

# System Design

## Large Scale distributed Systems

Eg Google Maps → to prevent ~~server~~ <sup>service</sup> failure

## Design Patterns

A software design pattern is a general, reusable solution to a commonly occurring problem within a given context in software design.

{ publisher  
subscriber  
problem }

Eg

## Live Streaming Platform

Eg Zoom  
Ft  
etc.

Layers

Primary → file to be saved.

Secondary → ID, 4096

etc.

## Basically

Product Requirement Doc [Core]

↓  
Features/abstract concepts [core]  
→ should be abstract

↓  
Data Definitions

↓  
objects

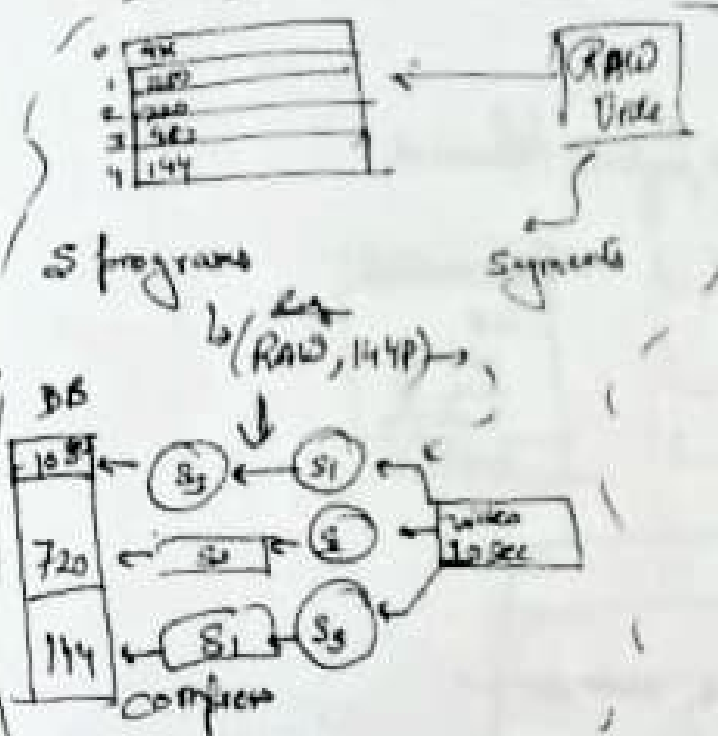
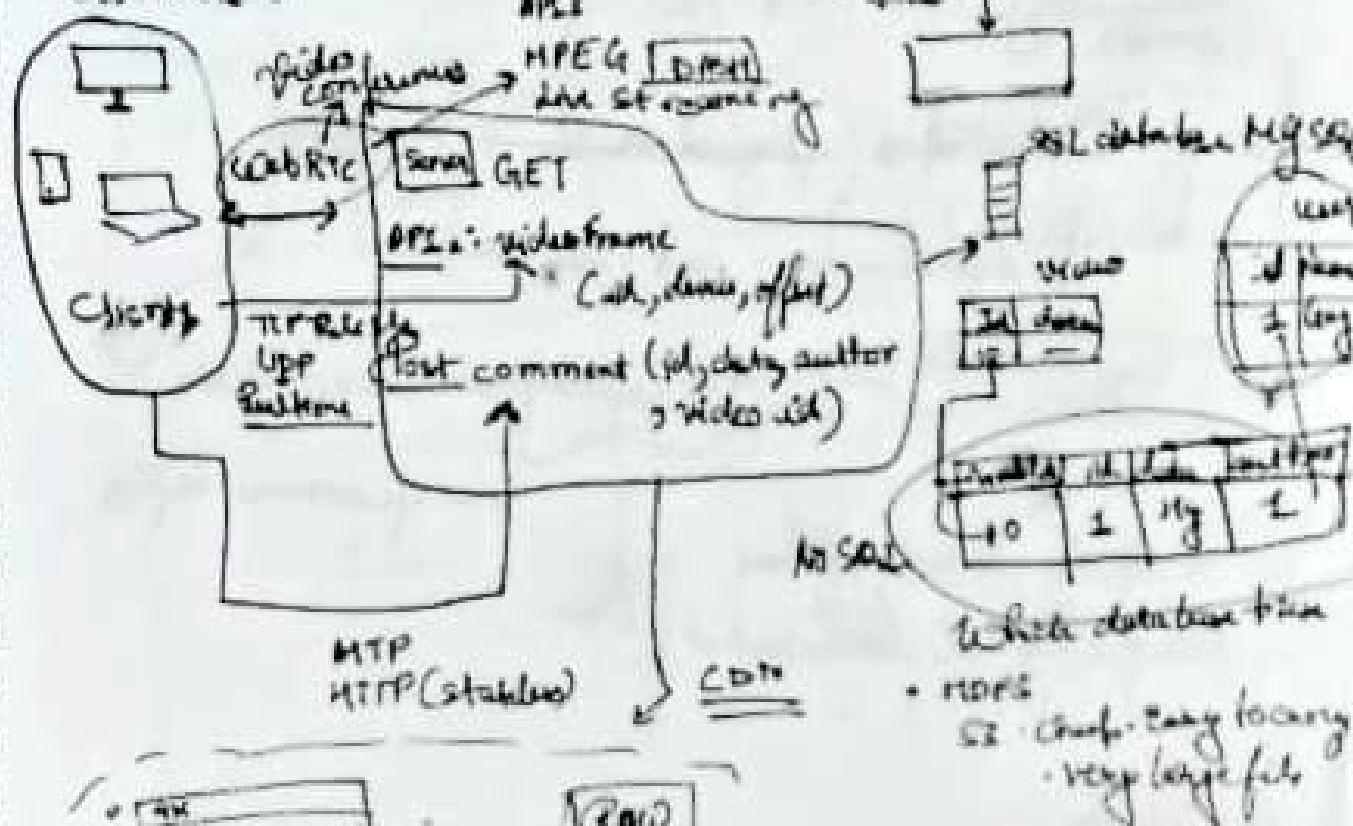
↓  
Interface

Note

\* Build a system that scale & extend as and when requirements change.

Testing → feasibility

Live Streaming  $\longleftrightarrow$  Server  $\longleftrightarrow$  Database



1. Define the requirements as abstract concepts (Objects)
2. Objects can be manipulated and queried using APIs on server
3. The data representation need to be stored

