

Requirements

Tinder architecture:

1. Store profiles (Images) - 5 per user
2. Recommend matches (Number of active = n users)
3. Note matches $n \times 10^{-3}$ considering there is 0.1% match.
4. Direct mapping

Image storage : Files v/s Database

Binary v/s Object (BLOB)

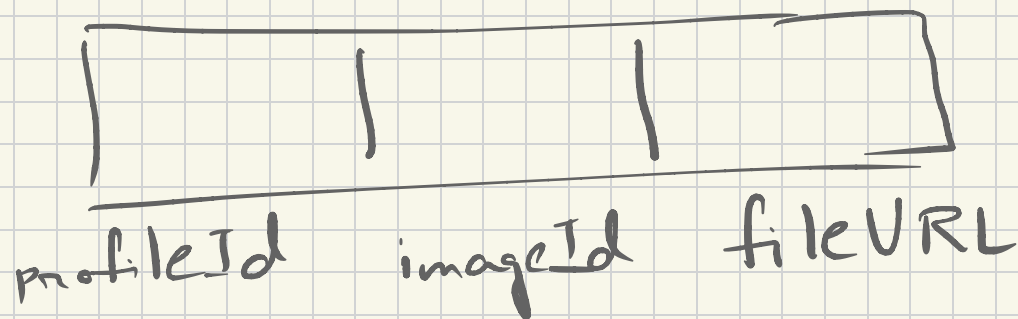
why not use it for images

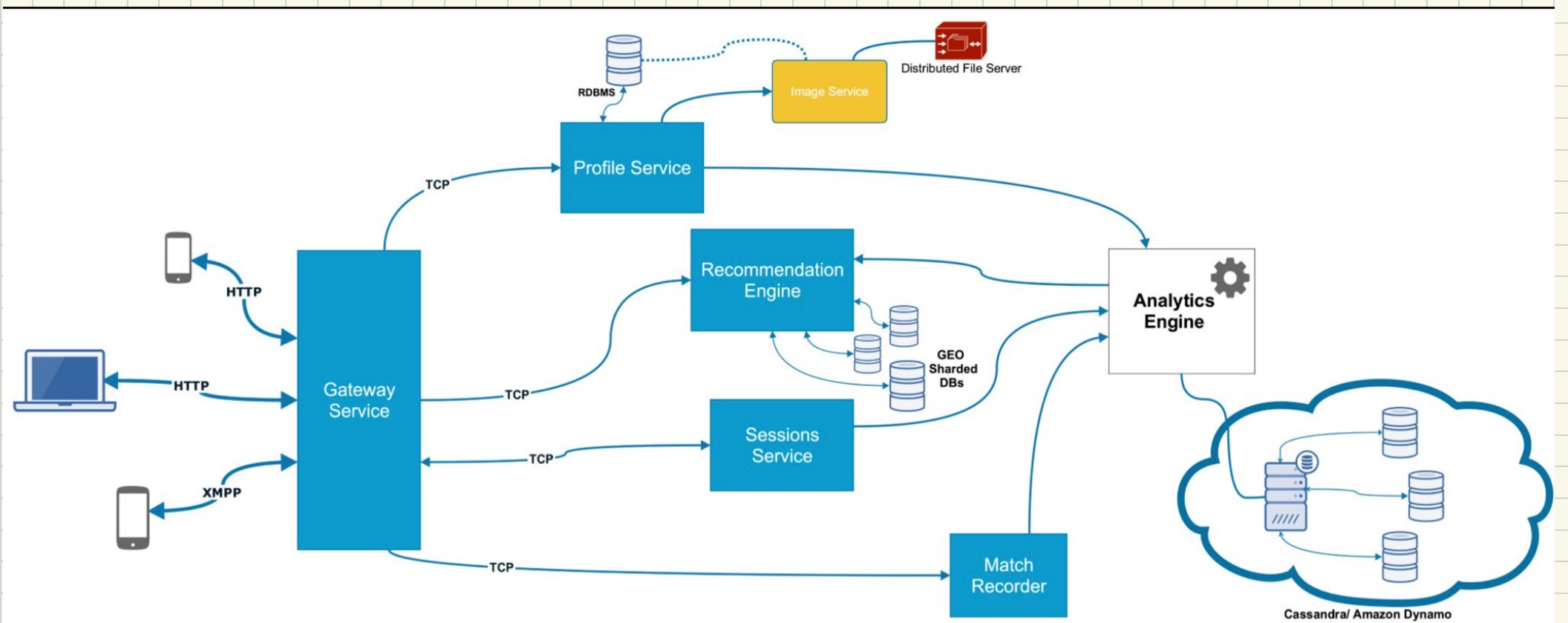
DB gives

1. Mutability → we won't be changing part of image it would be a new image so why not create separate file
2. Transaction guarantee
3. Indexes → no atomic operation on the image
4. Access control → we won't be searching in the blob (it is like 10...01)

Files

1. cheaper
2. Faster
3. Content delivery network





In this design the profile service acts as an authenticator. And the gateway goes to the profile service to validate authenticity before redirecting to any other service