Document databases are a type of database that store their data in the form of documents written in some sort of object notation language like JSON or XML. The main advantage of these types of databases is that they do not require schemas and afford more flexibility in the storage format of the data. Where theses databases seem to really shine (such a Cassandra) is with social media platforms such as twitter or blogs or user profiles where data isn’t going to be easy to conform to a schema. These types of databases also handle scaling by allowing for more nodes to be added while in run-time, meaning that servers can operate while being maintained upon.

Collections are a type of logical organizational unit that group together related objects in a document database. However, just like with document databases themselves, these collections have no strict organizational pattern, and can vary. Collections should be organized in such a way that is conducive to the types of queries that a business will be performing from the database.

Relational databases utilize keys to handle relations between objects within the database and enforce strict schema rules to maintain organization. Non-relational databases don’t use schemas, and so can use keys, documents, columnar or graph “relations” to link objects.