

1. Reuse

2. Linux/UNIX Review—command line

3. Test First/Test-Driven

4. Information hiding/access modifiers

5. Immutable vs. Mutable

6. Abstract data type (ADT)

7. Abstract class vs. Concrete class. Abstract method vs Concrete method

8. Java Syntax, including Liskov - Chapter 2: Review of Objects in Java

9. Write-Compile-Execute

10. Static Methods vs. Dynamic Method

11. JUnit testing

12. Designing test harness for given specifications

13. Abstraction barrier

14. Recipe for implementing an immutable ADT that is specified by an algebraic specification

15. Software process

16. Testing, including Liskov - Chapter 10: Testing and Debugging

17. Black-box testing vs. White-box testing

18. Dynamic Dispatch

19. Interchangeable Parts

20. Liskov - Chapter 1: Introduction

21. Debugging, including Liskov - Chapter 10: Testing and Debugging

22. The `new` rule

23. Factory method pattern

24. *Effective Java* items



25. Liskov - Chapter 3: Procedural Abstraction

26. Liskov - Chapter 4: Exceptions

27. Data Structures—List, Set, Map, Queue, Stack

28. Generics

29. Liskov - Chapter 5: Data Abstraction

30. Iterators, including Liskov - Chapter 6: Iteration Abstraction

31. Abstraction Function

32. Rep Invariant

33. Binary Search

34. Total Order

35. Binary Search Tree (BST)

36. Comparator

37. Asymptotic notation

38. Efficiency

39. Optimization