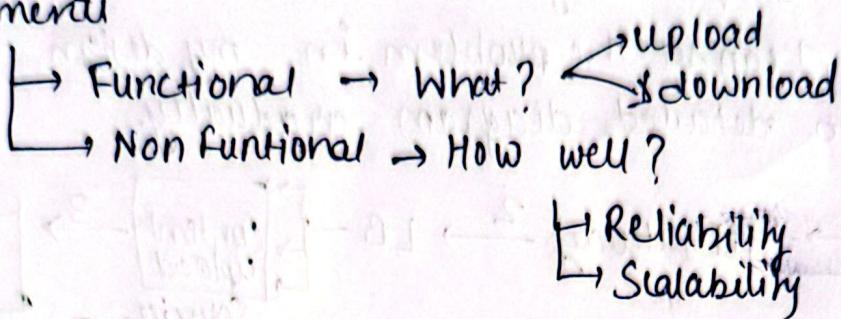


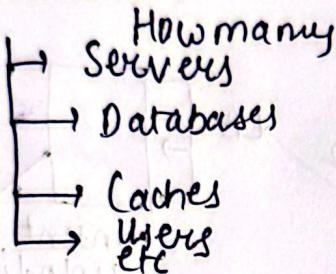
HiLD

FRAMEWORK FOR SYSTEM DESIGN INTERVIEWS

1. Requirements



2. Capacity Estimation



Framework

→ DAU / MAU

(Daily Active Users / monthly Active Users)

→ Throughput (Rps)

(How many request our system can process each sec.)

Storage & memory

→ NIW / Bandwidth

(How much data comes in & out)

Question: How do we come up with DAU / MAU

→ Make assumption & take agreement from interviewer

3. API Design

Discuss functional requirements technically

Endpoint → door to a specific part of system (upload, streaming etc.)

Body → Input

Response → Output

Example

```

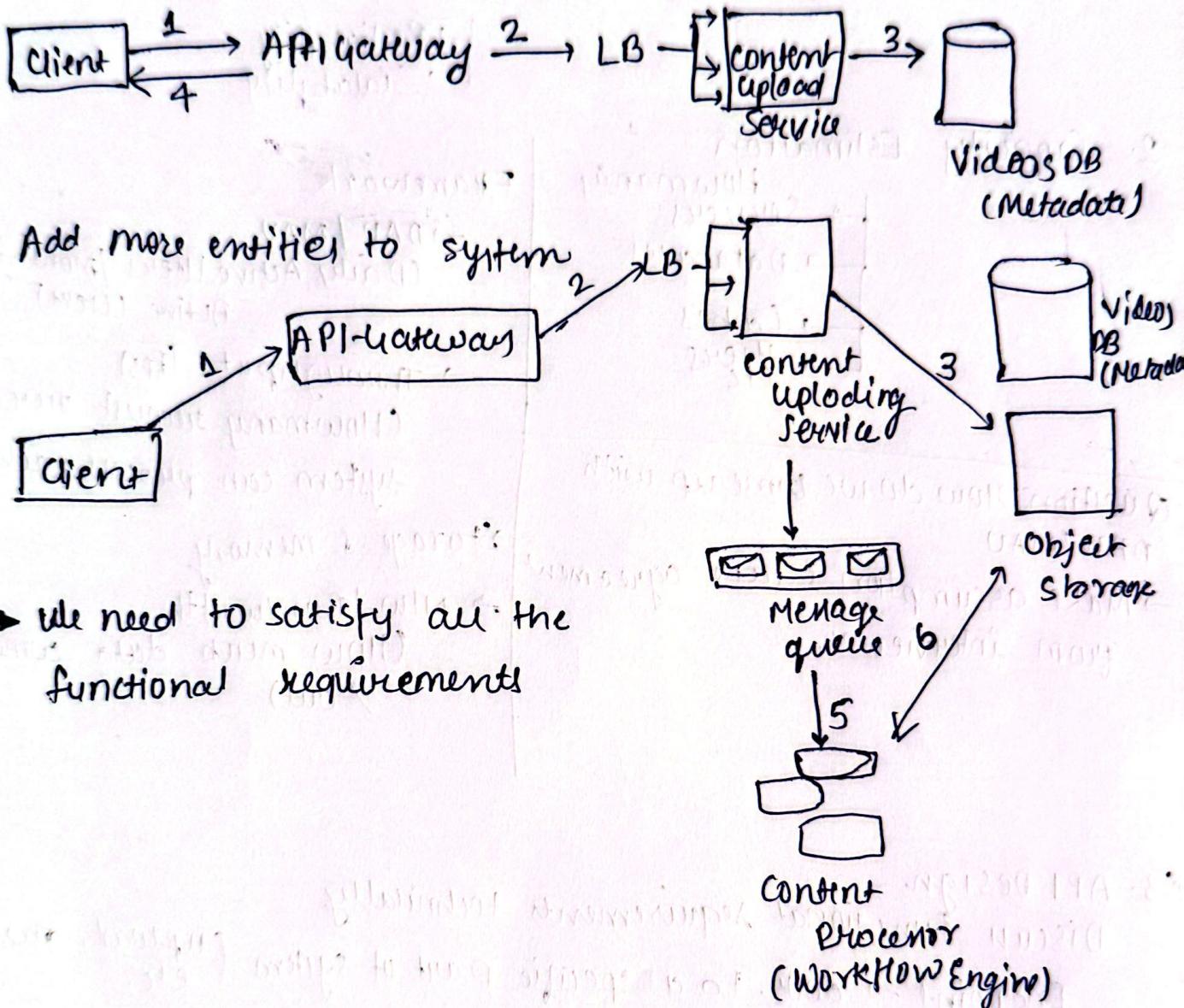
POST /videos
{
  "file": "m1.mp4",
  "title": "for example",
  "tags": ["API", "Design"]
}
  
```

Response

```

{
  "videoId": 1234,
  "status": "success"
}
  
```

- 4 High Level Design → Problem should be gradual
 → Exit simple diagram
 → Say, I can see the problem in my design
 → move to detailed diagram gradually.



→ we need to satisfy all the functional requirements

5. Deep Dive

- Database Selection
- Database Modeling
- Caches
- Database Type (NOSQL, SQL)