

Add dynamic pages



Estimated time needed: 1 hour

In the previous module, you created the necessary backend services to manage dealerships and reviews.

It's time to create user-friendly and aesthetic front-end pages to present these services to end users.

Prerequisites:

1. Sentiment Analyzer service deployed on Code Engine should be accessible. Please refer to the previous lab if required.
2. Backend service with Express-MongoDB should be running on one of the terminals. Please refer to [the lab](#) if required.

Environment setup

If your lab environment has been reset and you want to continue what you have done previously, you can `git clone` or pull the latest code from your GitHub repository.

1. Open another new terminal, and you can run `git clone` or pull the latest code from your GitHub repository.
2. Run the following to set up the Django environment:

```
cd /home/project/xrwvm-fullstack_developer_capstone/server
pip install virtualenv
virtualenv djangoenv
source djangoenv/bin/activate
```

3. Install the required packages by running the following command:

```
python3 -m pip install -U -r requirements.txt
```

4. Run the following command to perform model migration:

```
python3 manage.py makemigrations
python3 manage.py migrate
python3 manage.py runserver
```

Add and set up REACT Component for Dealers Page

1. Open `frontend/src/App.js` and import and add the Dealers component in the top along with other components. This component has already been created for you and uses a table element to list the dealers. Feel free to change the look and feel.

```
import Dealers from './components/Dealers/Dealers';
```

2. Add the route for `/dealers` to render the Dealers component.

```
<Route path="/dealers" element={<Dealers/>} />
```

3. Open server/djangoproj/urls.py and add the routes for Dealers and Dealer in it.

```
path('dealers/', TemplateView.as_view(template_name="index.html")),
```

4. Open a new terminal and build the front end as before.

```
cd /home/project/xrwm-fullstack_developer_capstone/server/frontend
npm install
npm run build
```

3. Go back to the terminal where you set up the Python environment and see if the server is running without errors. The server should have restarted when you built the front end. If not, please restart it.
4. Test the get_dealers view in the lab by launching the application with the development server on port 8000, as done earlier. You should see a list of dealers in table format.

Django Application

▼ Click here if the dealer's list is not visible











1. Append a "/" to the end of the get_dealers path in the urls.py file located in the djangoapp directory. The code should look like this:

```
path(route='get_dealers/', view=views.get_dealerships, name='get_dealers'),
```






2. Ensure you have started the Mongo server and updated the backend URL in the .env file.
 - If you updated the backend URL in the .env file after starting the Django server, make sure to stop and restart the server.
5. Take a screenshot of the same along with the URL shown in the sample below and save it as get_dealers.png or get_dealers.jpg.

Dealerships					
Home About Us Contact Us					
ID	Dealer Name	City	Address	Zip	State
1	Holdlamis Car Dealership	El Paso	3 Nova Court	88563	Texas
2	Temp Car Dealership	Minneapolis	6337 Butternut Crossing	55402	Minnesota
3	Sub-Ex Car Dealership	Birmingham	9477 Twin Pines Center	35285	Alabama
4	Solarbreeze Car Dealership	San Antonio	5800 Welch Circle	75241	Texas
5	Regrant Car Dealership	San Diego	9300 La Jolla Village Drive	21203	Maryland
6	Stronghold Car Dealership	San Francisco	10000 California	94603	Pennsylvania
7	Job Car Dealership	Pueblo	9000 Bridge Park	81010	Colorado
8	Bytecard Car Dealership	Topeka	288 Larry Place	66642	Kansas
9	Job Car Dealership	Dallas	253 Hanson Junction	75216	Texas
10	Alphazap Car Dealership	Washington	108 Memorial Pass	20005	District of Columbia

6. Log in with one of the valid credentials through the login panel on top of the homepage and take a screenshot of the dealer details rendered, along with the option to post a review. Save the screenshot as get_dealers_loggedin.png or get_dealers_loggedin.jpg.

Dealerships						
Home About Us Contact Us			lauvshree Logout			
ID	Dealer Name	City	Address	Zip	State	Review Dealer
1	Holdlamis Car Dealership	El Paso	3 Nova Court	88563	Texas	
2	Temp Car Dealership	Minneapolis	6337 Butternut Crossing	55402	Minnesota	
3	Sub-Ex Car Dealership	Birmingham	9477 Twin Pines Center	35202	Alabama	
4	Solarbreeze Car Dealership	Birmingham	3000 1st Avenue North	35202	Texas	
5	Regrant Car Dealership	Minneapolis	1300 Gough Street	55403	Minnesota	
6	Stronghold Car Dealership	Philadelphia	2200 Locust Street	19104	Pennsylvania	
7	Job Car Dealership	Pueblo	9 Cambridge Avenue	81010	Colorado	
8	Bytecard Car Dealership	Topeka	288 Larry Place	66642	Kansas	
9	Job Car Dealership	Dallas	253 Hanson Junction	75216	Texas	
10	Alphazap Car Dealership	Washington	108 Memorial Pass	20005	District of Columbia	

7. Click the dropdown for state and select any one to display the dealership for just that state. Take a screenshot and save it as dealersbystate.png or dealersbystate.jpg.

Dealerships						
Home About Us Contact Us			lauvshree Logout			
ID	Dealer Name	City	Address	Zip	Maryland	Review Dealer
5	Regrant Car Dealership	Baltimore	93 Golf Course Pass	21203	Maryland	
12	Tin Car Dealership	Silver Spring	10000 Peach Lane	20908	Maryland	
13	Y-Solowarm Car Dealership	Baltimore	4000 Fairview Drive	21206	Maryland	
34	Gembucket Car Dealership	Silver Spring	8000 Hill	20904	Maryland	
41	Tres-Zap Car Dealership	Baltimore	9 Sherman Hill	21275	Maryland	

Add REACT Component Dealer showing reviews

1. Open frontend/src/App.js and import and add the route to the Dealer REACT component to the rest of the routes. This will render a dealer-specific REACT page along with the reviews when you click the link on the table of dealers.

This page also has a link to post reviews for the users who are logged in. You will add the Post Review page in the next task.

```
import Dealer from "../components/Dealers/Dealer"

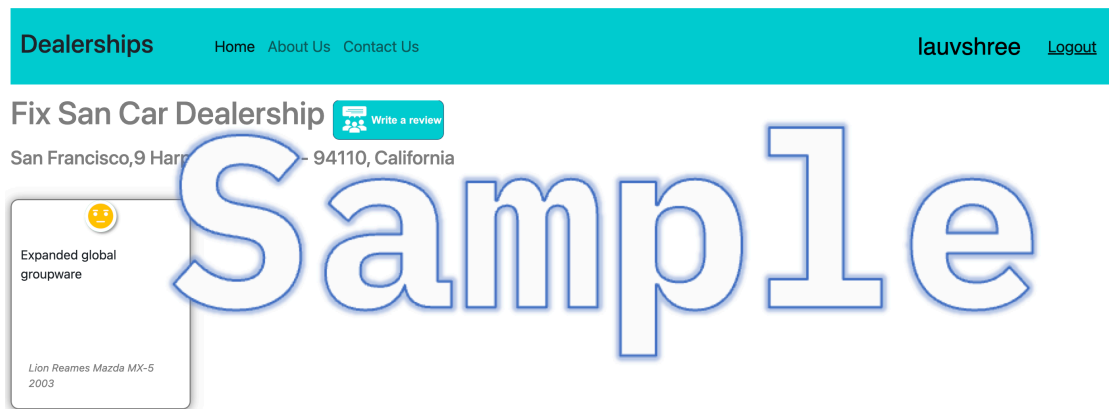
<Route path="/dealer/:id" element={<Dealer/>} />
```

2. Build the front end again in the same terminal where you built it earlier.
3. Open server/djangoproj/urls.py and add the path for showing the dealer page by including the following code:

```
path('dealer/<int:dealer_id>', TemplateView.as_view(template_name="index.html")),
```

4. Refresh the application go to the View Reviews page and click any dealer's name link to see its reviews.

- Take a screenshot of the same along with the URL in the sample below and save it as `dealer_id_reviews.png` or `dealer_id_reviews.jpg`.



Create a dealer details or reviews page

An authenticated user should be able to click this link and add a review for the dealer. We will add a review submission page.

- Open and view `frontend/src/components/Dealers/PostReview.jsx`. Make any changes to the look and feel as you wish.
- Import `PostReview` component and add `postreview/<dealer id>` route to `frontend/src/App.js`.

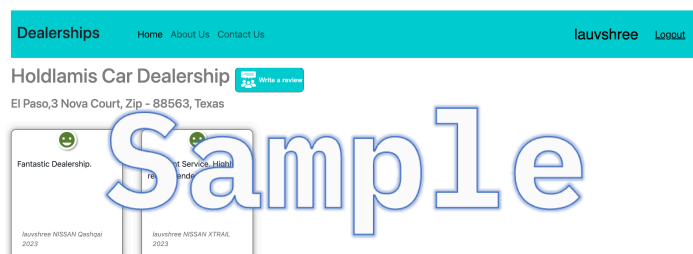
```
import PostReview from "../components/Dealers/PostReview"

<Route path="/postreview/:id" element={<PostReview/>} />
```

- Go to the terminal where you built the front end and run the build again.
- Open `server/djangoprojs/urls.py` and add the path to the post review page by including the following code:

```
path('postreview/<int:dealer_id>', TemplateView.as_view(template_name="index.html")),
```

- Log in with one of the registered usernames and passwords. You should see the Post Review link. Test the link by adding a review to a dealership.



▼ Click here if the CarMake dropdown is not working

Start by deleting the `db.sqlite3` file from the server directory, and also remove the `__pycache__` folder and `__init__.py` file (if present) from the `djangoapp` directory. These steps are necessary to ensure a clean state for migrations.

Next, execute the following migration commands again:

```
python3 manage.py makemigrations
python3 manage.py migrate --run-syncdb
```

Then, restart the Django server.

6. Enter the details of the review and take a screenshot of the same before submitting it. Save it as dealership_review_submission.jpg and dealership_review_submission.png.

Regrant Car Dealership

Excellent Dealership. Highly Recommended.

Sample

Purchase Date

01/12/2023

Car Make

NISSAN XTRAIL

Car Year

2023

Post Review

7. If the operation is successful, you will see the updated page with your review along with the sentiment.

Regrant Car Dealership

Write a review

Baltimore,93 Golf Course Pass, Zip - 21203, Maryland

Excellent Dealership. Highly Recommended.

Sample

lauvshree NISSAN XTRAIL
2023

8. Take a screenshot of the Dealer details page along with the review you posted and save it as added_review.png or added_review.jpg.

Summary

In this lab, you have created a dealer list, dealer details, and a provision for adding reviews. At this point, you have completed the main app development work.

Author(s)

Lavanya

Other Contributor(s)

Yan Luo
Upkar Lidder
Priya

© IBM Corporation. All rights reserved.