Building your Mobile Back-End with MongoDB

<https://www.youtube.com/watch?v=psiyHH17DBg>

1. General Approach
2. Cloud Service
   1. EC2
   2. Rackspace
   3. App Engine
3. Data Store Technology
   1. MongoDB
4. Rest API
5. Cloud Hosted MongoDB
   1. MongoLab
6. MongoDB

* Scalable, open-source, high performance, document-oriented database

1. Addresses two Modern DB Problems
   * 1. Object/relational “impedance mismatch”
     2. Horizontal Scalability
2. Dynamic queries

db.posts.find({ author.name: ”mike” })

* + - Author.name is a field

db.posts.find({ rating: { $gt: 2 }})

* + - $gt is a comparison operator

db.posts.find({ tags: “software” })

* + - Tags is an array

db.posts.find().sort({ date: -1}).limit(10)

* + Atomic update operators

1. High performance, fault tolerant clusters made easy
   * + Master/slave replication
     + Replica sets
     + Auto-sharding
2. Geospatial Indexing
   * Index on geo coordinate pairs
   * Search by
     + Bounding box
     + Bounding circle (point,radius)
3. GridFS
   * Distributed file system inside MongoDB
   * Stores large files by splitting them into smaller documents
   * Leverages existing sharding and replication configuration
   * Stores metadata along with files
   * Works well behind a CDN