Collection of 50 Interview Question on Web Back-End Development

1. Explain the purpose of the backend?
2. What is a web server?
3. What is the difference between a GET and a POST request?
4. What is an example of when you would use caching?
5. How would you select a cache strategy (e.g., LRU, FIFO)?
6. What are some common issues with ORMs?
7. When should you use asynchronous programming?
8. What is the difference between promises and callbacks?
9. What is closure?
10. What is the difference between a Class and an Interface in JavaScript?
11. What is continuous integration?
12. What is a software development kit (SDK)?
13. What are the tradeoffs of client-side rendering vs. server-side rendering?
14. What are high-order functions? Why are they useful?
15. What is a microservice?
16. How would you design an API?
17. What is the difference between a RESTful and a SOAP API?
18. How do you handle errors when making API calls?
19. What is a database?
20. How would you handle optimizing an existing database?
21. What is the difference between a relational and a non-relational database?
22. How would you query data from a MongoDB database?
23. What are some benefits of using a NoSQL database? What are the different types of NoSQL databases?
24. What is a typical workflow for implementing a new feature on the backend?
25. Explain the essence of DRY and DIE principles?
26. What are the advantages of Web Services?
27. What does Containerization mean?
28. Name some Performance Testing best practices
29. What Do You Mean By High Availability (HA)?
30. What Is CAP Theorem?
31. What REST stands for?
32. What is SQL injection?
33. How to mitigate the SQL Injection risks?
34. Name some performance testing steps
35. Name the difference between Acceptance Test and Functional Test
36. What Is ACID Property Of A System?
37. What Is Sticky Session Load Balancing? What Do You Mean By "Session Affinity"?
38. What are disadvantages of REST web services?
39. What are the difference between Clustered and a Non-clustered index?
40. What are the differences between Continuous Integration, Continuous Delivery, and Continuous Deployment?
41. What is the difference between Monolithic, SOA and Microservices Architecture?
42. What is the difference between JOIN and UNION?
43. What is the difference between WHERE clause and HAVING clause?
44. How does SSL/TLS work ?
45. What do you understand by Distributed Transaction?
46. What is GOD class and why should we avoid it?
47. What is Spike Testing?
48. What is BASE property of a system?
49. What's the difference between Faking, Mocking, and Stubbing?
50. Name some best practices for better RESTful API design