LLD	HLD
S.O.L.I.D Principles	Learn About Network Protocols (TCP, Websocket, HTTP etc.)
Strategy Pattern	
Observer Pattern	Client-Server Vs Peer 2 Peer Architecture
Design Notify-Me Button Functionality	C.A.P Theorem
Decorator Pattern	Microservices Imp. Design Patterns (SAGA pattern, Strangler Pattern)
Design Pizza Billing System	
Factory Pattern	Scale from 0 to Million Users
Design Parking Lot	Design Consistent Hashing
Abstract Factory Pattern	Design URL Shortening
Design Snake n Ladder game	Back of the Envelope Estimation
Chain of Responsibility Pattern	Design Key-Value Store
Design Elevator System	SQL vs NoSQL, When to Use Which DB
Proxy Pattern	Design WhatsApp
Design Car Rental System	Design Rate Limiter
Null Object Pattern	Design Search Autocomplete System / Typeahead System
Design Logging System	
State Pattern	Understand Message Queue , Kafka etc.
Design Tic-Tac-Toe game	What is Proxy Servers
Composite Pattern	What is CDN
Design BookMyShow & Concurrency handling	Storage types:
Adapter Pattern	(Block Storage, File Storage, Object Storage (S3) , RAID)
Design Vending Machine	
Singleton Pattern	File System
Design ATM	(Google File System, HDFS)
Builder Pattern	Bloom Filter
Design Chess game	Merkle Tree , Gossiping Protocol
Prototype Pattern	Caching
Design File System	(Cache Invalidation, Cache eviction)
Bridge Pattern	How to Scale Database
Design Splitwise	
Façade Pattern	● Sharding (Horizontal and Vertical)
Splitwise Simplify Algorithm / Optimal Accounting Balancing	● Partitioning
	● Replication, Mirroring
Flyweight Pattern	● Leader Election
Design CricBuzz / CricketInfo	● Indexing etc.
Command Pattern	
Design True Caller	Design Notification System
Interpreter Pattern	Design Pastebin
Design Car Booking Service like Ola, Uber	Design Twitter
Iterator Pattern	Design Dropbox
Design Online Hotel Booking System	Design Instagram
Mediator Pattern	Design YouTube
Design Library Management System	Design Google Drive
Memento Pattern	Design Web Crawler
Design Traffic Light System	Design Facebook News Feed / Newsfeed System
Template Method Pattern	
Design Meeting Scheduler	Design Ticket Master
Visitor Pattern	Design NearByFriends or Yelp

Design Online Voting System Design Inventory Management System Design Cache Mechanism Design LinkedIn Design Amazon Design Airline Management System Design Stock Exchange System Design Learning Management System Design a Calendar Application Design (LLD) Payment System Design (LLD) Chat based system Design Food delivery app like Swiggy and Zomato Design Community Discussion Platform Design Restaurant Management System Design Bowling Alley Machine Design (LLD) Rate Limiter	

Research Paper:
https://www.cs.unibo.it/~cianca/wwwpages/ids/esempi/coffee.pdf

Github Topics:
https://github.com/topics/low-level-design

Class Technique for Car Boooking:

User
+ name:string
+ age:number
+ type:string

+ User(string, string, number):void
+ setName(string):void
+ getName(): string

Cart
+ classes:DrivingClass[]

+ addDrivingClass(DrivingClass):void
+ removeDrivingClass(DrivingClass):void
+ getCartAmount():number

Creditcard
+ number:number

+ CreditCard(number): void

DrivingClass
+ name:string
+ cost:number

+ DrivingClass(string, number):void

Slot
+ Date:date
+ startTime:time
+ endTime:time

+ Slot(date, time, time):void