Schüttflix Take Home Task - Backend

For your take home challenge please create a backend service for accessing information about our Trucks fleet.

Requirements:

1. The service can be written in any language of your choice. Ideally TypeScript, Kotlin or PHP as this is what we use at Schüttflix
2. The service should have the following endpoints:
    - `[GET]/trucks` - This endpoint should return a list of all trucks with their latitude and longitude.
    - `[POST]/trucks` - This endpoint should allow the adding of a new Truck and return the newly created truck as its response.
    - `[GET]/trucks/<id>` - This endpoint should return detailed information about a specific truck, including its ID, location, and any other relevant details.
    - `[GET]/trucks?lat=<latitude>&lon=<longitude>` - Expanded version of the get trucks endpoint that should return a list of all trucks within a certain radius of the specified latitude and longitude.
3. The service should use a database to store truck data.
4. The service should have integration tests for the endpoints defined above
5. The service should use appropriate HTTP status codes and error messages.

Tada you're done! 🎉

Example Schema & Data

Here is an example schema and some example data for it.
Feel free to use it or expand it as you see fit.

```sql
CREATE TABLE trucks (
  id SERIAL PRIMARY KEY,
  latitude DECIMAL(10, 8) NOT NULL,
  longitude DECIMAL(11, 8) NOT NULL,
  model VARCHAR(100),
  make VARCHAR(100),
  year INTEGER,
  capacity INTEGER,
  status VARCHAR(50)
);
```

```sql
INSERT INTO trucks (latitude, longitude, model, make, year, capacity, status) VALUES
(37.7749, -122.4194, 'Semi Truck', 'Volvo', 2018, 20000, 'Available'),
(37.7833, -122.4167, 'Dump Truck', 'Mack', 2015, 30000, 'Available'),
(37.7749, -122.4200, 'Box Truck', 'Isuzu', 2016, 10000, 'In Use'),
(37.7833, -122.4150, 'Flatbed Truck', 'Ford', 2017, 25000, 'Available'),
(37.7800, -122.4117, 'Semi Truck', 'Peterbilt', 2019, 22000, 'Available'),
(37.7800, -122.4100, 'Box Truck', 'Freightliner', 2015, 15000, 'Available'),
(37.7800, -122.4100, 'Dump Truck', 'Kenworth', 2016, 28000, 'Available'),
(37.7749, -122.4222, 'Flatbed Truck', 'Chevrolet', 2017, 18000, 'Available'),
(37.7800, -122.4117, 'Box Truck', 'Hino', 2019, 12000, 'Available'),
(37.7749, -122.4194, 'Semi Truck', 'Kenworth', 2015, 21000, 'In Use'),
(37.7833, -122.4167, 'Dump Truck', 'Mack', 2017, 32000, 'Available'),
(37.7749, -122.4200, 'Box Truck', 'Freightliner', 2018, 8000, 'Available'),
(37.7833, -122.4150, 'Flatbed Truck', 'Ford', 2016, 24000, 'Available'),
(37.7800, -122.4117, 'Semi Truck', 'Peterbilt', 2015, 20000, 'Available'),
(37.7800, -122.4100, 'Box Truck', 'Isuzu', 2014, 10000, 'Available'),
(37.7800, -122.4100, 'Dump Truck', 'Volvo', 2015, 27000, 'Available'),
(37.7749, -122.4222, 'Flatbed Truck', 'Mack', 2013, 19000, 'Available'),
(37.7800, -122.4117, 'Box Truck', 'Hino', 2012, 11000, 'In Use'),
(37.7749, -122.4194, 'Semi Truck', 'Kenworth', 2011, 22000, 'Available'),
(37.7833, -122.4167, 'Dump Truck', 'Mack', 2010, 31000, 'Available'),
(37.7749, -122.4200, 'Box Truck', 'Freightliner', 2009, 9000, 'Available'),
(37.7833, -122.4150, 'Flatbed Truck', 'Ford', 2008, 23000, 'Available'),
```