**Core java basics**

1. Jdk setup
2. First program
3. Developmnt structure
4. Jdk 15 and eclipse setup
5. Programing elements
6. Printing in command prompt
7. Local variables
8. Unary operators
9. Command line arguments
10. If block
11. Nested if blocks
12. If blocks with unary operators
13. Else block
14. If-else blocks inside if block
15. If-else blocks inside else block
16. If-else blocks with unary operators
17. Ternary operator
18. Switch-cases
19. For-loop
20. Break and continue
21. Nesting of loops
22. Labeled loops
23. For-each loop
24. While loop
25. Do-while
26. Methods
27. Attributes
28. Sib
29. Ifr and multiple classes
30. Object and reference variable
31. This key word
32. Constructors
33. Constructor overloading and this()
34. Iib
35. Objects count
36. Encapsulation
37. Inheritance
38. Super() calling statement
39. Packages
40. Access levels
41. Abstrcat classes
42. Interfaces
43. Method overloading
44. Method overriding
45. Auto widening
46. Explicit narrowing
47. Auto upcasting
48. Explicit down casting
49. Achieving polymorphism
50. Final key word
51. Classpath
52. Javadoc, javap and jar commands
53. Scanner class
54. Eclipse

**Core java advanced**

1. Wrapper classes basics
2. Auto boxing and auto unboxing
3. Why do we require exception handling
4. Try-catch
5. Try-catches
6. Try-catch-finally
7. Exceptional conditions of finally
8. Return statement
9. Errors and exceptions
10. Checked and unchecked
11. Throws
12. Throw
13. Throws in overriding
14. Assertions
15. Tostring
16. Equals
17. Hashcode
18. Garbage collection and clone
19. Reflection api
20. Basics
21. Advanced
22. Annotations
23. Static imports
24. Why do we required an inner classes
25. Non static, staic and local inner classes
26. Anaymous inner class
27. Lambda expressions
28. Basics
29. Synchronization
30. Thread life cycle
31. Accessories
32. Basics and important methods
33. Stringbuffer
34. Formatters
35. Regular expressions
36. Dateformaters and numberformatters
37. Arrays
38. Introduction
39. Basic operations
40. Different collections
41. List
42. Queues
43. Avoiding duplicates (set)
44. Maps
45. Iterators
46. Sorting
47. Treeset and treemap
48. Sorting map based on values
49. Modifying collections classes as synchronized
50. Concurrent package
51. Sort even and odd separately
52. Basics
53. Advanced
54. Basics
55. Readers and writers
56. Streams
57. Serialization
58. Adv serialization and externalization
59. Printstream
60. Serialversionuid
61. Foreach() method in iterable interface.
62. Default and static methods in interfaces.
63. Functional interfaces and lambda expressions.
64. Double colon (::) operator
65. Foreach in detailed
66. Java streams creation
67. Java streams usage
68. Java io improvements.
69. Java date and time api improvement
70. Collection api improvements
71. Concurrency api improvements

### General logical coding

**data structures**

How it works

When and whare to use

### Algorithms

How to think

Way to build

### Javascript

1. Basics
2. Why do we require
3. Pre requisites
4. Softwares required.
5. Output
   1. Write
   2. Log
   3. Alert
6. Input
   1. Prompt
   2. Confirm
7. Events
   1. Onclick
   2. Onload
   3. Onchange
   4. Onblur
   5. Execution
      1. Functions
      2. Var
      3. Let
   6. Default
      1. Values
      2. Typeof
      3. Default with if
      4. Double equals (==)
      5. Triple equals (===)

* 1. Basic form validations
     1. Text, password and textarea
     2. Radio
     3. Checkbox
     4. Select
     5. Multi select
  2. Getelementbyid
     1. P, div and span
     2. Swap
     3. Hidden and show
     4. Change colour
  3. Display validation errors
     1. Single field
     2. Multiple fields
  4. Objects
     1. With fields
     2. With functions
     3. With nested
  5. Arrays
     1. Basics
     2. Sort
     3. Array with objects
  6. Form data manipulation
     1. Select all
     2. Reverse select all
     3. Dynamic population
     4. Transfer options
     5. String functions
     6. Trim
     7. Email validation
     8. Multi dimentional array
     9. Sorting records based on column
     10. Sorting options of drop down

**Sql**

1. Oracle 11g installation
2. Sql developer installation
3. Oracle 11g un installation
4. Ddl and dml
5. Dql
6. Not null, unique and primary
7. Foreign key
8. One-to-one
9. One-to-many
10. Many-to-many
11. Date and timestamp
12. Designing employee database
13. 1nf, 2nf and 3nf
14. Designing car database

### Jdbc

1. Setup
2. First program
3. Various ways of insert
4. Fetching
5. Try, catch and finally
6. External properties file
7. Util dev and tx management
8. Prepared statement
9. Callable statement
10. Eclipse usage, scrollable and updatable
11. Batch updates
12. Blob datatype
13. Metadatas
14. Reading db keys
15. Savepoint
16. Rowid
17. Poi setup
18. Storing masterdata in db
19. Crud operations

### Servlets

1. Setup
2. First servlet
3. Input to servlet
4. Client side dev
5. Backend dev
6. War dev
7. With eclipse
8. Again backend dev
9. Welcome file list
10. Getparameter()
11. Form data
12. Constants
13. Life cycle
14. Architecture
15. Doget and dopost
16. Init methods
17. Requestdispatcher
18. Sendredirect
19. Why session tracking
20. Hidden form fields
21. Url rewritting
22. Cookies
23. Httpsession
24. Filters basics
25. Dispatcher types
26. Diff containers
27. Diff listeners

## Jsp

1. Jsp scripting elements
2. Using java code inside jsp 3.jsp implicit objects
3. Page directive
4. Include directive and jsp actions 6.jsp usebean

7.jsp el

# Rest webservices

1. Softwares setup (jdk15, winrar, editplus and eclipse)
2. Springboot first application
3. Rest webservices return types
4. Rest webservices input (pathvariable)
5. Rest webservices input (requestbody)
6. Rest webservices input (requestparam)
7. Get mapping in detail
8. Image file upload
9. Diff file uploads
10. File upload along with json object
11. Multiple files and multiple json objects
12. Excel file upload and processing with poi
13. Text file upload and inserting into db
14. Excel file upload and inserting into db
15. Responseentity - body and status code
16. Responseentity - body, headers and status code
17. Responseentity - file download
18. Mail sending setup and sending text mail
19. Mail with html body
20. Mail with attachment
21. Mail with programmatic configuration(sending from a specific mail account)
22. Email id verification

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# Spring boot

1. Softwares setup (jdk15, winrar, editplus and eclipse)
2. Springboot first app
3. Springboot 2nd app
4. Spring boot auto configuration
5. Spring boot dev tools
6. Spring boot command line arguments
7. Spring boot exception handling
8. Spring boot jar development
9. Spring boot war development

## Spring microservices

8.micro services architecture 9.micro services setup

1. resttemplate
2. feign client with example
3. feign client with zipkin server
4. feign and ribbon client with example
5. feign, ribbon and eureka
6. feign, ribbon, zuul and eureka
7. feign, ribbon, zuul and slueth
8. Rabbitmq and zipkin
9. Spring cloud config server
10. Spring cloud config client
11. Spring cloud actuator
12. Spring cloud bus
13. Spring hystrix

# Spring data jpa

1. Setup
2. Save operation
3. Save all operation
4. Put and patch operations
5. Read and delete operations
6. All methods of crud repository
7. Generators
8. For unique columns
9. For non unique columns
10. Where clause with boolean like
11. Where clause with boolean and
12. Where clause with boolean or
13. Table, column, not-null and unique
14. Where clause with greater than (>) and less than (<)
15. Reading single column
16. Reading multiple columns
17. Dto development
18. Dto single join
19. Dto multiple join
20. One-to-one uni directional
21. One-to-one bi directional
22. One-to-one sharing key (mapsid)
23. One-to-many uni directional
24. One-to-many bi directional
25. Many-to-many

## Spring security

1. Security setup
2. Inmemory credentials and password encoding 3.reading credentials from db
3. Authorization bsics
4. Authorization patterns
5. Tesing authentication through arc 7.setting up angular

8.tesing authorization through angular 9.interception filters

1. Guard services
2. Jwt implementation in spring boot app and calling from angular app

### Angular

1. Installations
2. Un installations
3. Creating a project and understanding default code
4. Creating a component
5. Creating a component with different options
6. Creating a component without ng command
7. Typescript datatypes and fields declaration
8. Typescript methods declaration
9. Typescript methods body development
10. Access specifiers and constructor
11. Bindings
12. Directives
13. Template variable
14. Template driven forms
15. Reactive forms
16. Http client
17. Routing
18. Modular development
19. Tyscript compiler
20. Type assertion
21. Arrow functions
22. Directives
23. Http with template variables
24. One-to-one mapping
25. One-to-many create and read-all
26. One-to-many read, update and delete
27. Managing checkbox
28. Many-to-many crud

## Java fsd practical dev

1.spring boot first app 2.commandlinerunner 3.data jpa setup

1. Data jpa basics
2. Custom repository methods 6.angular client
3. Angular client with template variable
4. Angular client with template driven form- create
5. Angular client with template driven form- create with validations
6. Angular client with template driven form- read
7. Angular client with template driven form- update and delete
8. Angular client with reactive forms create
9. Angular client with reactive forms create- validations
10. Angular client with reactive forms read, update and delete
11. Lombok
12. Mysql usage
13. Oracle usage
14. Example1
15. Example2
16. Example3
17. Example3 continue ...
18. Data poulation
19. Adv methods... Set1
20. Adv methods ... Set2
21. Adv methods ... Set3
22. Adv methods set4
23. One-to-one setup
24. One-to-one unidirectional
25. One-to-one bi-directional
26. One-to-one mapsid
27. One-to-one client dev create
28. One-to-one client dev rud
29. One-to-many uni
30. One-to-many bi
31. One-to-many imp points
32. One-to-many clientside dev1
33. One-to-many clientside dev2
34. One-to-many clientside dev3
35. Many-to-many server side
36. Many-to-many services and controllers
37. Many-to-many client side create
38. Many-to-many client side read, update and delete
39. Bootstrap setup and navbar dev
40. Dashboard dev
41. Dashboard with spring security
42. Pagination in angular
43. Security headers
44. Jwt implementation
45. Aws account creation, ec2 creation and mobaxterm installation
46. Jdk and tomcat installations
47. Jar and war deployment
48. Jar and war deployment with angular code
49. Mysql installation and usage in ec2 instance