

Assignments?

Active Recall vs Revision

Active Recalling - PS, Solution, Code, Class Diagram, Applications

Introduction :

- TS : Types (any, null, unknown, void, undefined), SuperSet of JS
- Polymorphism : Poly (many) + Morphism (Forms) :
 - OR(changing the definition), OL (sum(n1, n2){} or sum(n1, n2, n3){} or sum(n1 + s1){})
 - sum(1,2), sum(1,2,3), sum(1,"Rs.")
 - Object Substitution
 - Animal(P), Duck, Dog
 - specie:Animal = new Animal()
- Class : mV + mF, blueprint, instance

OOPs Concepts

- Inheritance (P/C, extends, super, reusa, is-a), Interface(contract, impl,v,F), Abstraction, Polymorphism,

Encapsulation

- Coupling : Tight, Loose; Prefer : Loose; Why? Maintainability
- Class Diagram : Rules
- Public(+), Private(-), Protected(#)
- Class1(+v1, -v2, #v3){....}, Class2 extends Class1, Class3
- Concrete (--> Abstraction)
 - Implementation

Design Princples (Principles vs Rules)

- DRY : DRY : Functions, SDP
- SOLID
 - SRP
 - OCP
- Composition (has-a, solid Diamond)

Design Patterns :

1. Strategy

- Encapsulation Varying Behaviour (Abstract class), Inheritance X, Interface X
- Family of Algos, pre-defined Strategies
- Ab, C, IS, S1, S2, S3, Client Code
- Composition
- Payment System : UPI, etc.

2. Observer

- Publisher and Subscriber (Pub-Sub), Notification System
- Weather Application
- Code : ob[], attach, detach, notify()

3. Decorator

- Customization at Run-time
- Pizza Application, User, etc.
- Decorator vs Strategy DP
- Pizza = Decorator + Pizza