ┌──────────┐      ┌────────┐  read/write ┌─────────────┐
   │          │      │        │    data     │             │   HTTP Response
   │ Database │◄────►│ Models │◄──────────► │ Controllers │─────► (HTML)
   │          │      │        │             │             │
   └──────────┘      └────────┘             └──────┬──────┘
                                                   ▲
                                                   │
                                            ┌──────┴──────┐
                                            │   Views     │
                                            │ (templates) │
                                            └─────────────┘
```