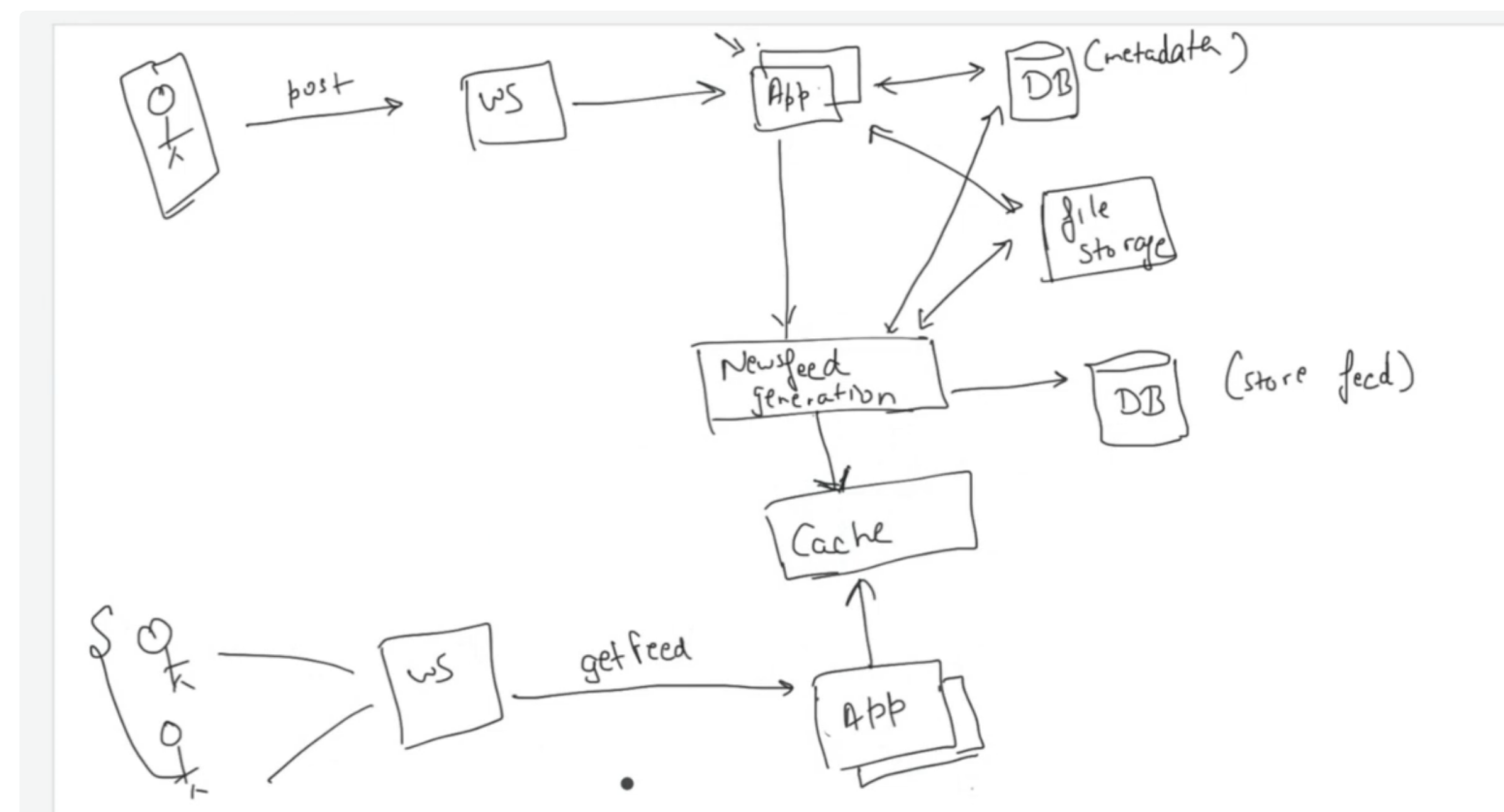


Requirements

Personalised Home page view
Retrieve all images that User A follow
Retrieve latest posts and rank above posts



Database

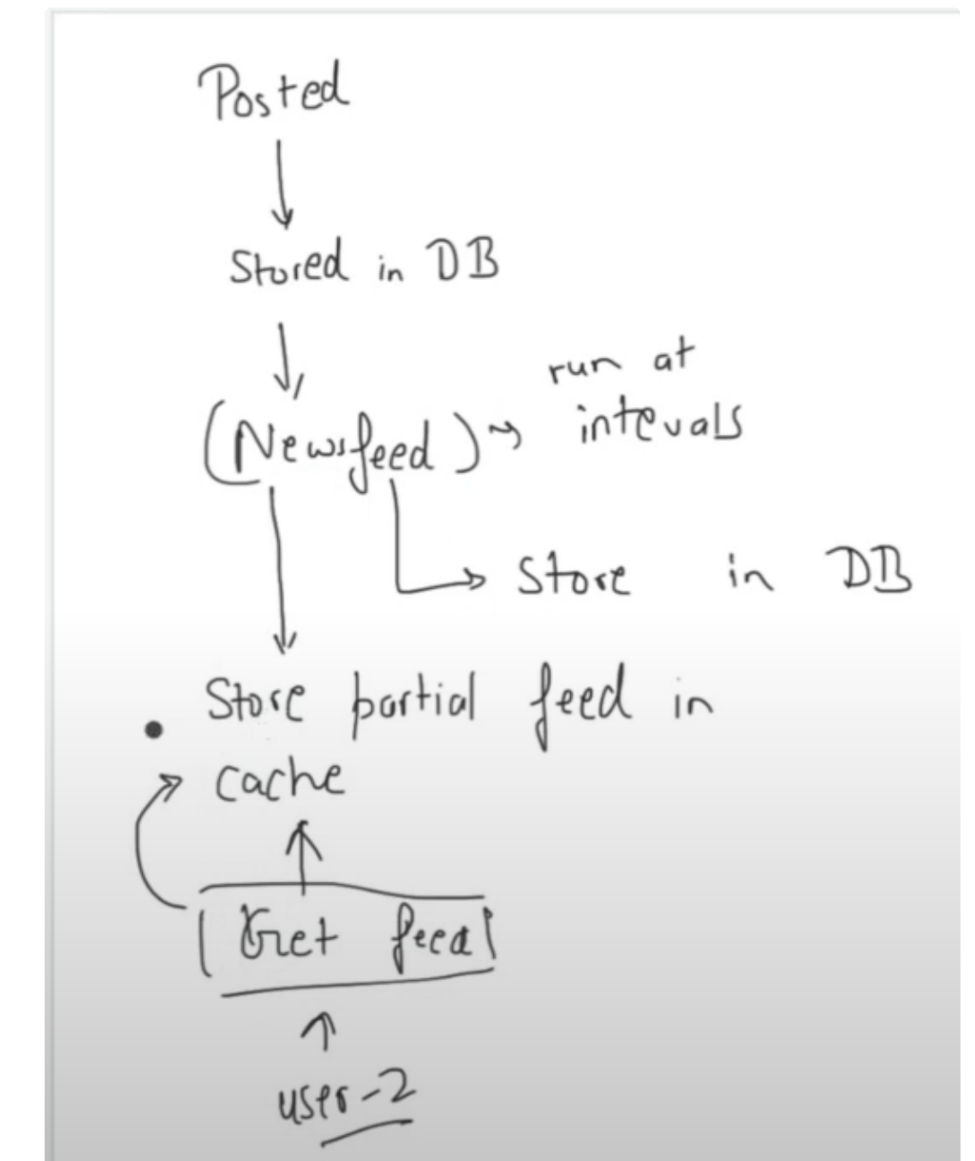
FeedItem - id, user, photoid, createdAt, likes

Feed Generation

```
Select * From Photo Where user_id IN ( Select followee_id from
UserFollow Where follower_id = 1) Order By Created_at Desc Limit 100
```

Disadvantages - Very Slow, High DB load

Approach 2 - Pregenerate the feed & Store it in Cache (We can use
{ TreeMap<FeedItemId, FeedItem> feeds ; DateTime lastGenerated; }



Feed Publishing

Agar Client Req krke maang rha hai then it's a **Pull model [Fan Out on Load]**

Agar Client ko hi mil rha hai server se it's a **Push model [Fan Out on Write] - LongPolling and WebSocket**

Pull Advantages - 1. Lesser work on server. 2. Client can choose when it wants data.

Pull DisAdvantages - 1. New data can't be shown unless pulled . 2. Difficult to deduce right pull interval 3. Wastage of resources when no new data.

Push Advantages - 1. Reduce req on Client. 2. Real time updates

Push DisAdvantages - 1. Resources - intensive . 2. Difficult for celebrities.

So we use Hybrid. For celebrity we do pull, and for others it's push.

Data Partitioning

FeedItemId - All feeds are on diff db for diff user will not be a good option

UserId- Here if system has all data for 1 user at one place it makes sense. Hence retrieval will be fast