Design google drive

What are the essential requirements?

Upload file server

1. <https://api.example.com/files/upload?uploadType=resumable>

Download a file server

2.

3. File revision service

Amazon S3 storage service

4. Metadata db

5. File storage

6 .Block severs

  Block servers process files passed from clients by splitting a file into blocks, compressing each block, and encrypting them. Instead of uploading the whole file to the storage system, only modified blocks are transferred.

8. Delta sync:

dWhen a file is modified, only modified blocks are synced instead of the whole file using a sync algorithm [7] [8].

7. Offline backup queue:

If a client is offline and cannot pull the latest file changes, the offline backup queue stores the info so changes will be synced when the client is online.

8. Offline backup queue:

9.

How do we deal with sync conflicts with version?

It will be a last write win situation again