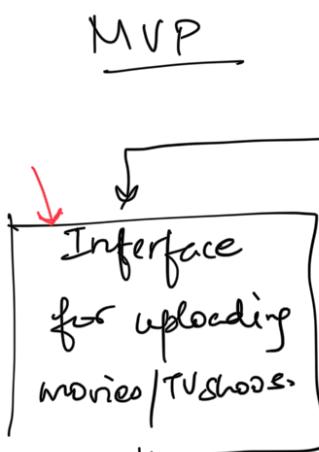
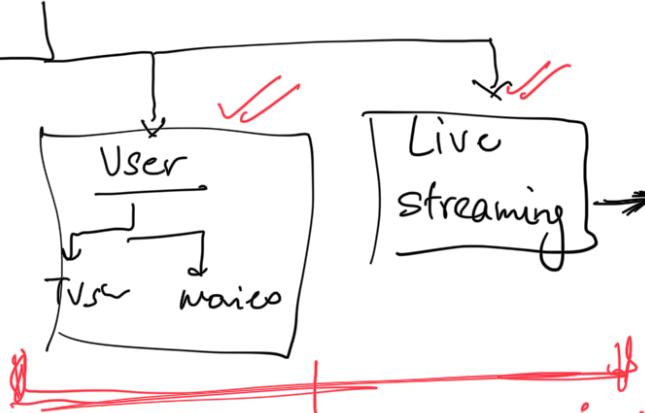


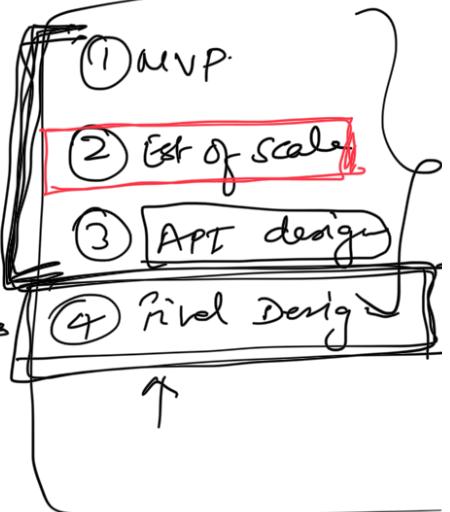
DESIGN HOTSTAR



rights
countries



Live streaming



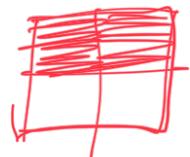
- ↳ List of movies/TV shows.
- ↳ Play → different resolution
 - ↳ reduce buffering
 - ↳ lightweight on client
 - ↳ Mobile
 - ↳ scroll
- ↳ Resume from where left
 - ↳ subtitles/audio
- live streaming
 - ↳ lag is less
 - ↳ go back in live stream

0 → black

1 → white

pixel

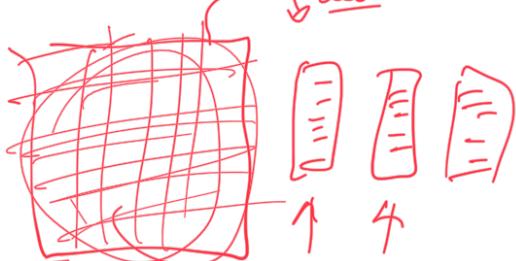
0 - 255

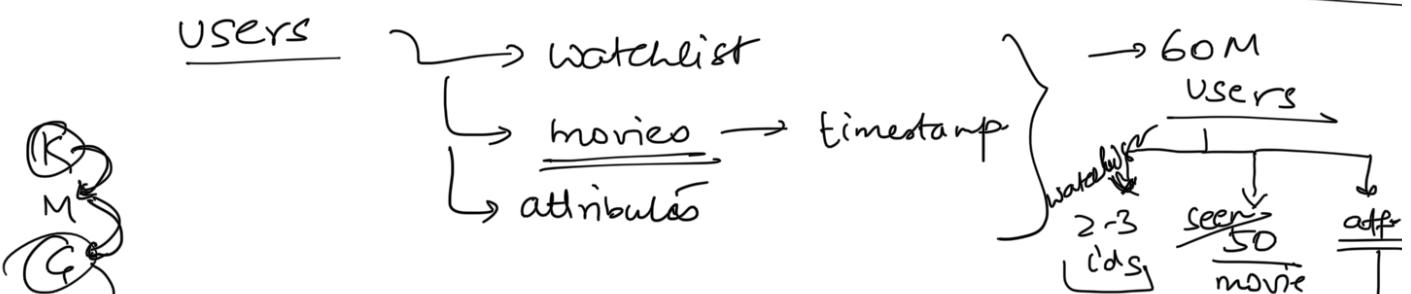
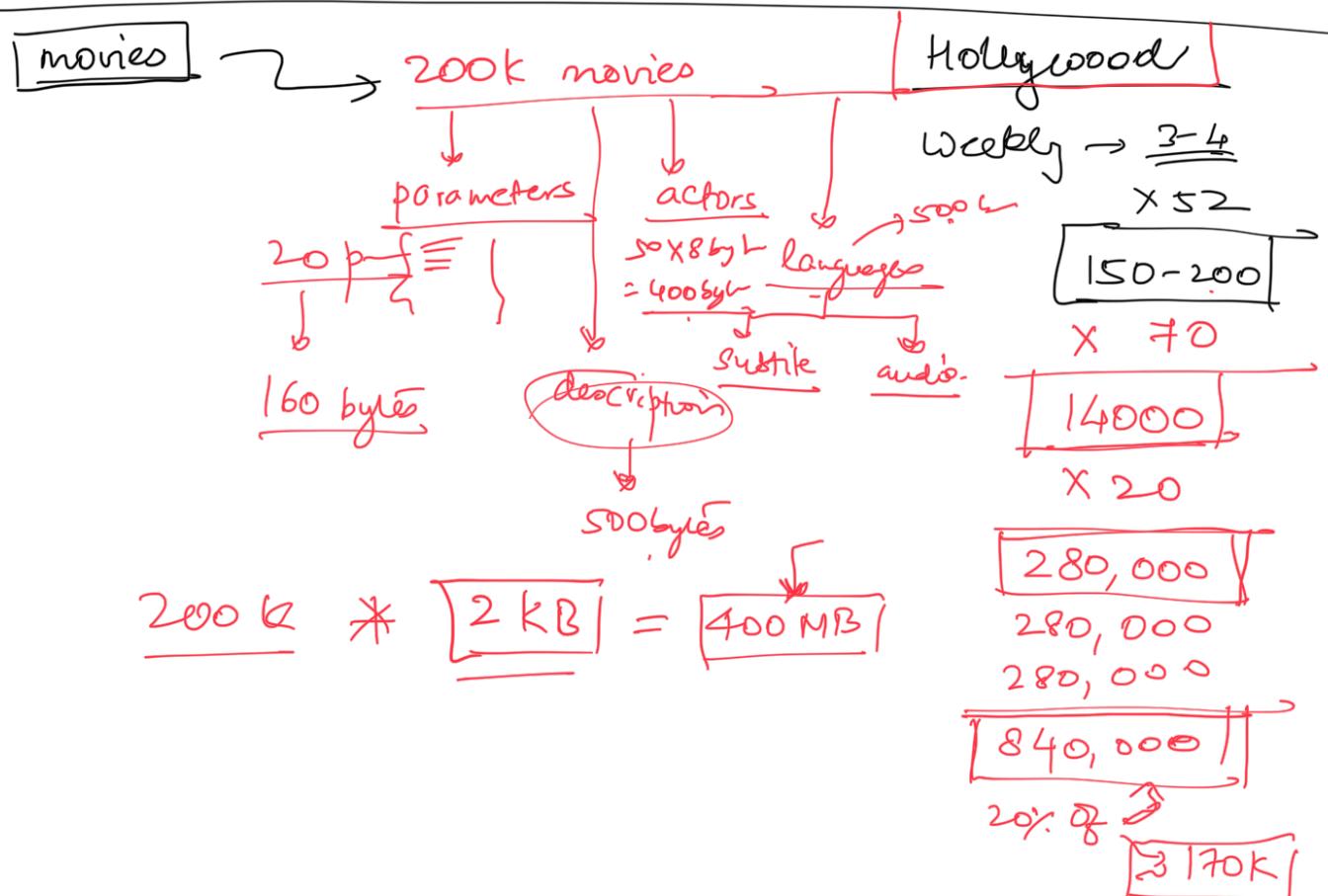
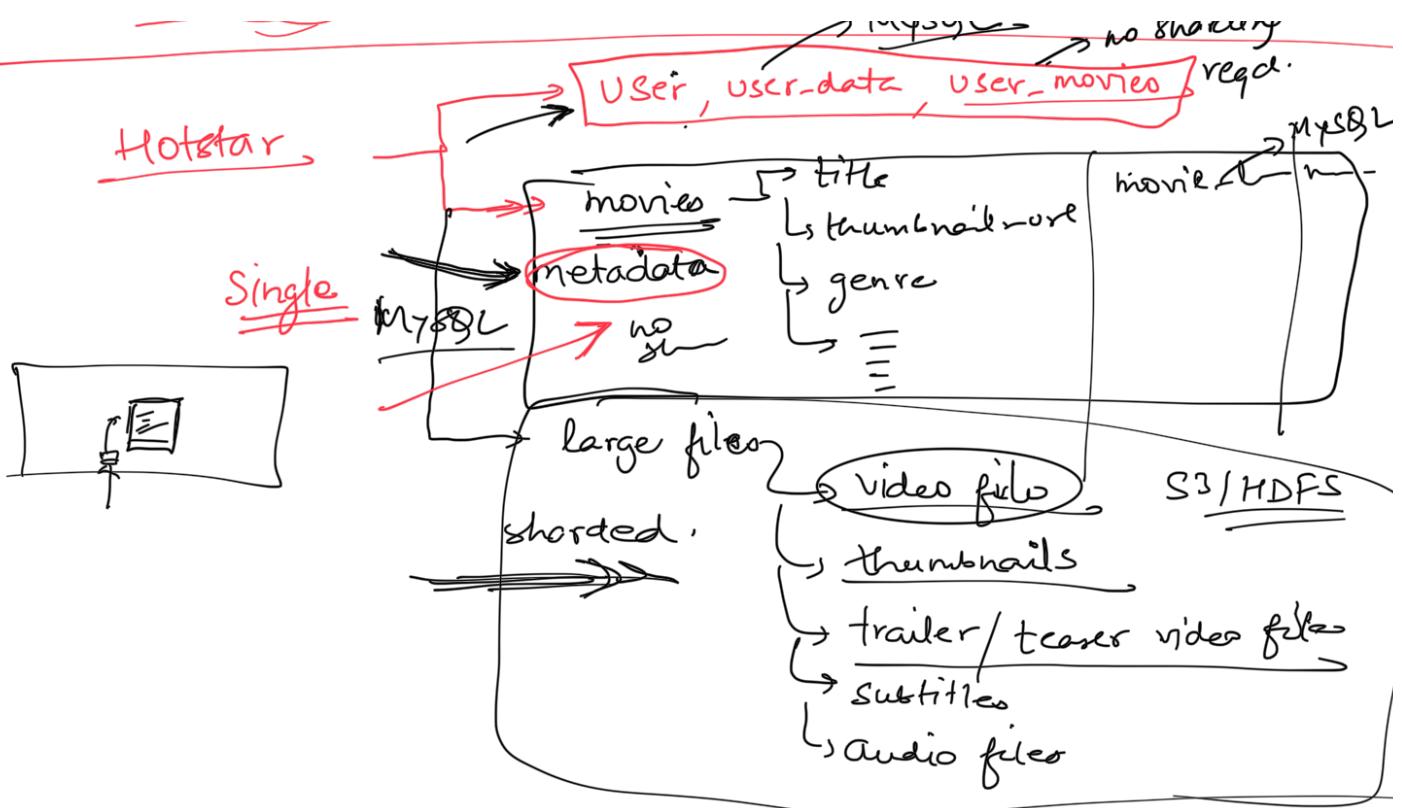


JPG / PNG

(0)0/0/d/d/b/b/a/a/a/(r/
 x Dc y I-s

delta

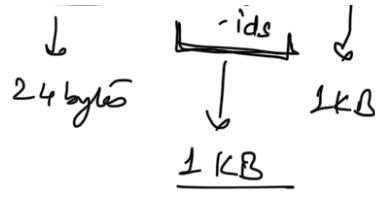




TC

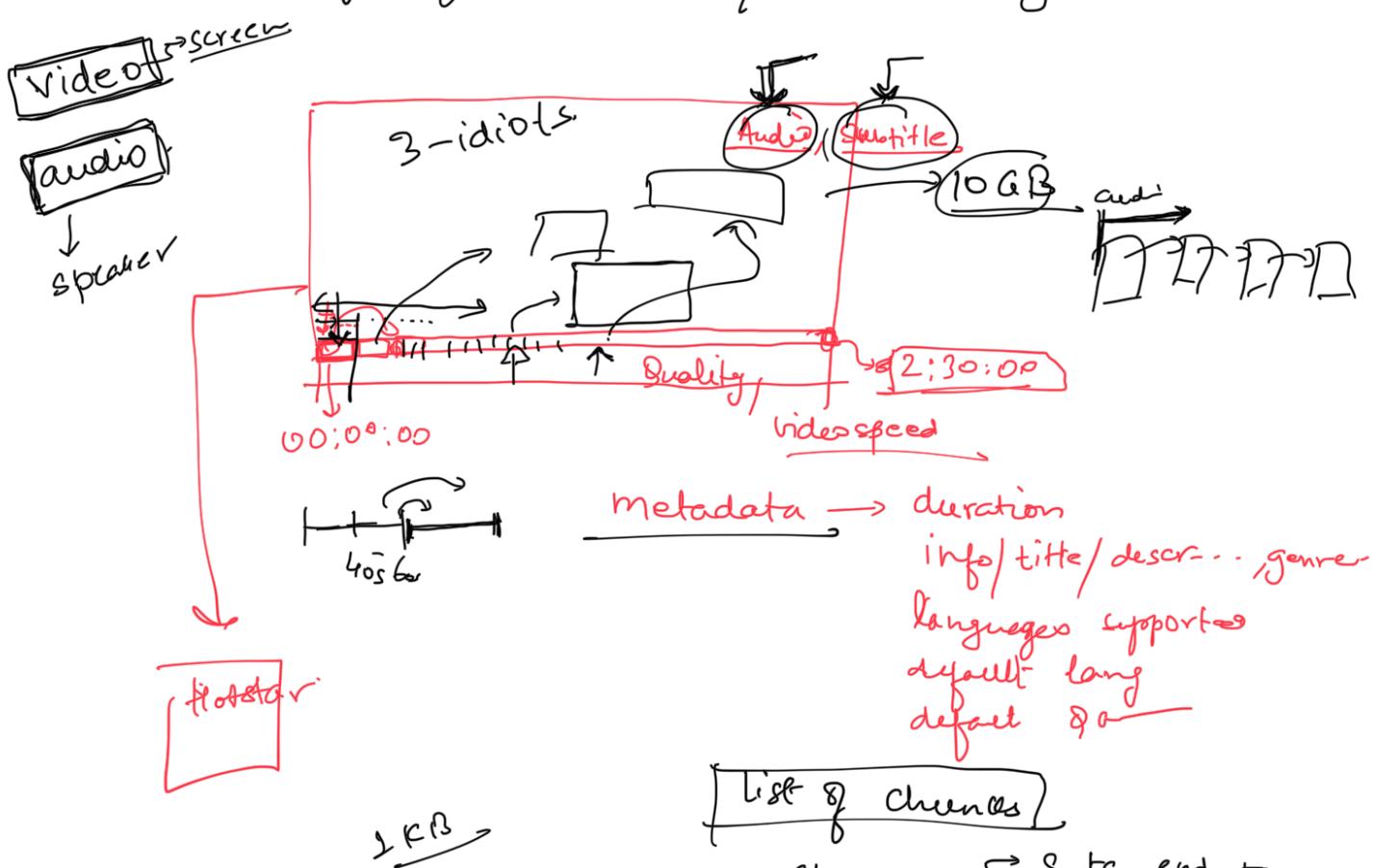
P

$$\begin{array}{l} \text{60 M} * 2 \text{ KB} \\ = 120 \text{ GB} \end{array}$$



read heavy vs write heavy.

- Given a movie-id, play it on browser/app.
- Movie watched earlier
watchlist
list of movies
- searching for movies & actors through name-



list of chunks

- Chunk → s-ts, end-ts
- cdn-url video
- quality
- cdn-url thumbnail

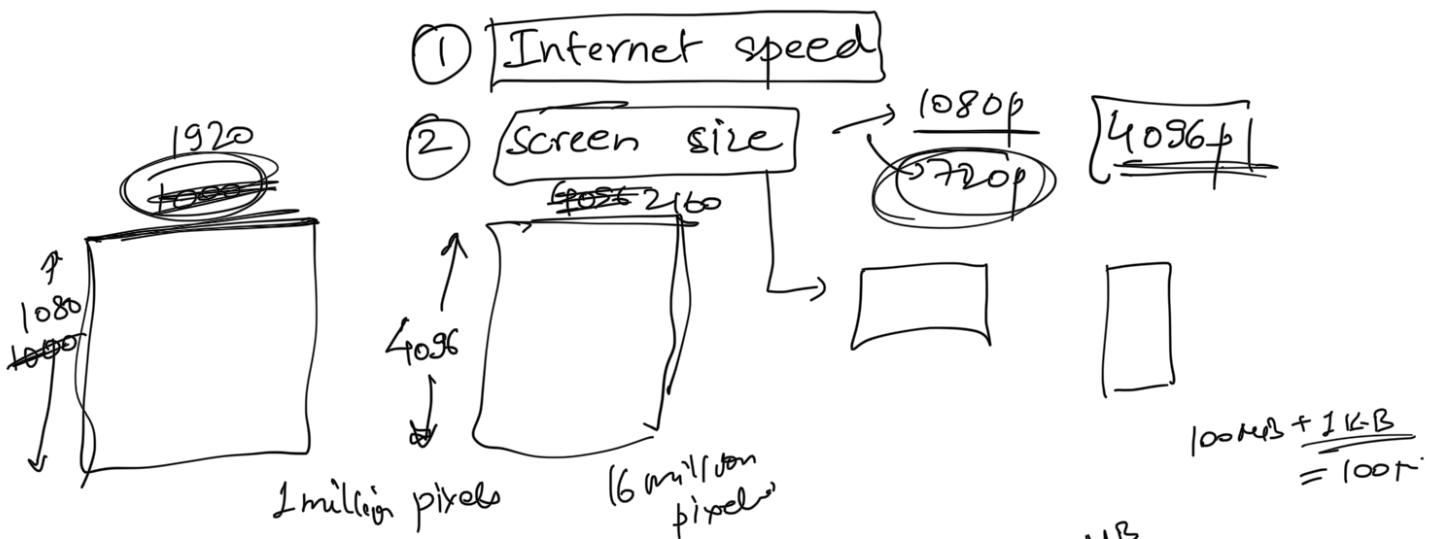
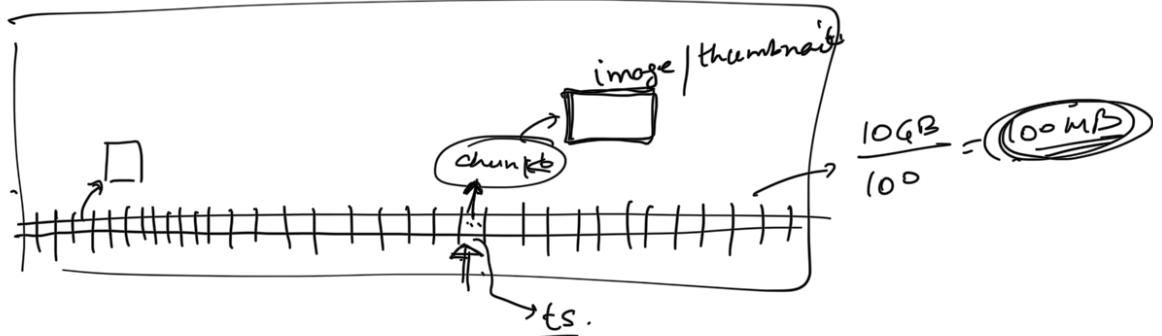
Q1. How to implement previous scene at time t



Q3: How does resolution adapt?

↳ Adaptive Bitrate Streaming (ABS)

AUTO-RESOLUTION
Internet?
?!



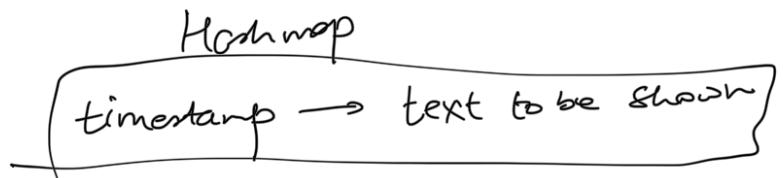
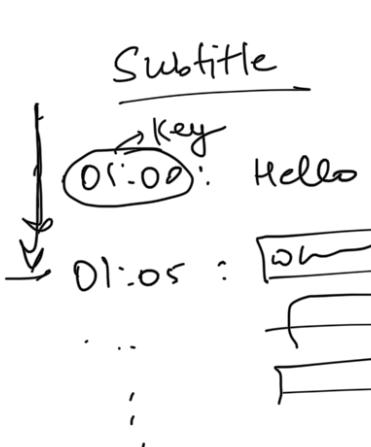
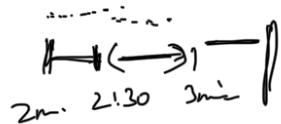
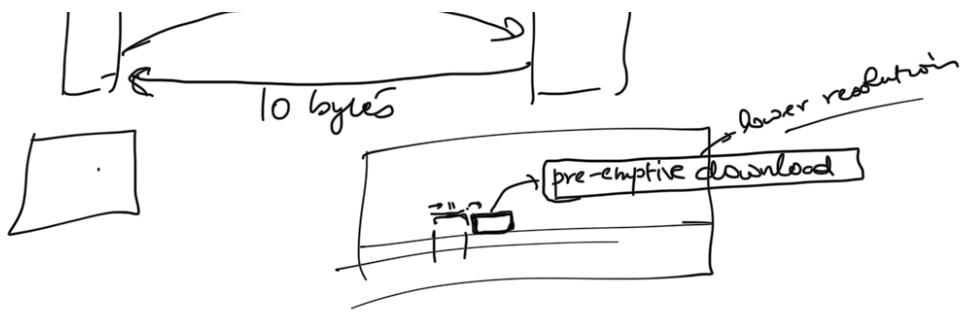
$$100\text{ MB} + 1\text{ KB} = 100\text{ f}$$

Async:

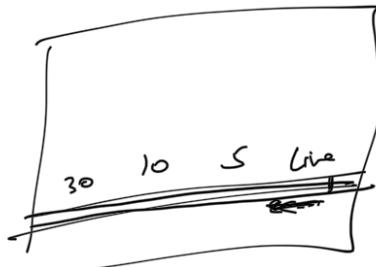


10 bytes

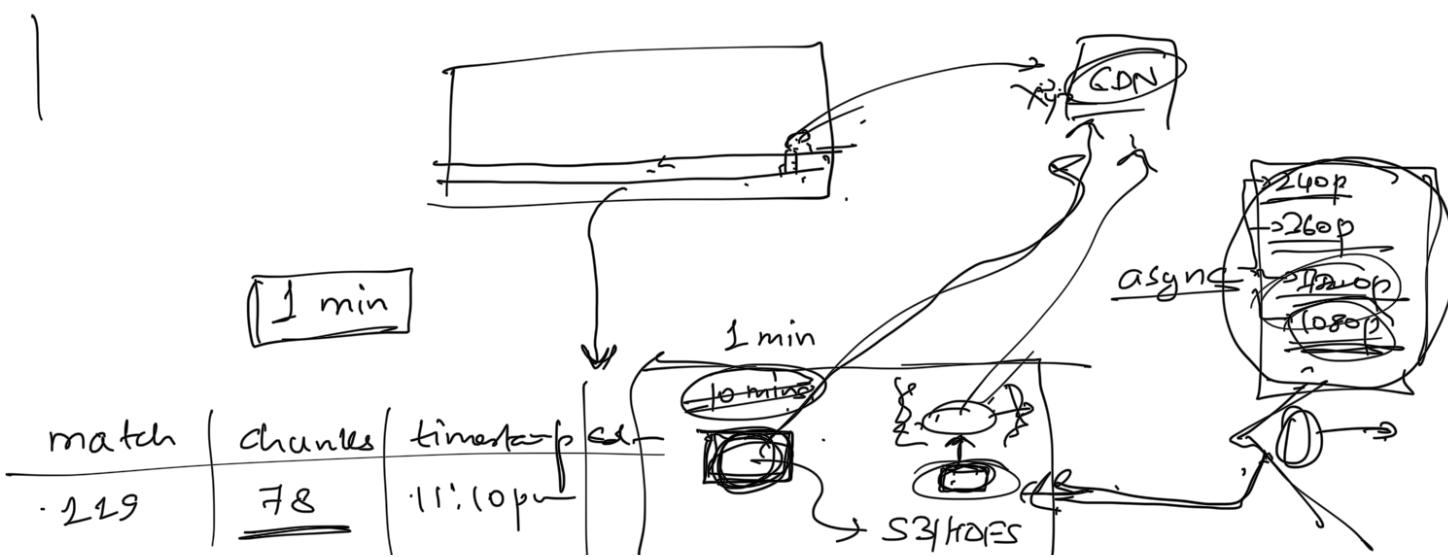
Hoststar



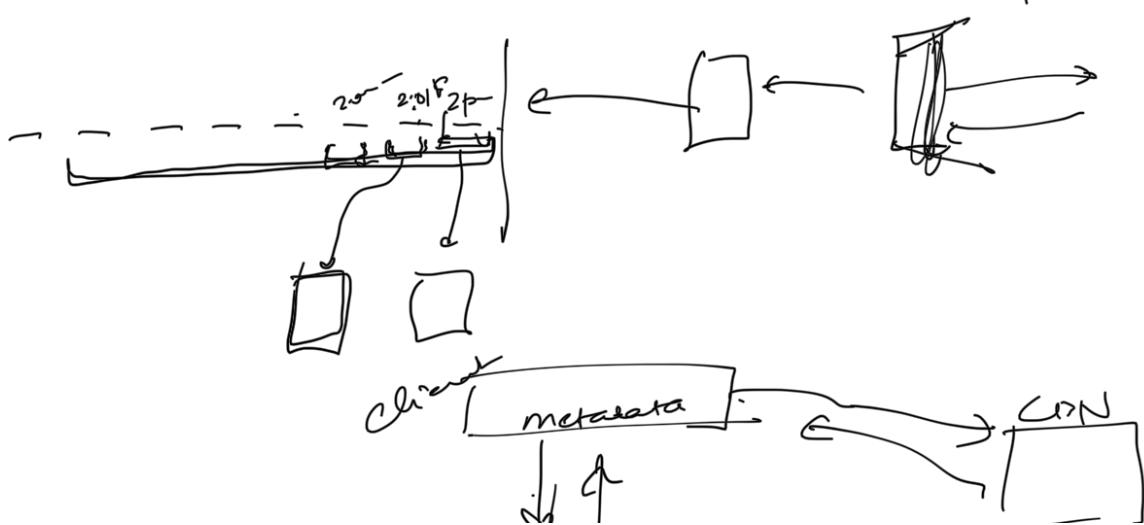
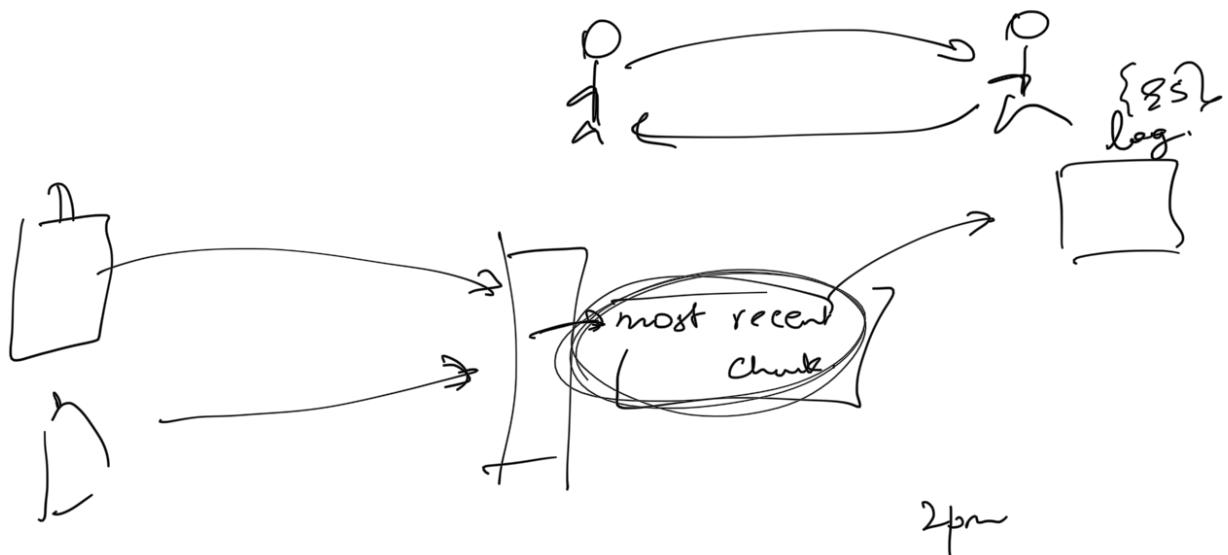
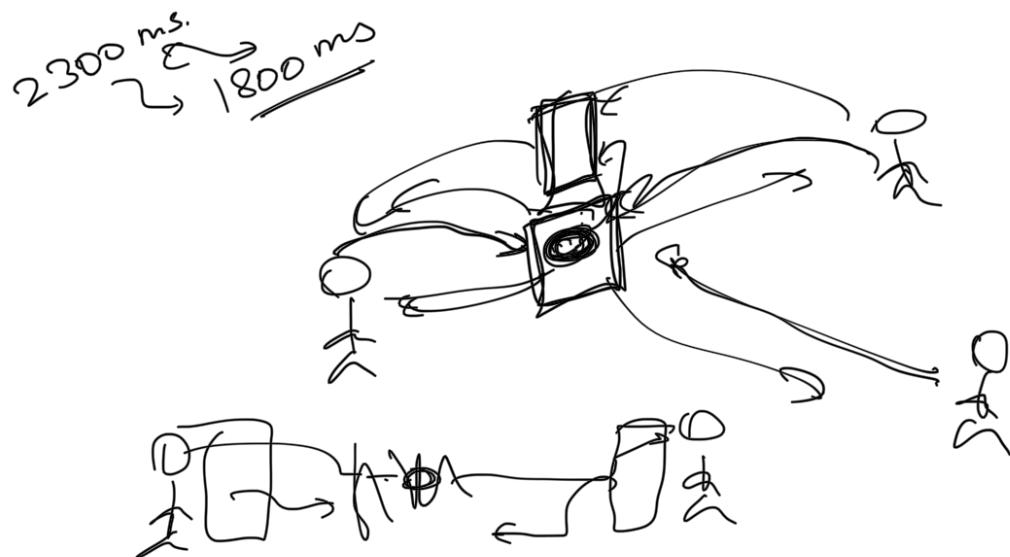
Live Streaming

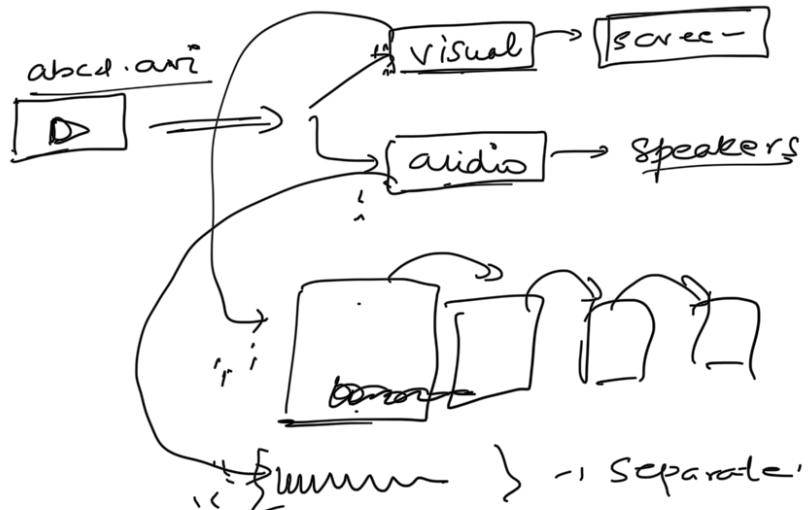
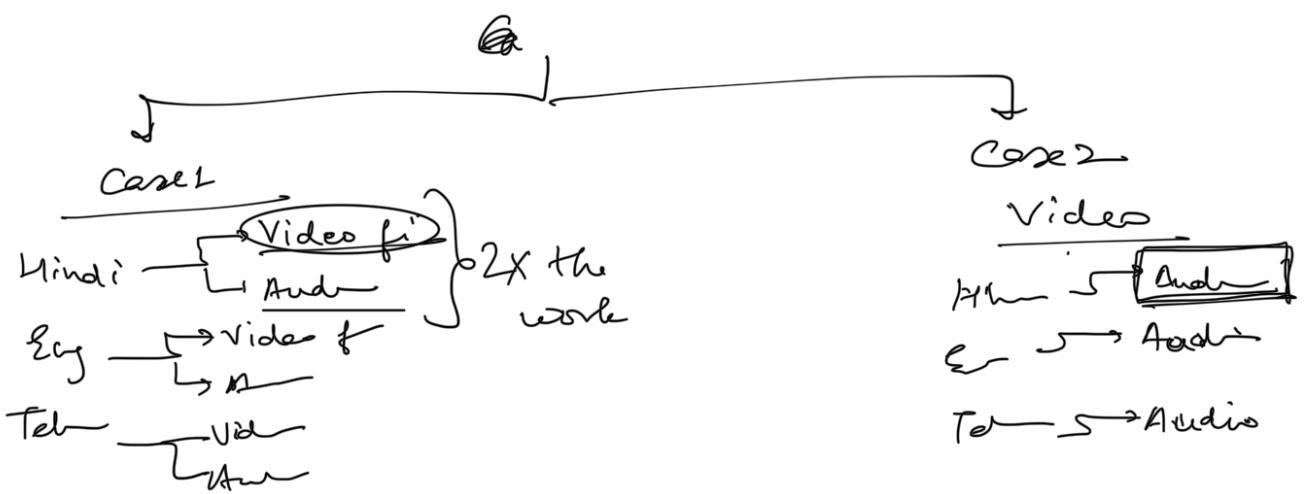
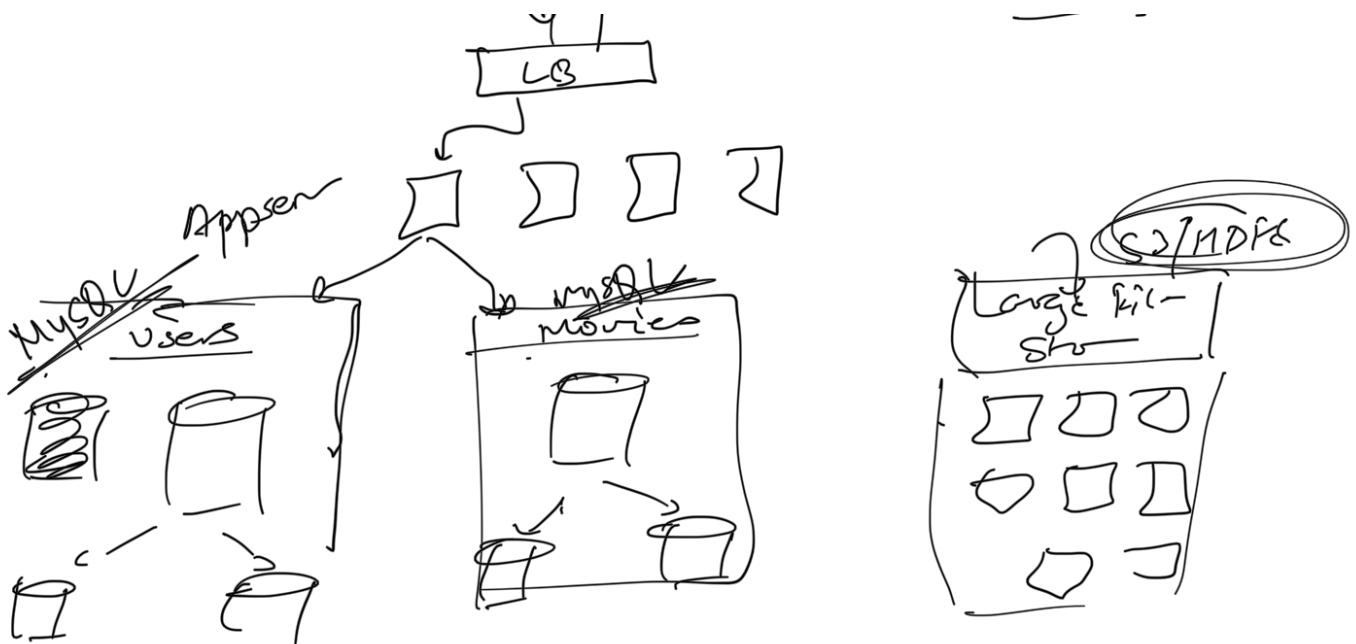


2-3 min delay



chunk-id	resolution	clen-urt	1 min	2-3 min
			100ms	50 seconds 45 seconds





St - el

C1
C2
C3
r4

A

