

Topics and Important Playlists from Naveen AutomationLabs:**1. Core Java basics Programming – OOPs Concepts**

https://www.youtube.com/watch?v=Wm0KeM90bUo&list=PLFGoYjJG_fqqylj2ht0aHMx_HnGX3ZFEx

2. Java Collections Framework: https://www.youtube.com/playlist?list=PLFGoYjJG_fqoDQHufg7XVkyb2w6CNpgF

ArrayList, LinkedList, Vector, Set, HashSet, Map, HashMap, LinkedHashMap, Stack, Queue

3. Tricky Java Interviews Questions https://www.youtube.com/playlist?list=PLFGoYjJG_fqpcoeCZsi_czihPa4GoFtrL**4. String, Array based questions, String manipulations, regex****5. Time/Space Complexity:** https://www.youtube.com/playlist?list=PLFGoYjJG_fqpNW4onglHmxyLHfs4pKAjc**6. DS/Algo: -** https://www.youtube.com/playlist?list=PLFGoYjJG_fqpNW4onglHmxyLHfs4pKAjc

Linear Search -

Binary Search -

Merge Sort -

Depth-First Search -

Breadth-First Search -

Quick Sort -

Heapsort -

Counting sort -

Test Automation Tools:

Type	I	II	III
UI Automation Tool	Selenium	Cypress/Playwright	UFT/TestComplete CodeLess Automation
API Automation Tool	Postman Rest Assured Http Client	Karate SOAP UI	Cypress Playwright
Mobile Automation Tool	Appium (iOS/Android)	XCUITest Espresso Detox	Robotium Calabash
Performance Testing	Jmeter Gatling K6	LoadRunner Neoload LoadUI	Silk Performer
Security Testing	Burp Suite OWASP ZAP	Pynt WireShark	

Automation Topics : Testing, UI, API, Backend, Mobile, Performance, Security

1. Understand the role: Before the interview, research the role of a test automation engineer and understand the responsibilities and skills required.
2. Show your experience: Share specific examples of your experience with test automation tools and frameworks, such as Selenium or Appium, and explain how you have used them in previous projects.
3. Be familiar with programming languages: Be prepared to talk about your experience with programming languages commonly used for test automation, such as Java, Python, JavaScript or C#.
4. Demonstrate problem-solving skills: Share examples of how you have identified and solved problems during test automation projects, such as bugs or performance issues.
5. Explain your testing approach: Describe your approach to testing and how you ensure that the software is thoroughly tested before release.
6. Share your understanding of Agile and DevOps: Explain how you have worked in Agile and DevOps environments, and how you have integrated test automation into those processes.
7. Be ready to answer questions about test automation best practices: Be prepared to discuss best practices for test automation, such as maintaining test scripts, testing for different

- environments, and running parallel tests.
8. Be familiar with different test automation tools: In addition to the tools and frameworks you have already used, be familiar with other popular test automation tools, such as TestComplete, TestNG, or JUnit.
 9. Be familiar with API testing concepts: Understand the basics of API testing, including types of API calls, request/response structures, and common API testing tools.
 10. Be familiar with API testing tools: Understand the different API testing tools available in the market, such as Postman, SoapUI, Karate, Jmeter, Rest Assured, Http Client and be able to discuss their capabilities and limitations.
 11. Understand REST and SOAP: Understand the difference between REST and SOAP API's and be familiar with how to test both types of API's
 12. Be able to write test scripts: Be able to write test scripts using a programming language such as Python or Java to automate API testing.
 13. Understand the importance of API documentation: Understand the importance of API documentation and be able to use it to create accurate test cases.
 14. Understand the importance of security testing for API's: Understand the importance of security testing for API's and be familiar with different tools and techniques that can be used to test API's for security vulnerabilities.
 15. Be familiar with API testing in the context of integration testing: Understand how API testing can be used as part of integration testing to test the integration between different systems.
 16. Be familiar with API testing in the context of load testing: Understand how API testing can be used as part of load testing to test the performance of an API under different load scenarios.
 17. Be familiar with API testing in the context of continuous testing: Understand how API testing can be integrated into the continuous testing process to ensure that API's are thoroughly tested throughout the development lifecycle.
 18. Understand the importance of test automation in the context of API testing: Understand the importance of test automation in the context of API testing, and be able to discuss the benefits and limitations of test automation for API testing.
 19. Be ready to talk about test automation in the context of Continuous Integration and Continuous Deployment (CI/CD) pipeline: Understand how test automation fits into the CI/CD pipeline and be prepared to talk about how you have integrated test automation into a CI/CD environment.
 20. Understand the importance of test automation documentation: Be able to discuss the importance of maintaining detailed test automation documentation, such as test plans, test cases, and test results, and be ready to share examples of how you have done this in the past.
 21. Be ready to discuss test automation challenges: Be prepared to discuss common challenges that can arise during test automation projects and how you have overcome them in the past,

such as flaky tests, test maintenance, or test execution time.

22. Be able to discuss Test Automation Metrics: Be familiar with test automation metrics such as test coverage, test execution time, and test success rate, and be ready to discuss how you have used these metrics to improve test automation processes.
23. Understand the importance of test automation in the overall testing process: Be able to explain how test automation fits into the overall software testing process and be able to discuss the benefits and limitations of test automation.
24. Show enthusiasm and willingness to learn: Show that you are passionate about test automation and that you are always looking for ways to improve your skills and knowledge.
25. Be ready to discuss test automation in the context of different testing types: Understand the difference between different types of testing such as unit testing, integration testing, and end-to-end testing, and be able to discuss how test automation can be used to support each type.
26. Be familiar with test automation reporting tools: Understand the importance of reporting test automation results and be familiar with different reporting tools such as Allure, TestNG, or JUnit.
27. Be ready to discuss test automation in the context of different platforms: Be familiar with testing different platforms such as web, mobile, and desktop applications and be able to discuss how test automation can be used to support each platform.
28. Be familiar with test automation in the cloud: Understand the importance of cloud-based testing and be familiar with cloud-based test automation tools and services such as Sauce Labs, BrowserStack, or Testim.
29. Understand the importance of test data management: Be able to discuss the importance of managing test data and be familiar with different test data management tools such as Test Data Generator or Test Data Manager.
30. Understand the importance of test automation in the context of security testing: Be familiar with how test automation can be used to support security testing and be able to discuss the importance of security testing in the overall testing process.
31. Understand the importance of test automation in the context of performance testing: Be familiar with how test automation can be used to support performance testing, and understand the importance of performance testing in the overall testing process.
32. Be ready to discuss test automation in the context of different industries: Understand the specific requirements and challenges of test automation in different industries such as finance, healthcare, or e-commerce, and be able to discuss how test automation can be adapted to support each industry.
33. Be familiar with test automation for IoT devices: Understand the importance of test automation for Internet of Things (IoT) devices, and be familiar with different test automation tools and frameworks that can be used to test IoT devices.
34. Be familiar with test automation for AI and ML-based systems: Understand the importance of test automation for AI and ML-based systems and be familiar with different test

automation tools and frameworks that can be used to test these systems.

35. Understand the importance of test automation in the context of accessibility testing: Understand the importance of accessibility testing and be familiar with how test automation can be used to support accessibility testing.
36. Be familiar with test automation in the context of Continuous Testing: Understand the importance of continuous testing and be familiar with how test automation can be used to support it, including integration with test management and test execution tools.
37. Be familiar with BDD (Behaviour-Driven Development) frameworks: Understand the concepts of BDD and be familiar with different BDD frameworks such as Cucumber, Specflow, or JBehave, and how they can be used for test automation.
38. Be familiar with test automation in the context of IoT devices: Understand the importance of test automation for Internet of Things (IoT) devices, and be familiar with different test automation tools and frameworks that can be used to test IoT devices.
39. Be familiar with test automation for blockchain applications: Understand the importance of test automation for blockchain applications and be familiar with different test automation tools and frameworks that can be used to test blockchain-based systems.
40. Understand the importance of test automation in the context of accessibility testing: Understand the importance of accessibility testing and be familiar with how test automation can be used to support accessibility testing.
41. Be ready to discuss test automation in the context of security testing: Understand the importance of security testing and be familiar with different test automation tools and frameworks that can be used to support security testing.
42. Understand the importance of test automation in the context of performance testing: Be familiar with how test automation can be used to support performance testing, and understand the importance of performance testing in the overall testing process.
43. Be familiar with test automation for microservices architecture: Understand the importance of test automation for microservices architecture and be familiar with different test automation tools and frameworks that can be used to test microservices-based systems.
44. Be familiar with test automation for serverless architecture: Understand the importance of test automation for serverless architecture and be familiar with different test automation tools and frameworks that can be used to test serverless-based systems.
45. Be familiar with test automation for cloud-native applications: Understand the importance of test automation for cloud-native applications and be familiar with different test automation tools and frameworks that can be used to test cloud-native systems.
46. Be familiar with test automation for containerized applications: Understand the importance of test automation for containerized applications and be familiar with different test automation tools and frameworks that can be used to test containerized systems.
47. Be ready to discuss test automation in the context of test-driven development (TDD) and behavior-driven development (BDD): Understand the concepts of TDD and BDD and be

familiar with different test automation frameworks and tools that can be used to support

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48. Understand the importance of test automation in the context of mobile testing: Be familiar with different test automation tools and frameworks that can be used to test mobile applications and understand the specific requirements and challenges of mobile testing.
49. Be ready to discuss test automation in the context of test data management and test data generation: Understand the importance of managing test data and be familiar with different test data management and test data generation tools such as Test Data Generator or Test Data Manager.
50. Be familiar with test automation in the context of chatbot and conversational systems: Understand the importance of test automation for chatbot and conversational systems and be familiar with different test automation tools and frameworks that can be used to test these systems.
51. Be ready to discuss test automation in the context of service virtualization: Understand the importance of service virtualization and be familiar with different service virtualization tools and frameworks that can be used to support test automation.
52. Be familiar with test automation in the context of big data and data analytics: Understand the importance of test automation for big data and data analytics systems and be familiar with different test automation tools and frameworks that can be used to test these systems.
53. Understand the importance of test automation in the context of IoT and embedded systems: Be familiar with different test automation tools and frameworks that can be used to test IoT and embedded systems, and understand the specific requirements and challenges of testing these types of systems.
54. Be ready to discuss test automation in the context of Continuous Integration and Continuous Deployment (CI/CD) pipeline: Understand how test automation fits into the CI/CD pipeline and be prepared to talk about how you have integrated test automation into a CI/CD environment.
55. Understand the importance of test automation in the context of security testing for web applications: Be familiar with different test automation tools and frameworks that can be used to test web applications for security vulnerabilities and understand the specific requirements and challenges of security testing for web applications.