

# Checklist for back-end developers

## General Best Practices

- ✓ Follow **RESTful API principles** ([REST API Best Practices](#)).
- ✓ Ensure **scalability and performance optimization** (Web Performance Guide).
- ✓ Use **secure coding practices** (OWASP Secure Coding).

## Data Structure & Accessibility

- ✓ Implement **clean, well-structured database design** (Database Normalization Guide).
- ✓ Ensure **efficient data indexing & caching** (Redis Caching Guide).
- ✓ Use **JSON-LD for structured data** ([Schema.org Guide](#)).

## API Accessibility & Optimization

- ✓ Implement **accessible API responses** ([API Accessibility Guidelines](#)).
- ✓ Support **GraphQL or REST with proper versioning** ([GraphQL vs REST](#)).
- ✓ Ensure **API rate limiting & error handling** ([API Rate Limiting](#)).

## Security & Compliance

- ✓ Use **HTTPS with TLS encryption** (TLS Best Practices).
- ✓ Implement **OAuth2 and secure authentication** (OAuth 2.0 Guide).
- ✓ Follow **GDPR & data privacy regulations** ([GDPR Compliance Guide](#)).

## Error Handling & Logging

- ✓ Provide **clear, accessible error messages** (Error Handling Guide).
- ✓ Use **centralized logging & monitoring** (Log Management Best Practices).
- ✓ Ensure **graceful degradation** when services fail ([Failover Strategies](#)).

## Performance Optimization

- ✓ Implement **asynchronous processing** for heavy tasks ([Async Processing Guide](#)).
- ✓ Optimize **database queries & avoid N+1 queries** ([Efficient Query Writing](#)).
- ✓ Use **CDN caching for static assets** (CDN Performance Benefits).

## Testing & Validation

- ✓ Write **unit & integration tests** (Unit Testing Guide).
- ✓ Validate **database queries for efficiency** (SQL Query Optimization).
- ✓ Check **API responses for WCAG compliance** ([Web Accessibility API Guide](#)).

## Final Deployment Checks

- ✓ Set up **automated CI/CD pipelines** ([CI/CD Best Practices](#)).
- ✓ Monitor **server performance & uptime** ([New Relic Monitoring](#)).
- ✓ Regularly **audit code & dependencies** (OWASP Dependency-Check).