

1. What is MongoDB:

- A database is a structured way to store and access data
- A NoSQL Database is nothing but the data is stored in an organized way but not stored in tables
- MongoDB is NoSQL document database (stored as documents(collections))

2. What is Document in MongoDB:

- A way to organize and store data as a set of field-value pairs.

```
{  
  <field> : <value>,  
  <field> : <value>,  
  "name"  : "Lakshmi",  
  "title" : "Team Lead",  
  "age"   : 26  
}
```

- *Field* - a unique identifier for a datapoint, *Value* - data related to a given identifier.
 - *Collection* - an organized store of documents in MongoDB, usually with common fields between documents. There can be many collections per database and many documents per collection.
3. Atlas is a wide range of database build for mongo DB, MongoDB is used at the core of Atlas for data storage and retrieval. This sets up database into cloud.
- *Clusters*: groups of servers that store your data can be deployed.
 - The clustered servers are configured in what we call a replica set. Which is set a few connected MongoDB instances that store the same data
 - *Replica Set* - a few connected machines that store the same data to ensure that if something happens to one of the machines the data will remain intact. Comes from the word replicate - to copy something.
 - *Instance* - a single machine locally or in the cloud, running a certain software, in our case it is the MongoDB database.
 - If we deploy a cluster it automatically creates replica set.
 - *Services*: Manage cluster creation, Run and Maintain database deployment, Use cloud service provider of your choice, experiment with new tools and features.
 - *Atlas free tier*: 3-server replica set, 512 MB storage
4. Created cluster, loaded data and added user to the database
5. The created cluster is connected to the atlas shell