

Advanced Laravel Topics You Should Know

1. Advanced Laravel Architecture

- Service Container & Dependency Injection (bindings, contextual binding)
- Custom Service Providers
- Facades internals
- Repository & Service Layers
- Domain-Driven Design (DDD)
- CQRS pattern in Laravel

2. Performance Optimization

- Query optimization & avoiding N+1 queries
- Caching strategies (Redis/Memcached, tagged cache)
- Queues & Jobs (delayed, batch)
- Event broadcasting & Laravel Echo
- Horizon for queue management

3. Advanced Eloquent

- Global & Local Scopes
- Custom Casts & Mutators
- Eloquent Macros
- Polymorphic relations
- Pivot table enhancements
- Model Observers

4. Security & Authorization

- Advanced Gates & Policies
- Custom Guards & Providers
- Rate limiting APIs
- CSRF & XSS deep understanding
- Signed & Temporary URLs

5. API Development

- API Resources & Transformers
- Versioned APIs
- Advanced validation & custom rules
- Sanctum & Passport authentication
- Error handling & custom exceptions

6. Testing & Quality

- Feature vs Unit testing
- Mocking dependencies
- Test factories & seeders
- Pest framework

- Continuous Integration (CI/CD)

7. Package Development

- Creating Laravel packages
- Publishing configs, migrations, views
- Versioning & distributing packages
- PSR-4 autoloading
- Private composer repositories

8. Laravel Internals

- Request lifecycle
- Route & config caching internals
- Middleware internals
- Routing resolution flow
- Service container binding resolution

9. Advanced Tooling

- Laravel Telescope
- Laravel Debugbar
- Laravel Pint
- Laravel Octane

10. Scaling Laravel

- Horizontal scaling
- Redis session handling
- Queue workers across servers
- DB read/write splitting
- Cloud deployment
- Microservices & API gateways