Consistency vs. Availability

SQL databases seem to fulfil the criteria of ACID (Atomicity, Consistency, Isolation, Durability) (Luber & Litzel, 2018) whereas NoSQL database supporters defend the idea of BASE (Basically available, soft state, eventual consistent) (DB-ENIGNES, N.D.). Listening to a talk at goto (Fowler, 2012) it specifically puts the emphasize on the comparison of the two standards of "High consistency" (SQL) against "High availability" (NoSQL). To give an example in this respect, think about training times on a Football pitch that a club wants to organize for all its teams. I think all agree that only one team can use the ground at one moment in time, at least for an efficient training. Furthermore, there is probably already a time table for the whole week containing all the regular training sessions of all teams of the club. However, if a team wants to set up an extra session, this should be possible, at least in some kind of range. For example, if an extra session request would have been sent to the administrator, the trainer of the team which has the initial right to use the ground at that time should also get a short note and decide whether he accepts it or not. This temporary "in process" request should be possible for every team of the club. This is what the trade-off between availability and consistency describes. High availability would allow the application to accept such a process, whereas the pledge for high consistency would vote against it.

Reference List

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