Seminar 5: Vector Clocks - https://riak.com/why-vector-clocks-are-hard/
An article discussing a way of tracking time in DS.
Keywords: monotonic, causality, vclocks, *whatever word you didn't understand* etc.

- **What is the article about?**

The page gives two examples of how to use vclocks and how they operate, as well as information on prunning and how vclocks may get sophisticated.

- **What do vclocks guarantee?**

Data integrity.

- **How do vclocks solve conflicts?**

Creates a vector clock that will be a successor to all previously-seen vector clocks. So taking everything the previous two vector clocks have.

- **Explain the concept of "pruning" a vclock and why we would do that.**

Prunning is utilized in situations where vector clocks are expected to expand in size as more customers use the system over time. When a field is increased, a timestamp is added to it, and it is updated to the current local time. This timestamp is solely used for pruning purposes and is never utilized for vclovk comparison.

- **What other timekeeping tools are used besides vclocks? Describe at least 2 shortly.**

Three further techniques for capturing causal and temporal linkages in a distributed system are listed below (logic clocks).

- Lamport timestamps, which are software counters that are monotonically rising.
- In an optimistic replicated system, version vectors organize replicas in accordance with updates.
- Matrix clocks, which are a type of vector clock that also stores information about how other processes see the system.