Syllabus

Topic

1. Tool setup;

2. Maven, git, github and PR

3. Java Core

    1. Java Basic

    2. OOP - Abstract, Interface, Inner Class, String, StringBuilder, StringBuffer

    3. Except Handling, Runtime, compile time

    4. Enum

    5. Multi threading

    6. Collections

    7. Java 8 new features - Optional, Lambda, Stream*

        1. Stream Exercise

        2. Lambda exercise

4. Core Desgin Pattern

    1. Singleton

    2. Builder

    3. Factory

5. Database

    1. MySQL

    2. MongoDB

    3. Graph Database

6. REST API & PostMan

7. SpringBoot

    1. Write a project using Spring boot, JPA, MySQL

    2. rewrite the project using MongoDB

8. Service Layer IOC

9. Data Access - JPA & Hibernate

10. Spring Secuirty

11. Test Framework

    1. Unit Test

1. Junit
        2. Mockito
        3. PowerMockito
    2. Integration Test
    3. Testing Report
        1. Jacoco
12. Spring MVC and Dispatcher Servelet
13. AOP
14. Spring Batch
15. Cloud Concepts & Docker
    1. CI/CD - Jenkins
    2. AWS
    3. Deploy your springboot app to aws
16. Logger and Splunk
17. Microservice/Kafka
    1. Microservice architecture
    2. Kafka
        1. Message Queues
        2. Topics for Pub-Sub
        3. Producer, Consumer
        4. Write a project using kafka
18. Final Project
    1. launch a big spring boot project with multiple modules
    2. Launch a microservice project

Since every concepts will be expalin using code example, the sequence of topic is not fixed.

Algortihm

1 - 4 weeks: 1 or 2 coding problems each day

5 - Marketing: 2 - 4 coding probelms each day.

How to get Algorithm assignments? The algorithm assignments would be sent to **assignments** channle in slack.
How to submit your algorithm assignments? Share you screenshot to **leetcode** channel in slack. remember add `@channel` to notify all of people in that channle.

Assignments

How to submit your hws?

- Raise a **PR(pull request)** to the branch of repository, the branch name would be your name.
- get more details from the README.md file in repo.

Short Questions

- write the interview questions.

Coding Questions

- write the coding assignments.