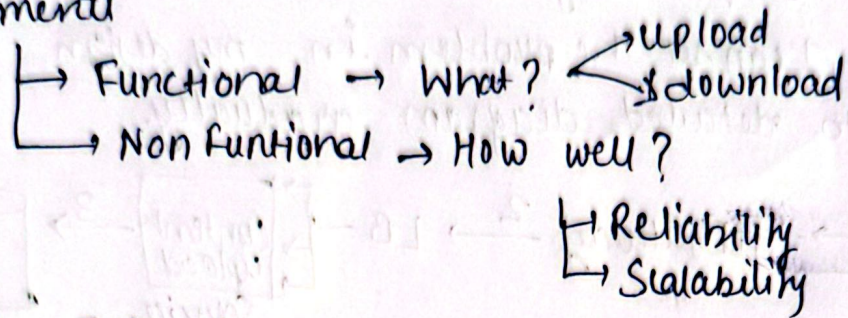
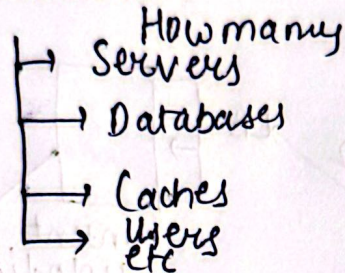


FRAMEWORK FOR SYSTEM DESIGN INTERVIEWS

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

```

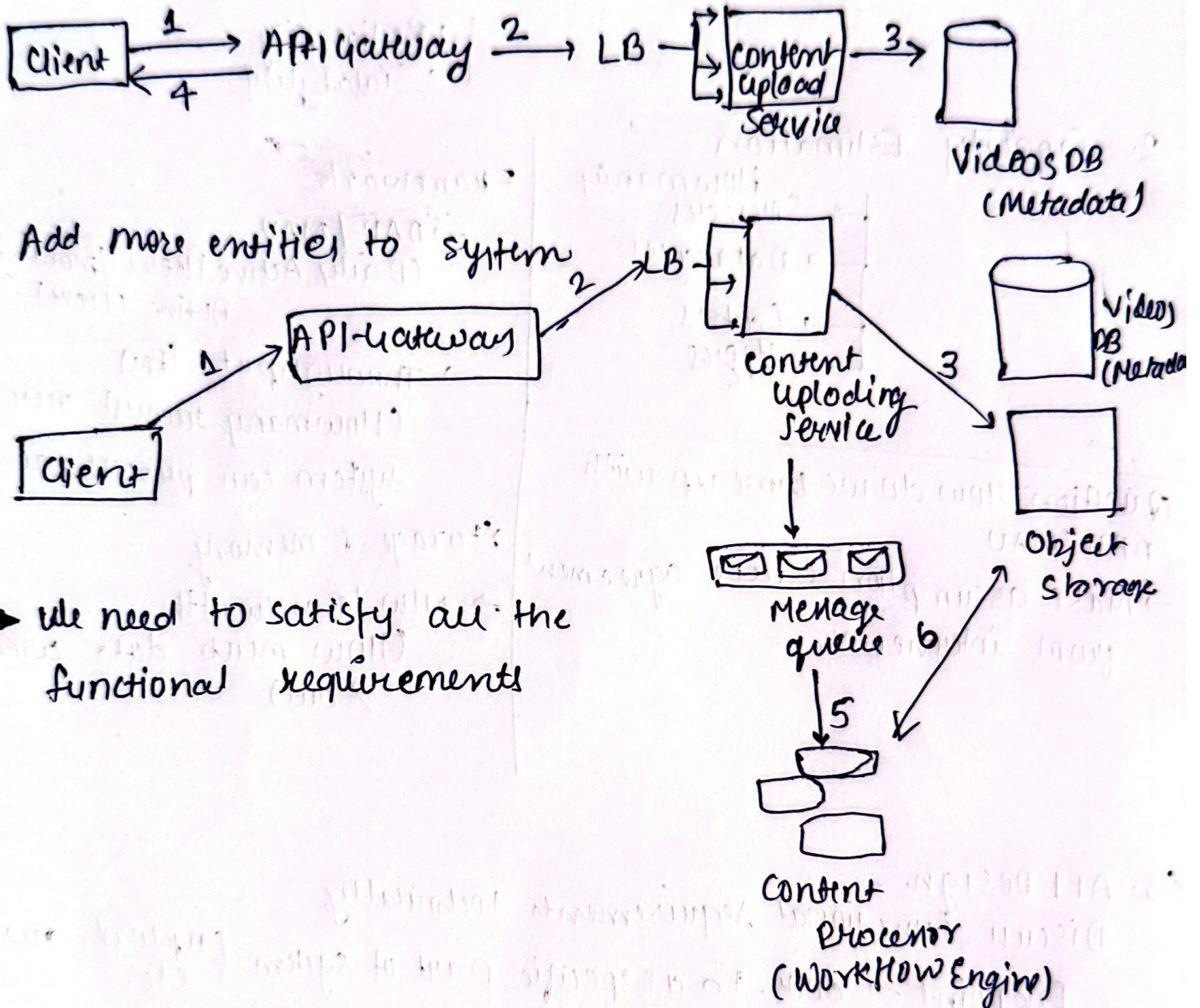
POST /Videos
{
  "file" : "m1.mp4"
  "title" : "for example"
  "tags" : ["API", "Design"]
}
  
```

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.



5. Deep Dive

- Database selection
- Database modeling
- Caches
- Database Type (NoSQL, SQL)