

Live Video Streaming

Enterprise Architecture Project 3

Group Members

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Technology Used

Spring
Boot

Node Js

Angular

Cassandra

Mongo Db

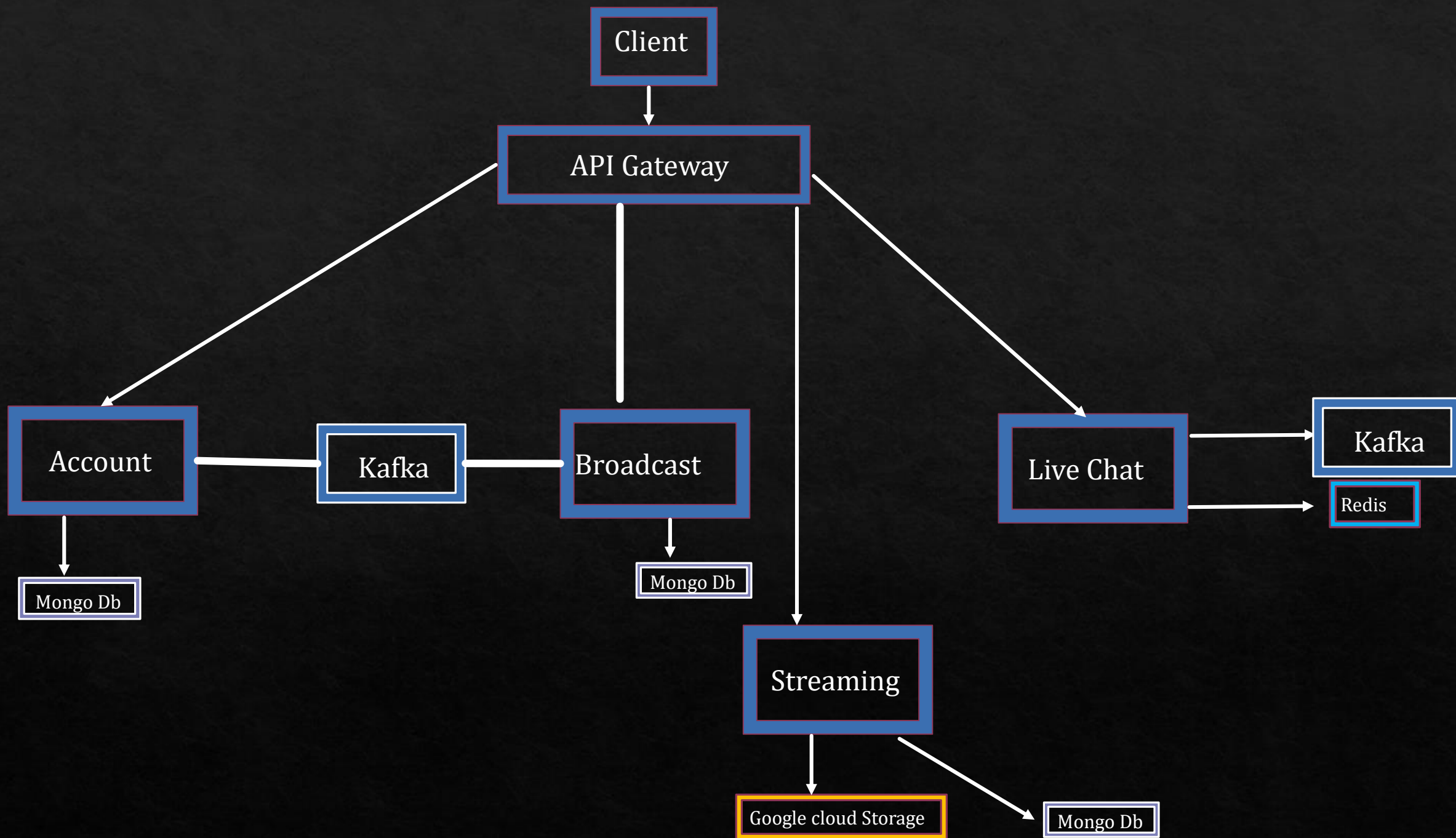
GitHub

Trello

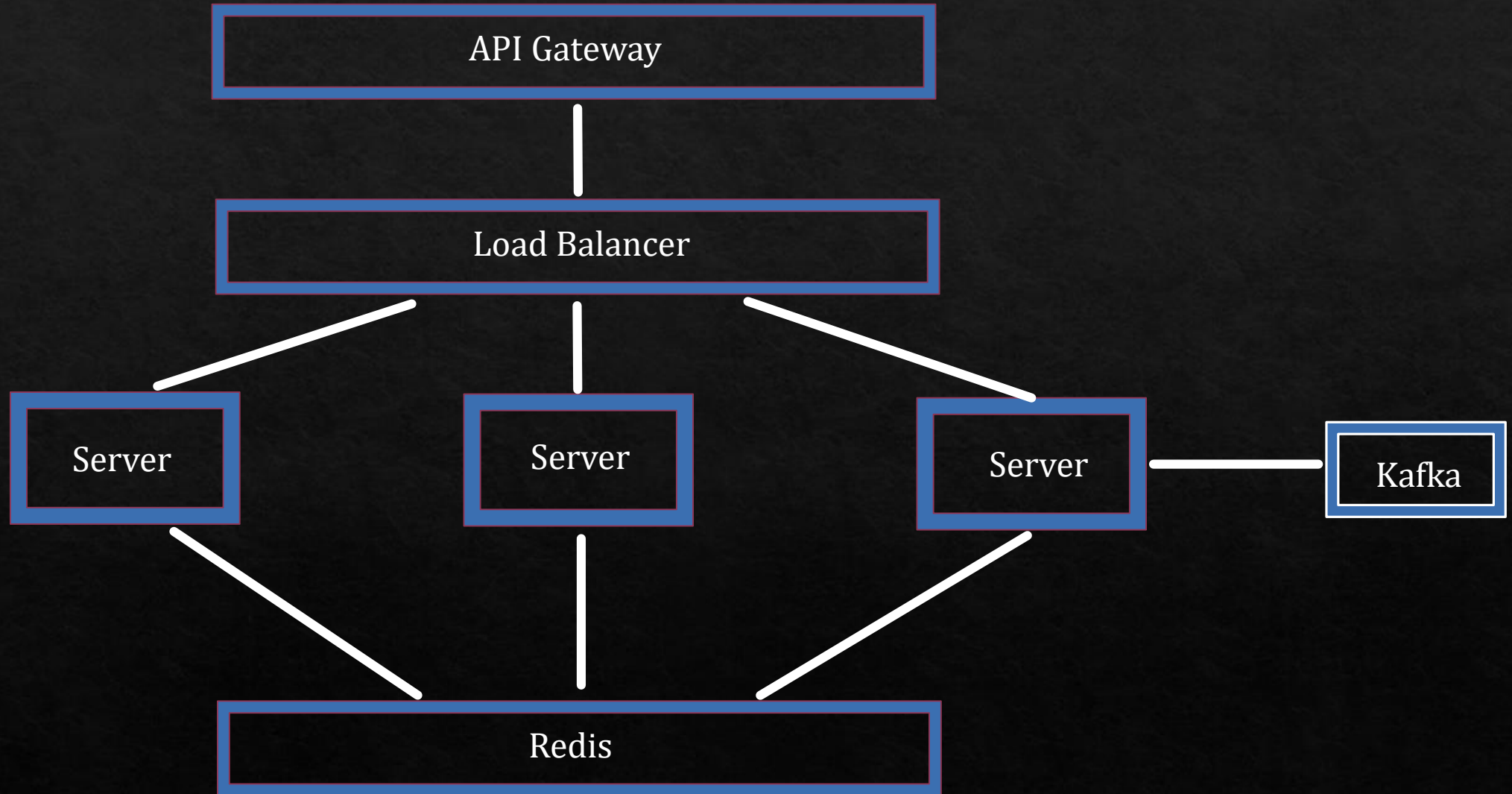
Kafka

Kubernetes

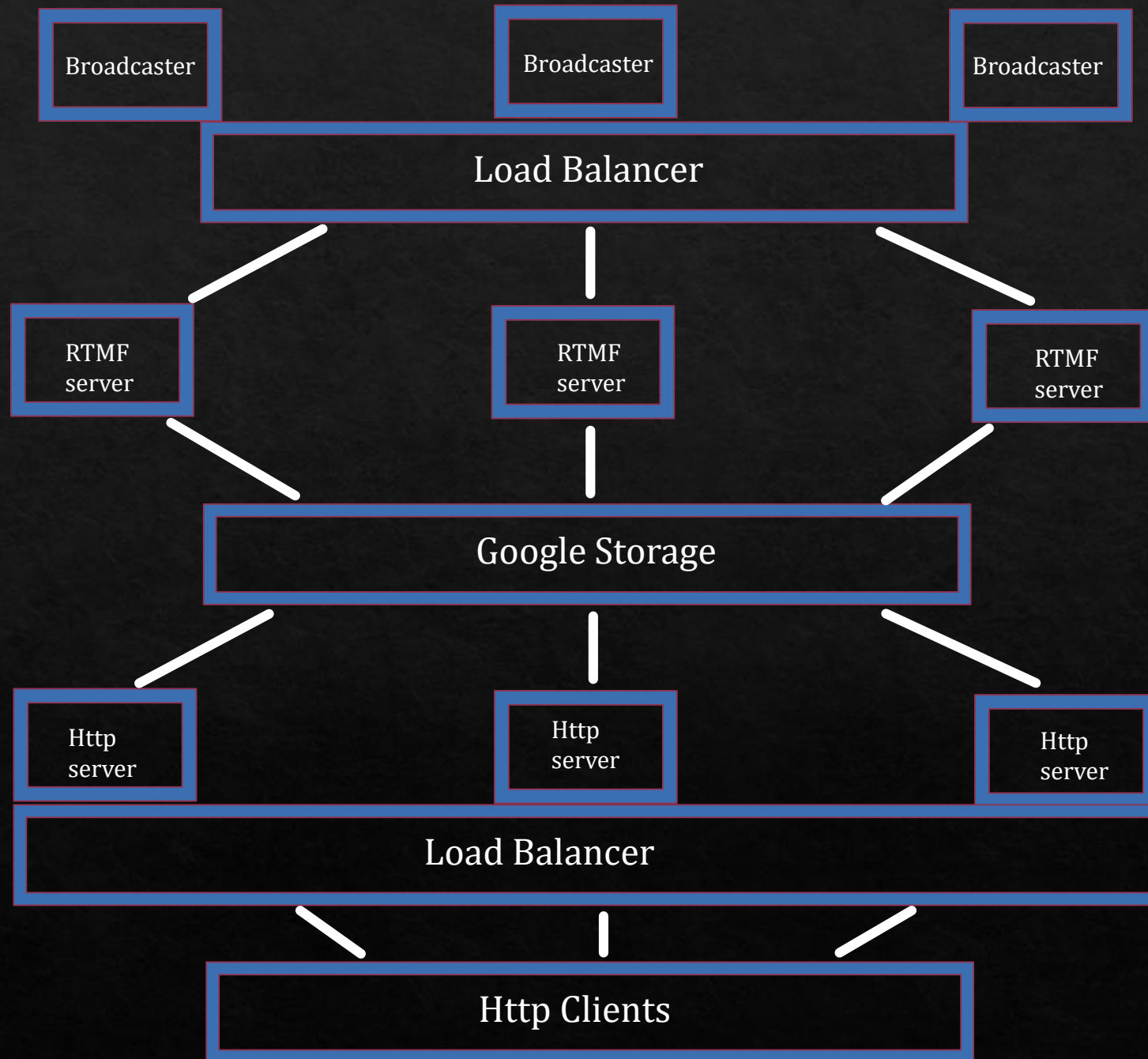
Docker



Live Chat Architecture



Live Streaming Architecture



What we could
do deferent

Future Extension

IPFS(Inter-Planetary File System)

- ◆ IPFS is a distributed system for storing and accessing files, websites, applications, and data.



Your file, and all of the **blocks within it**, is given a **unique fingerprint** called a **cryptographic hash**.



IPFS **removes duplications** across the network.



Each **network node** stores only content it is interested in, plus some indexing information that helps figure out which node is storing what.



When you **look up a file** to view or download, you're asking the network to find the nodes that are storing the content behind that file's hash.



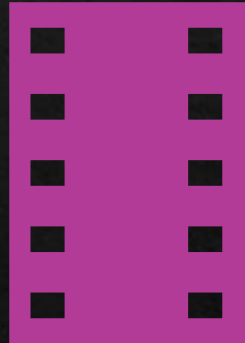
You don't need to remember the hash, though — every file can be found by **human-readable names** using a decentralized naming system called **IPNS**.



Blockchains

IPFS lets you address large amounts of data and place the immutable, permanent links into blockchain transactions. This timestamps and secures content without having to put the data itself on the chain.

Video on Demand



Save the video after live stream, so that it can be accessible any time.



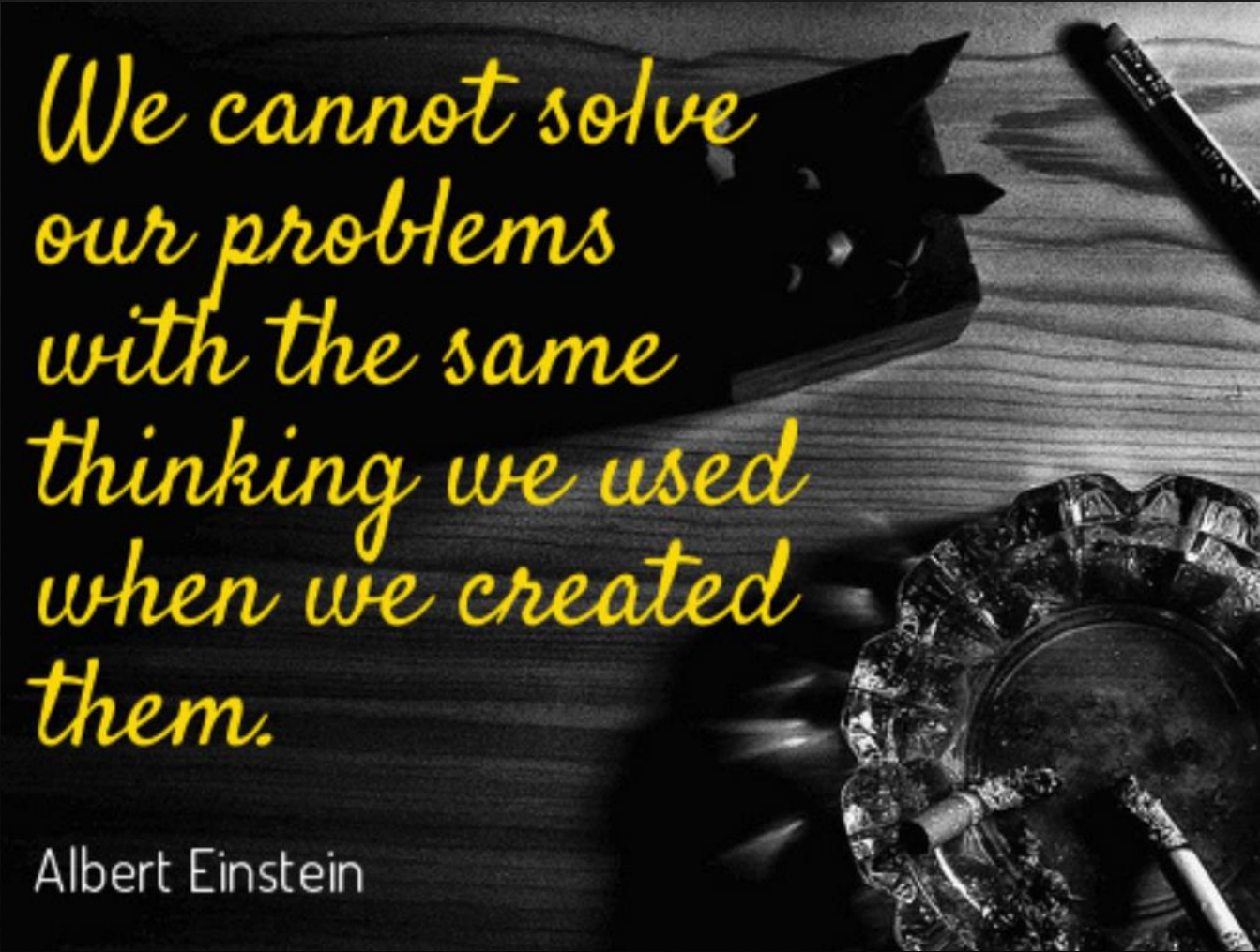
Use Cassandra Database as its performance is high and it is saleable.



Transcoding

Video transcoding, sometimes called video encoding, is the conversion from one digital encoding format to another, such as for movie data files. This involves translating all three elements of a digital video at the same time — the file format, the video, and the audio.

This is a vital function when a target device does not support the current format of your media, or has limited storage capacity that requires a reduced file size (think going from WMV to MP4). It is also used to convert incompatible or obsolete data to a better-supported, read newer, video format.

A black and white photograph of a wooden desk. On the left, a typewriter is partially visible. In the center, a pen lies horizontally. In the bottom right, a glass ashtray contains two lit cigarettes. The background is a dark, textured surface.

*We cannot solve
our problems
with the same
thinking we used
when we created
them.*

Albert Einstein

Thanks

We enjoyed the learning process !!