

Week 2 - Lesson 1 - Task - Solution

Where is data stored?

- In a persistent storage (so likes are not lost)
- Stored as a number associated with each post
- The storage must survive crashes

What happens when 1 million user refreshes?

- All users want to read the same like count
- If every one reads from storage directly:
 - Storage gets overloaded
 - Responses become slow
- So reads must be served without hitting storage every time

What is the bottleneck?

- The storage layer becomes the bottleneck
- Too many read requests at the same time
- Disk access is slower than memory

User clicks like



Increases like count in Database



Database save:
post 123 → likes = 10

update fast copy

post 123 → likes = 101

Write

like click



Database (safe write)



fast copy updated

Read (Refresh)

Refresh



fast copy



Return number