Thursday, May 26, 2022

Cassandra DB

**Database** - somewhere we can store persisted data

**Cassandra DB -** high availability; **scalability** (without compromising performance); fault-tolerance

**The CAP theorem**

* central theorem for distributed systems
* Also known as “Brewer’s theorem”
* Consistent, Available, Partition Tolerant
* You can only have 2 at the same time; not ALL THREE at once

**Consistent** every node **always** returns the **same** most recently written data

**Availability** every non failing node return read/write to the db we want; should always available the data we want to get; read perspective - able to **query**

**Partition Tolerant** continue to **function** even if it has **network partition or failure;** some of the nodes can’t talk to each other; THIS IS THE SOMETHING WE NEED TO HAVE in distributed system

*More likely, C-DB sits on Availability and Partition Tolerant (if u check on the Triangle- 1)*

**INSTALLING CASSANDRA ON LINUX (MAC)**