

# **Resources for Back-end Development**

## **Database and Data Modeling:**

Visit the following resources to learn more:

- [Visit Dedicated PostgreSQL DBA Roadmap](#)
- [Official Website](#)
- [What is PostgreSQL](#)
- [Learn PostgreSQL - Full Tutorial for Beginners](#)
- [Learn PostgreSQL Tutorial - Full Course for Beginners](#)
- [Postgres tutorial for Beginners](#)
- [MySQL website](#)
- [W3Schools - MySQL tutorial](#)
- [MySQL tutorial for beginners](#)
- [MySQL for Developers](#)
- [MySQL Tutorial](#)
- [MongoDB Website](#)
- [MongoDB Documentation](#)
- [MongoDB Online Sandbox](#)
- [Learning Path for MongoDB Developers](#)
- [Dynamo DB Docs](#)
- [Official Developers Guide](#)

## **API Security and Authentication:**

Visit the following resources to learn more:

- [Official Website](#)
- [What is OpenID](#)
- [OAuth vs OpenID](#)
- [An Illustrated Guide to OAuth and OpenID Connect](#)
- [OAuth 2.0 and OpenID Connect \(in plain English\)](#)
- [User Authentication: Understanding the Basics & Top Tips](#)
- [An overview about authentication methods](#)
- [SSO - Single Sign On](#)
- [OAuth - Open Authorization](#)
- [JWT Authentication](#)
- [Token Based Authentication](#)
- [Session Based Authentication](#)
- [Basic Authentication](#)

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### **Real-Time Applications and WebSocket's:**

Visit the following resources to learn more:

- [Web Sockets - MDN](#)

### **Authentication and Authorization:**

Visit the following resources to learn more:

- [User Authentication: Understanding the Basics & Top Tips](#)
- [An overview about authentication methods](#)
- [SSO - Single Sign On](#)
- [OAuth - Open Authorization](#)
- [JWT Authentication](#)
- [Token Based Authentication](#)
- [Session Based Authentication](#)
- [Basic Authentication](#)
- [HTTP Basic Authentication](#)
- [Illustrated HTTP Basic Authentication](#)
- [What Is Token-Based Authentication?](#)

### **Caching and Performance Optimization:**

Visit the following resources to learn more:

- [Everything you need to know about HTTP Caching](#)
- [Server-side caching](#)
- [Server-side caching and Client-side caching](#)
- [CloudFlare - What is a CDN? | How do CDNs work?](#)
- [Wikipedia - Content Delivery Network](#)
- [What is Cloud CDN?](#)
- [What is a Content Delivery Network \(CDN\)?](#)

### **Web APIs and RESTful Services:**

Visit the following resources to learn more:

- [What is REST?](#)
- [What is a REST API?](#)
- [Roy Fieldings dissertation chapter, Representational State Transfer \(REST\)](#)
- [Learn REST: A RESTful Tutorial](#)

- [Official Website](#)
- [Official Docs](#)
- [JSON API: Explained in 4 minutes](#)
- [OpenAPI Specification Website](#)
- [Open API Live Editor](#)
- [Official training guide](#)
- [OpenAPI 3.0: How to Design and Document APIs with the Latest OpenAPI Specification 3.0](#)

### **Microservices and Containerization:**

Visit the following resources to learn more:

- [Pattern: Microservice Architecture](#)
- [What is Microservices?](#)
- [Microservices 101](#)
- [Primer: Microservices Explained](#)
- [Articles about Microservices](#)
- [Docker Documentation](#)
- [What is Docker | AWS](#)
- [Complete Docker Course - From BEGINNER to PRO!](#)
- [Docker Tutorial](#)
- [Docker simplified in 55 seconds](#)

### **Serverless Architecture:**

Visit the following resources to learn more:

- [Serverless](#)
- [AWS Services](#)
- [Serverless Computing in 100 Seconds](#)

### **DevOps and Continuous Integration/Continuous Deployment (CI/CD):**

Visit the following resources to learn more:

- [DevOps CI/CD Explained in 100 Seconds by Fireship](#)
- [Automate your Workflows with GitHub Actions](#)
- [What is CI/CD?](#)
- [A Primer: Continuous Integration and Continuous Delivery \(CI/CD\)](#)
- [3 Ways to Use Automation in CI/CD Pipelines](#)
- [Articles about CI/CD](#)

## **Real-Time Communication:**

Visit the following resources to learn more:

- [Introduction to WebSockets](#)
- [A Beginners Guide to WebSockets](#)
- [Socket.io Library Bidirectional and low-latency communication for every platform](#)
- [Server-Sent Events - MDN](#)

## **Security and Authorization:**

Visit the following resources to learn more:

- [Why HTTPS Matters](#)
- [Wikipedia - OWASP](#)
- [OWASP Web Application Security Testing Checklist](#)
- [OWASP Top 10 Security Risks](#)
- [OWASP Cheatsheets](#)
- [Content Security Policy \(CSP\)](#)

## **Scalability and Load Balancing:**

Visit the following resources to learn more:

- [Scalable Architecture: A Definition and How-To Guide](#)
- [Scaling Distributed Systems - Software Architecture Introduction](#)

## **GraphQL and API Design:**

Visit the following resources to learn more:

- [Introduction to GraphQL](#)
- [The Fullstack Tutorial for GraphQL](#)
- [GraphQL Tutorials](#)
- [GraphQL Course for Beginners](#)

## **Monitoring:**

Visit the following resources to learn more:

- [What is Monitoring?](#)

