# Introduction

## Intro to MongoDB: **What We’ll Learn**

* How to Install MongoDB
* Set up database deployment.
* MongoDB Fundamentals
* CRUD Operations
* Aggregations
* MongoDB Drivers

## Features of MongoDB

* Built with distributed systems from the start
* MongoDB code is openly available to anyone
* Now has new features:
  + Schema Validartion
  + ACID complieance
  + Join
* Sharding
* Client-Side Field-Level Encryption 🡪 allows to encrypt sensitive data before it leave the client

# Install MongoDB

Self-hosted vs. Managed Mongo DB

Self-Managed Responsibilities:

* Select & maintain hardware.
* Security
* Monitoring
* Backups
* Version Upgrades
* Scaling (if database grows)

**Look at MongoDB Agent** if going down this route.

Hosted MongoDB: Soltuions

* Clever Cloud
* IBM Cloud
* ObjectRocket
* ScaleGrid
* DigitalOcean
* MongoDB Atlas

2 different versions of MongoDB: Community vs Enterprise:

Enterprise:

* Advanced Security options
* Additional Storage Engine
* Management Tools
* MongoDB Enterprise Kubernetes Operators
* MongoDB Connector for BI

## Installing MongoDB on Mac

m 🡪 allows you to have multiple versions of MongoDB installed at the same time

npm 🡪 Node Package Manager

NVM 🡪 Node Version Manager: Used to install Node

# Setting up my Database

**Mongod:**

* + **Daemon** process for MongoDB
  + Handles data request from the MongoDB Shell/Drivers
  + Preforms background management Operations.

**Default Settings:**

* + port: 27017
  + Data Storge: /data/db or C:\data\db\*

Currently does not work on macOS Catalina or Later

Code in terminal **Mognosh** connects to the local port

Graphical user interface, text, application

Description automatically generated