Mod 06

[**1**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans01)**.** Name two use cases for key-value databases.

Two use cases for using a key-value databases would be setting up user profiles and gathering real-time analytics. With a user profile I can associate every attribute of a player’s; injury history, amount of time played, what team they’re playing…etc. There is a long list of features that the system would be able to report and analyze the data based on a unique profile.

With real-time information the system could better determine what the player’s current health is and if there is risk for future injury.

[**2**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans02)**.** Describe two reasons for choosing a key-value database for your application.

The first question sums up the reasons for using a key-value database. When I can associate all risks to a player’s health with one key I can easily gather the correct information on what the best option is to move forward with each player. I’d start with asking should they even be on the field? Should we find a replacement? Will that player be available during this game or the next?

With real-time analytics the system should be able to see after each play what the best move is moving forward for the team and the player.

[**3**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans03)**.** Name two use cases for document databases.

With document databases the AI module could store player profiles (age, weight, position, game statistics, and other relevant information. This can also be used to track performance on the player based on given circumstances.

[**4**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans04)**.** Describe two reasons for choosing a document database for your application.

Although there is a difference the same information from having a key-based database and document database would have similar outcomes. It will be easy to see a player’s profile, and also track a performance over time.

[**5**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans05)**.** Name two use cases for column family databases.

With column family databases I’d look mostly at injury tracking and game statistics. With injury tracking I could look at specific injuries based on body part and from there track how much that has effected players with similar injuries. This can also give insight into potential game statistics moving forward.

[**6**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans06)**.** Describe two reasons for choosing a column family database for your application.

This is answered in question 5. The system should be able to identify patterns that could prevent future injury and check in on potential game statistics.

[**7**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans07)**.** Name two use cases for graph databases.

I’d go with social network analysis and specific to my application the coach’s playcalling.

[**8**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans08)**.** Describe two reasons for choosing a graph database for your application.

Graph databases get a little tricky for my use case with NFL players. On the one hand there is Social Networking that reveals a lot more than what can be seen on the field, but should be taken into consideration. Another are where graph databases could be useful is on a coach’s play calling style. So me plays may be more risky for players in terms of injury, but have a higher reward in terms of the game outcome.

[**9**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans09)**.** Name two types of applications well suited for relational databases.

Transactional and business decisions.

[**10**](https://learning.oreilly.com/library/view/nosql-for-mere/9780134029894/app01.html#ch15ans10)**.** Discuss the need for both NoSQL and relational databases in enterprise data management.

The need for both NoSQL and relational databases are needed in enterprise data management.

Transactions are what help keeps an NFL team in business and helps in decision making. A relational database is crucial for any business, but not necessary when focusing on a player’s health. When focusing on a player’s health a NoSQL system is necessary. To ensure the business is still running a relational database is very important.

If you think about it, a fan pays for a ticket, buys a jersey, pays for parking and if the team is doing well a relational database would be ideal. This is how business decisions are made. If the star player is injured or not playing and the team is losing because of a poor NoSQL system then the relational database isn’t as lucrative.