#### Lorna Mitchell, Aiven





#### The PHP Framework for Web Artisans

#### Aiven

Database-as-a-Service, on a cloud of your choice



#### Databases

- MySQL Natural match for PHP
- PostgreSQL MySQL's older brother
- Redis Cache? Queue? You choose!
- **OpenSearch** Open source search backend (fork of Elasticsearch)

Bonus content: Artisan helper for Aiven with Laravel



### **Eloquent ORM**

Eloquent is Laravel's database package and ORM

It supports PostgreSQL and MySQL, used in most applications



#### **MySQL and PostgreSQL** A relational database for every occasion



## **Configure Connection**

#### MySQL connection:

DATABASE\_URL=mysql://avnadmin:s3cr3t@host:port/defaultdb

(may need to disable mysql.sql\_require\_primary\_key )

#### PostgreSQL connection:

DATABASE\_URL=postgres://avnadmin:s3cr3t@host:port/defaultdb
DB\_CONNECTION=pgsql

#### Remove other DB\_\* fields to use connection strings



### **Quick Test: Breeze**

Laravel Breeze is users-in-a-box for Laravel - with database backend.

- Set database config
- Run php artisan migrate
- Start your app php artisan serve
- Register at https://localhost:8000/register
- Check the database for users





#### In-memory data store



# **Redis Requirements**

Redis has some dependencies, **either one of**:

- PHP extension PhpRedis from PECL
- The userland predis/predis package

Configure redis in .env:

REDIS\_URL=rediss://default:s3cr3t@host:port



### **Redis in Action**

Add a route to see Redis in action

```
use Illuminate\Support\Facades\Redis;
```

```
Route::get('/redis', function () {
    $count = Redis::get('count');
    if(!$count) {
        $count = 0;
    }
    Redis::incr('count');
    return "Current value of count: " . $count;
});
```

The key is laravel\_database\_count



### **Redis with Laravel**

Simple data store, cache, or queue.

Cache: https://laravel.com/docs/8.x/cacheHelper functions including tagging, expiry

Queues: https://laravel.com/docs/8.x/queues

- An object to represent a job and payload
- Performed asynchronously by worker apps



#### Search all the things! (also Elasticsearch)



## **OpenSearch and Scout**

- Laravel Scout supports search backends
  - https://laravel.com/docs/8.x/scout
- Plus the Elasticsearch/OpenSearch addition Explorer
  - https://jeroen-g.github.io/Explorer/

Great writeup: https://laravel-news.com/explorer



Add some Aiven magic to your Laravel project! https://github.com/aiven/aiven-laravel/



Add some artisan commands for easy Aiven database connection and management.

composer require aiven/aiven-laravel

#### Set up the environment variables:

- AIVEN\_API\_TOKEN
- AIVEN\_DEFAULT\_PROJECT



### **Database Config**

Your artisan command should now have new entries: php artisan list

#### Get database lists and config:

php artisan aiven:list

php artisan aiven:getconfig --service my-database

Paste the config into your .env file



### **Avoid Cloud Bills**

Leaving services running can add up!

Check if the database is running:

php artisan aiven:state --service my-database

#### Turn it on or off:

php artisan aiven:powerup --service my-database
php artisan aiven:powerdown --service my-database



#### **Aiven and Laravel**

#### And a little sprinkle of helper magic



#### Resources

- https://github.com/aiven/aiven-laravel
- https://aiven.io (free trial)
- https://laravel.com
- https://lornajane.net

