

# Developers

Build Spring PetClinic Reference App  
with **Spring Reactive** and  
Apache Cassandra™



# Director of Developer Relations



- Trainer
- Public Speaker
- Developers Support
- Developer Applications
- Developer Tooling
  
- Creator of ff4j ([ff4j.org](http://ff4j.org))
- Maintainer for 8 years+
  
- Happy developer for 14 years
- Spring Petclinic Reactive & Starters
- Implementing APIs for 8 years

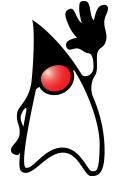


Cédrick Lunven

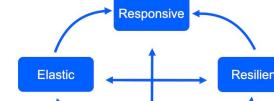
# Senior Developer Advocate



Passionate  
Advocate



Java Champion



**mgrygles**



**mary-grygleski**

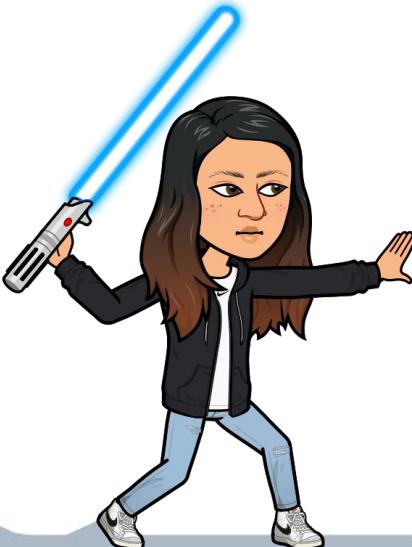


**mgrygles**



**mgrygles**

- Streaming
- Distributed Systems
- Reactive Systems
- IoT/MQTT



**Mary Grygleski**





S



Cedrick  
Lunven



David  
Dieruf



Rags  
Srinivas



Artem  
Chebotko



Stefano  
Lottini



Aleksandr  
Volochnev



Aaron  
Ploetz



S



Jack  
Fryer



Kirsten  
Hunter



Gary  
Harvey



Mary  
Grygleski



Ryan  
Welford

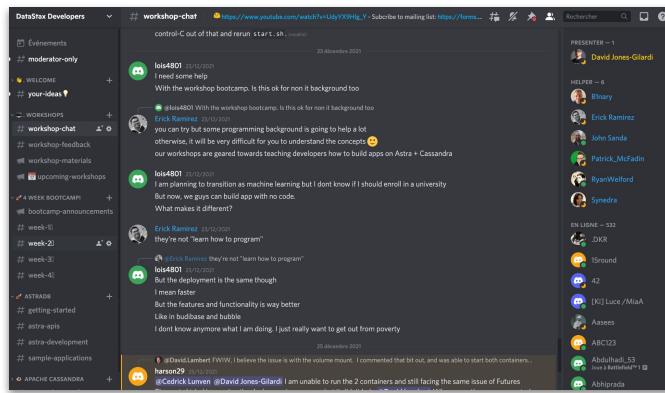
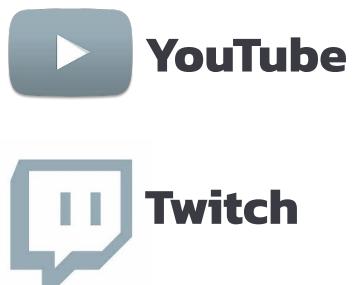


David  
Gilardi



**Livestream:** youtube.com/DataStaxDevs

**Questions:** <https://dtsx.io/discord>

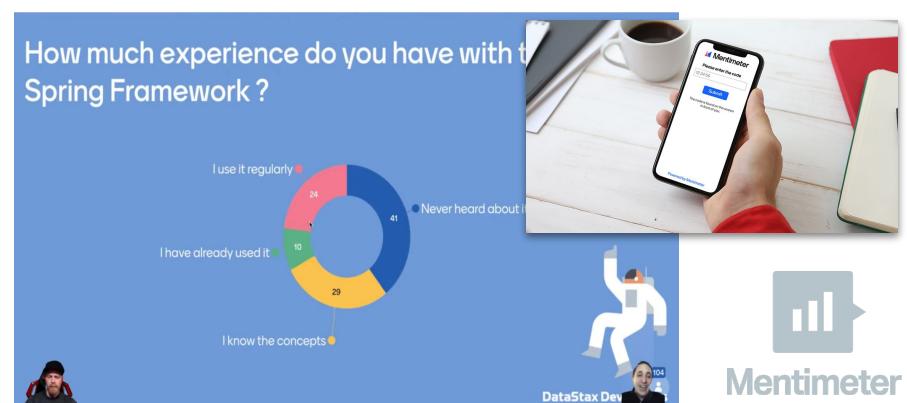


**YouTube  
(with nighbot)**

**Discord  
(#workshop-chat)**

!discord

**Games and quizzes:** [menti.com](https://menti.com)

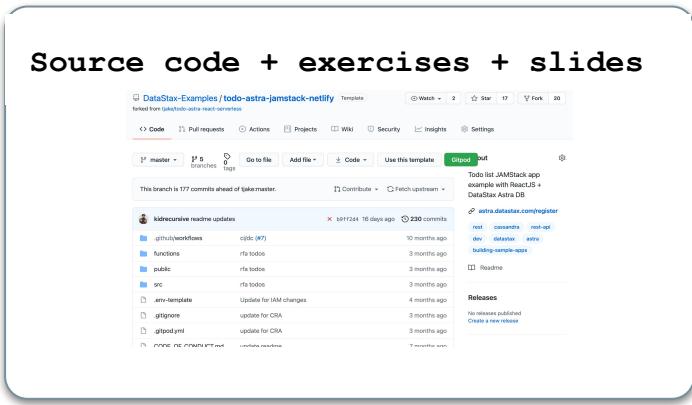


!menti



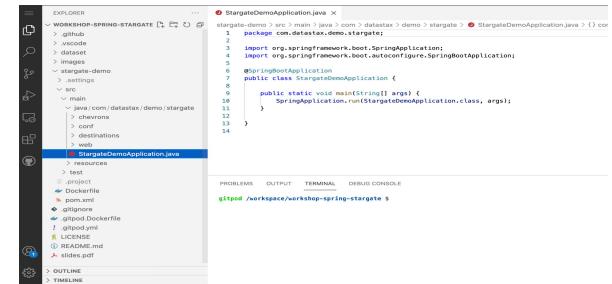
Nothing to install !

### Source code + exercises + slides



!github

### IDE



!gitpod

### Database + Api + Streaming



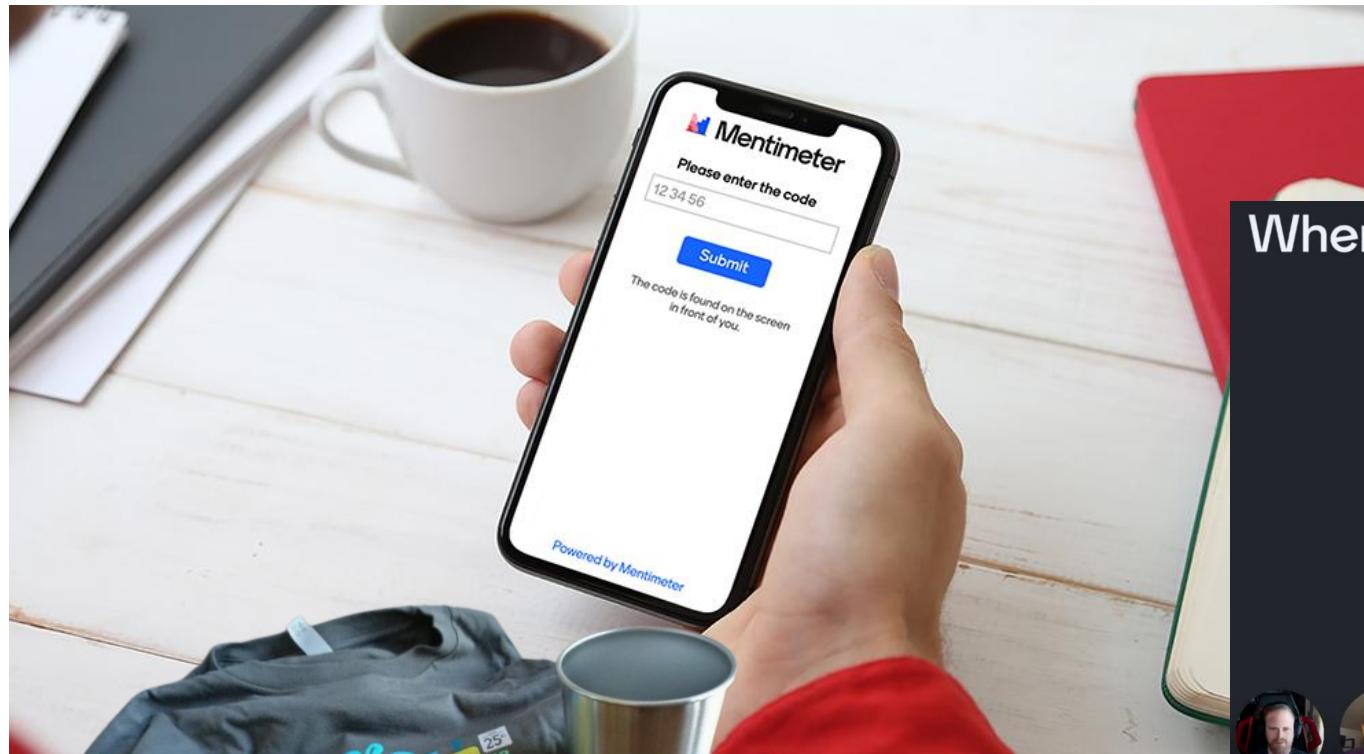
!astra

Hands-On Housekeeping



!homework





**Open a new TAB**

**CODE=** [7848 5649](#)

Where are you from?

Mentimeter



[menti.com](#) ⇒ enter code  
Don't answer in YT chat  
Look at phone (not at YT)  
Keep it open for later

"Menti" for survey and quiz !

# 01



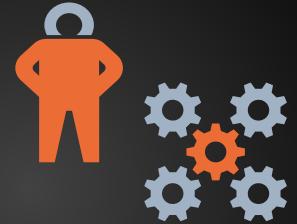
**Overview**  
**Application and DB**

# 02



**DB Design**  
**The Art of Data Modelling**

# 03



**Connectivity**  
**Getting Started with Drivers**

# 04



**Spring Data Reactive**  
**Manifesto and usage**

# 05



**Spring Webflux**  
**Reactive APIs**



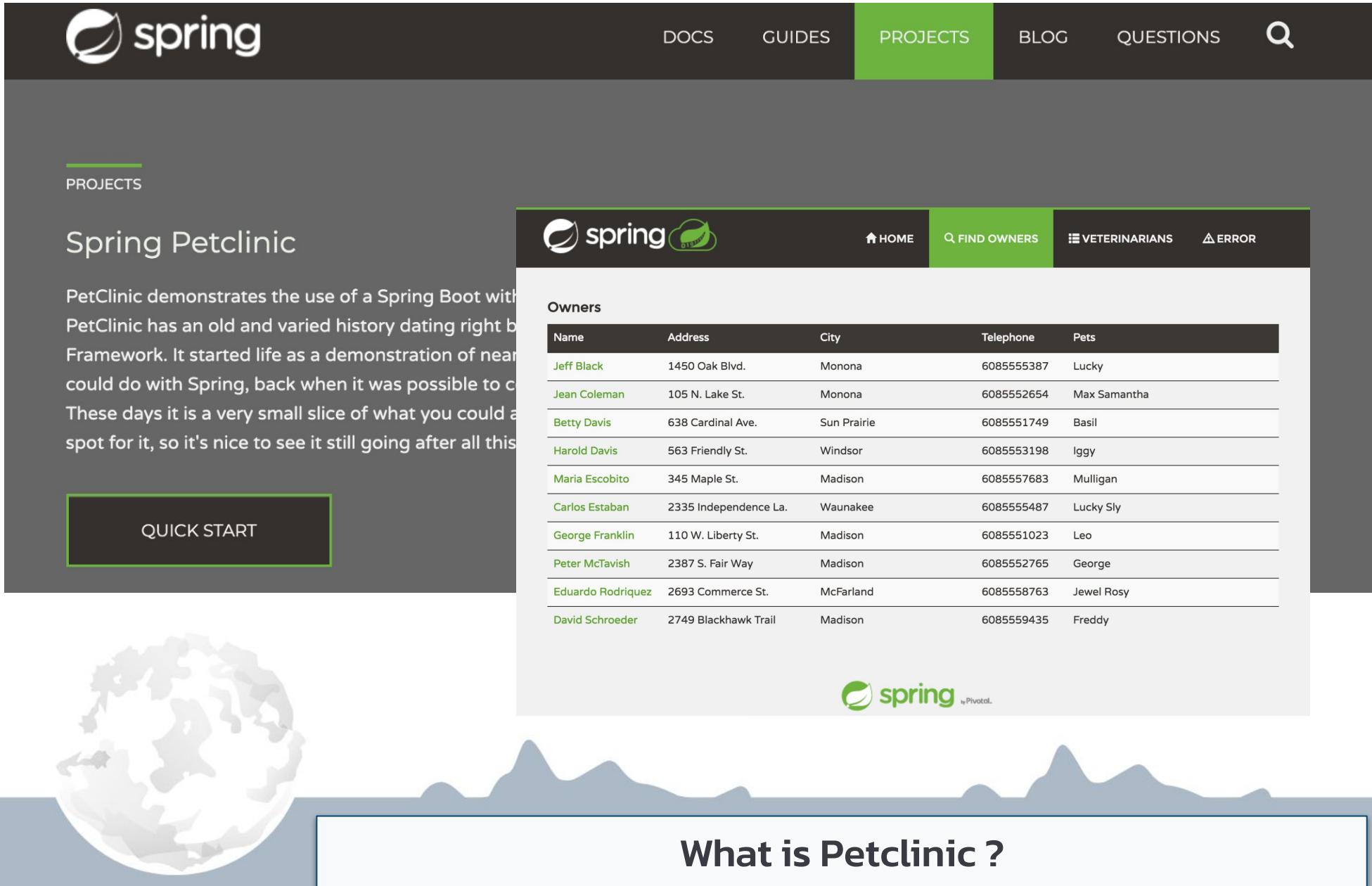
# 06



**Game &**  
**Resources**

**Agenda**

<https://projects.spring.io/spring-petclinic/>



The screenshot shows the Spring Petclinic application running on a Spring Boot server. The interface includes a top navigation bar with links for DOCS, GUIDES, PROJECTS (which is highlighted in green), BLOG, and QUESTIONS, along with a search icon. Below the navigation, there's a section titled "PROJECTS" and a main title "Spring Petclinic". A "QUICK START" button is visible. The central content area displays a table of "Owners" with columns for Name, Address, City, Telephone, and Pets. The table lists ten entries, each with a link to the owner's details. At the bottom, there's a "spring" logo with "Pivotal" underneath.

Name	Address	City	Telephone	Pets
Jeff Black	1450 Oak Blvd.	Monona	6085555387	Lucky
Jean Coleman	105 N. Lake St.	Monona	6085552654	Max Samantha
Betty Davis	638 Cardinal Ave.	Sun Prairie	6085551749	Basil
Harold Davis	563 Friendly St.	Windsor	6085553198	Iggy
Maria Escobito	345 Maple St.	Madison	6085557683	Mulligan
Carlos Estaban	2335 Independence La.	Waunakee	6085555487	Lucky Sly
George Franklin	110 W. Liberty St.	Madison	6085551023	Leo
Peter McTavish	2387 S. Fair Way	Madison	6085552765	George
Eduardo Rodriguez	2693 Commerce St.	McFarland	6085558763	Jewel Rosy
David Schroeder	2749 Blackhawk Trail	Madison	6085559435	Freddy

What is Petclinic ?

<https://spring-petclinic.github.io/>

The screenshot shows the GitHub repository page for 'spring-petclinic'. At the top, there are statistics: 5,186 stars and 14,079 forks. Below this is a large green header with the text 'The Spring PetClinic Community' and a green leaf logo. To the right of the header are links for 'Docs', 'GitHub', 'Docker images', and 'Demo'. A central feature is a terminal window showing the command '\$ cd spring-petclinic \$ mvn package'. Below the terminal is a 'Live Demo' button. The main body of the page is titled 'What is Spring PetClinic?' and contains three logos: Spring (teal background), GitHub (black octocat icon), and Apache (red feather icon). Below each logo is its respective description: 'A legendary and official webapp', 'A GitHub Organization', and 'Apache 2.0 license'.

Star | 5,186 Fork | 14,079 Tweet

The Spring PetClinic Community

Open Source sample applications based on the Spring stack

Live Demo

What is Spring PetClinic?

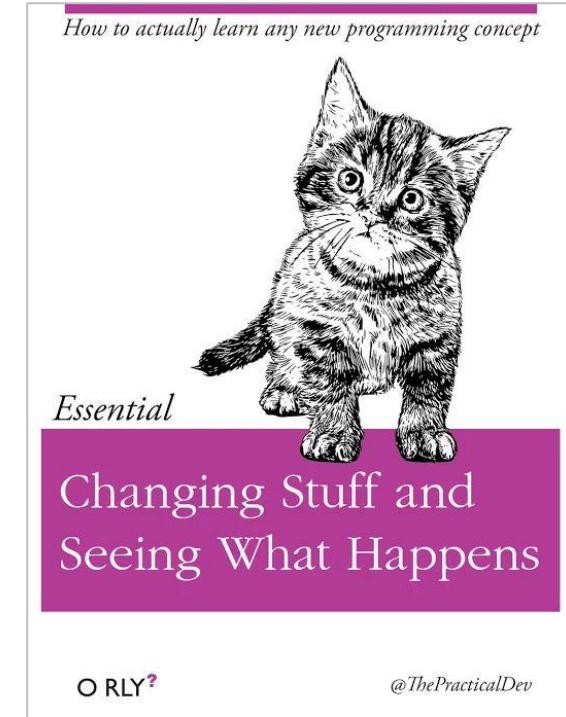
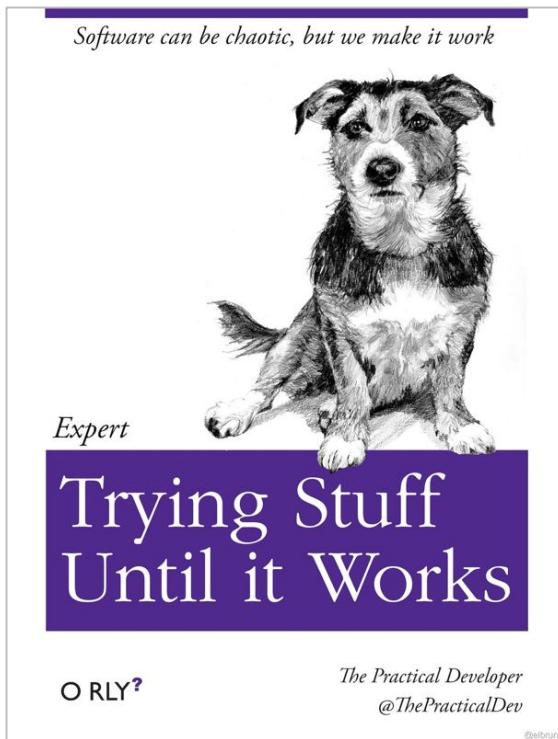
A legendary and official webapp

A GitHub Organization

Apache 2.0 license

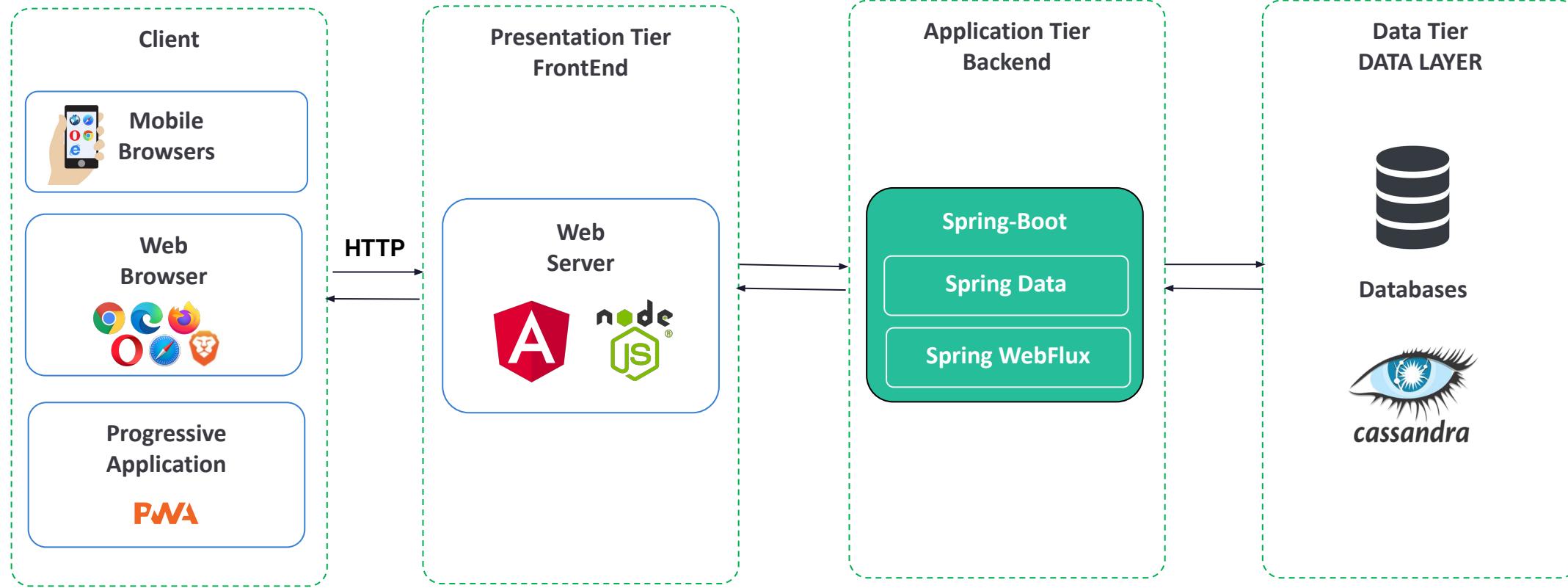
What is Petclinic Community ?

<https://spring-petclinic-community.herokuapp.com/>

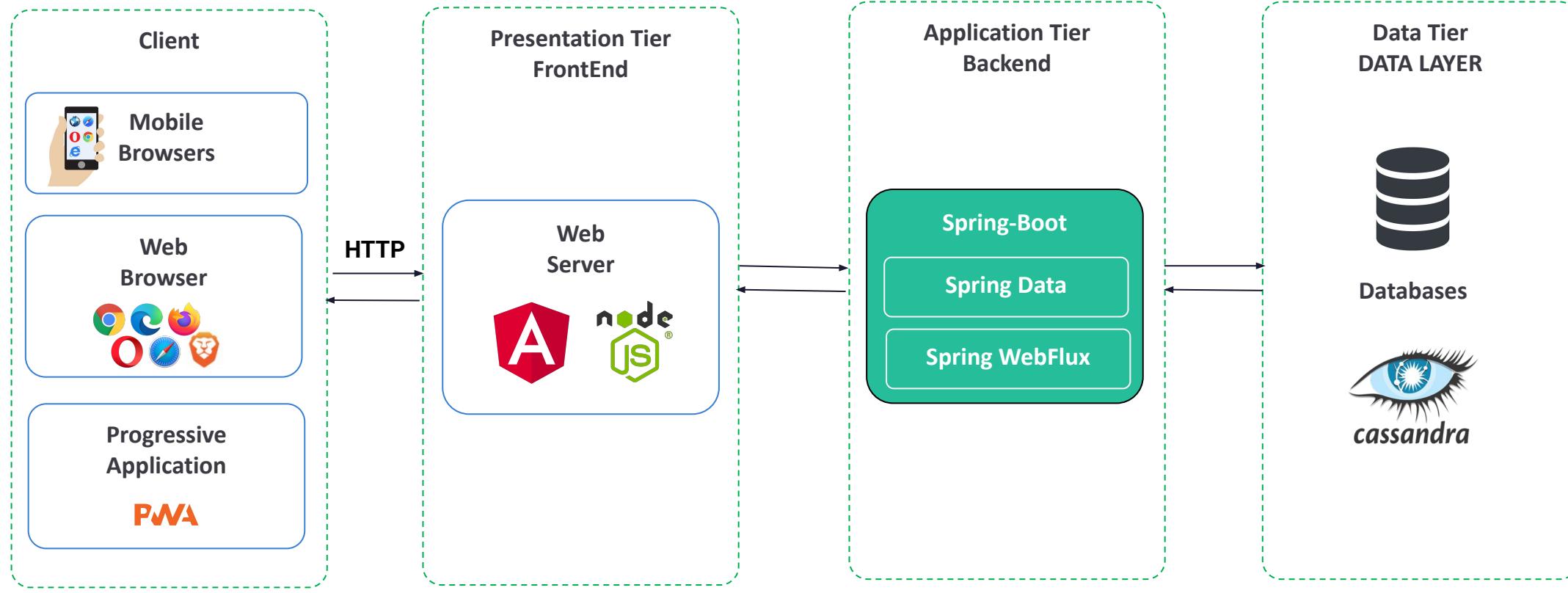


Demo





## Architecture Overview



Gitpod

Gitpod

DataStax  
**Astra DB**

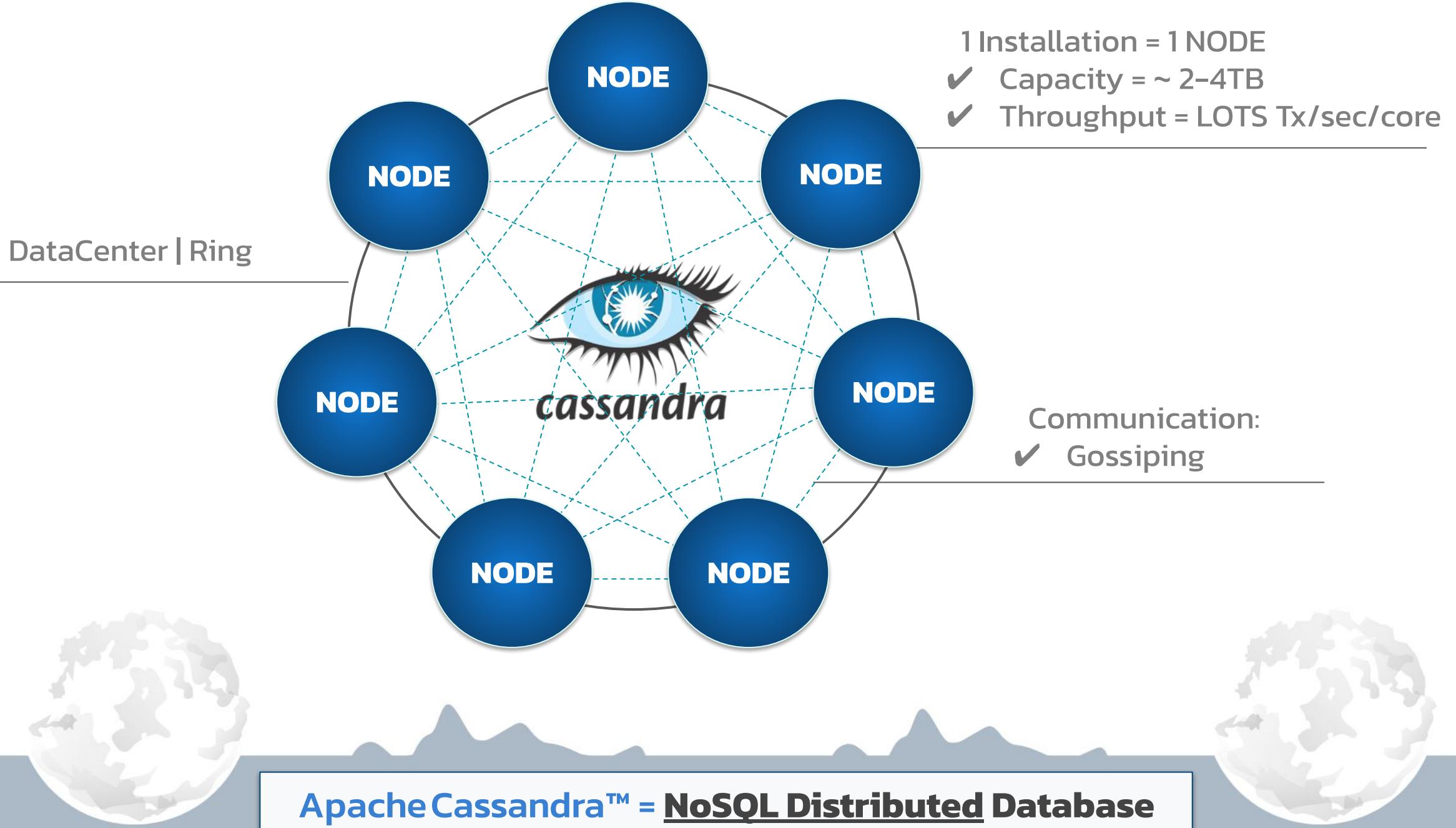


# Apache Cassandra

## in a nutshell



DataStax



# Apache Cassandra @ Netflix

- . 98% of streaming data is stored in Apache Cassandra
- . Data ranges from customer details to viewing history to billing and payments
- . Foundational datastore for serving millions of operations per second

- 30 million ops/sec on most active single cluster
- 500 TB most dense single cluster
- 9216 CPUs in biggest cluster

O(100) Clusters  
O(10000) Instances  
O(10,000,000) Replications per second  
O(100,000,000) Operations per second  
O(1,000,000,000,000,000) Petabytes of data

[dtsx.io/cassandra-at-netflix](http://dtsx.io/cassandra-at-netflix)

## Apple Scale

- 160K+ Apache Cassandra instances
- 100+ PB stored
- Several million ops / sec
- 1000s of clusters



And many others...

Cassandra Biggest Users (and Developers)

# Apache Cassandra

NoSQL Distributed Decentralised Database Management System



- Big Data Ready
- Read / Write Performance
- Linear Scalability
- Highest Availability
- Self-Healing and Automation
- Geographical Distribution
- Platform Agnostic
- Vendor Independent



Cassandra Features

Cassandra doesn't belong to any of commercial vendors but controlled by a non-profit Open Source **Apache Software Foundation**, already familiar to you by *Hadoop, Spark, Kafka, Zookeeper, Maven* and many other projects.

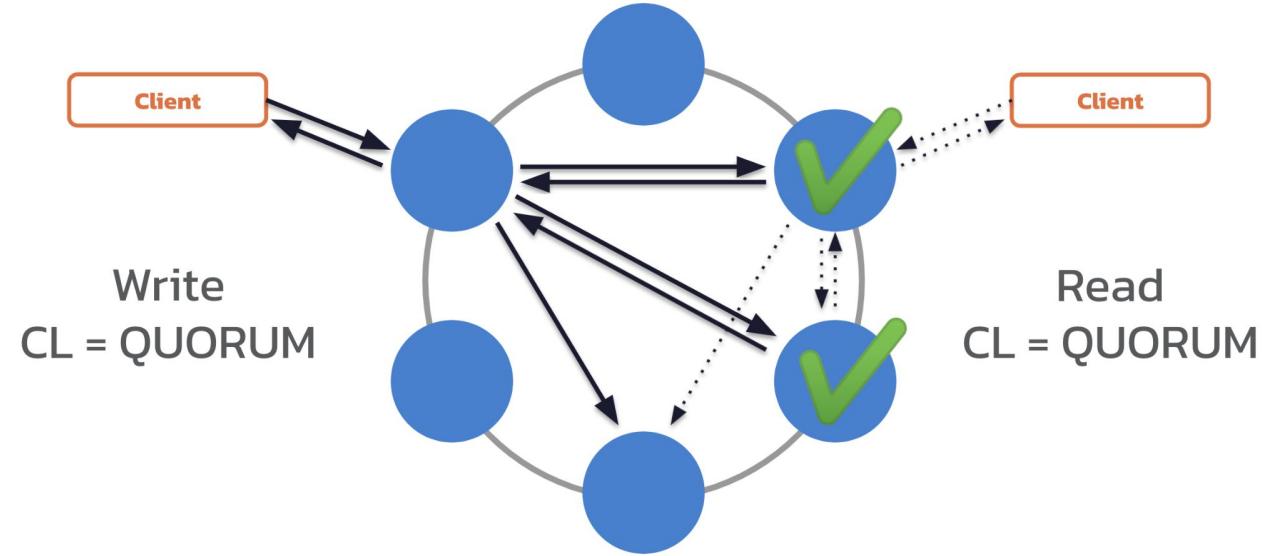


Vendor Independent



Even a single Cassandra node is very performant but a cluster consisting of multiple nodes and data centers brings throughput to the next level.

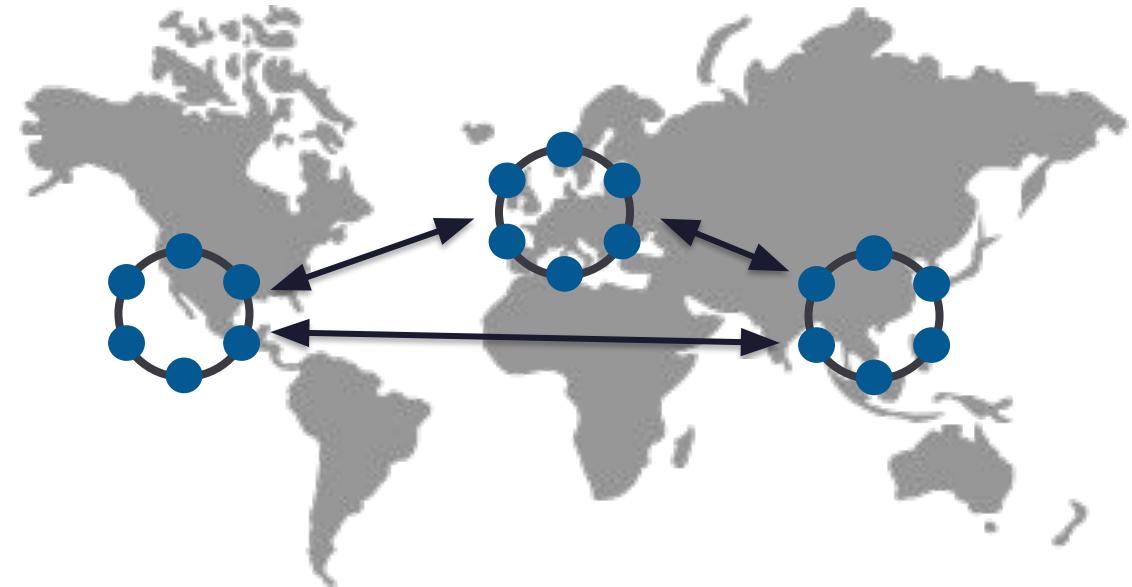
Decentralisation (**masterless architecture**) means that every node is able to deal with any request, read or write.



## Read / Write Performance

Cassandra's trademark is multi-datacenter deployments, granting you an exceptional capability for disaster tolerance while keeping your data close to your clients - worldwide.

All DCs are active (available for both writes and reads)!



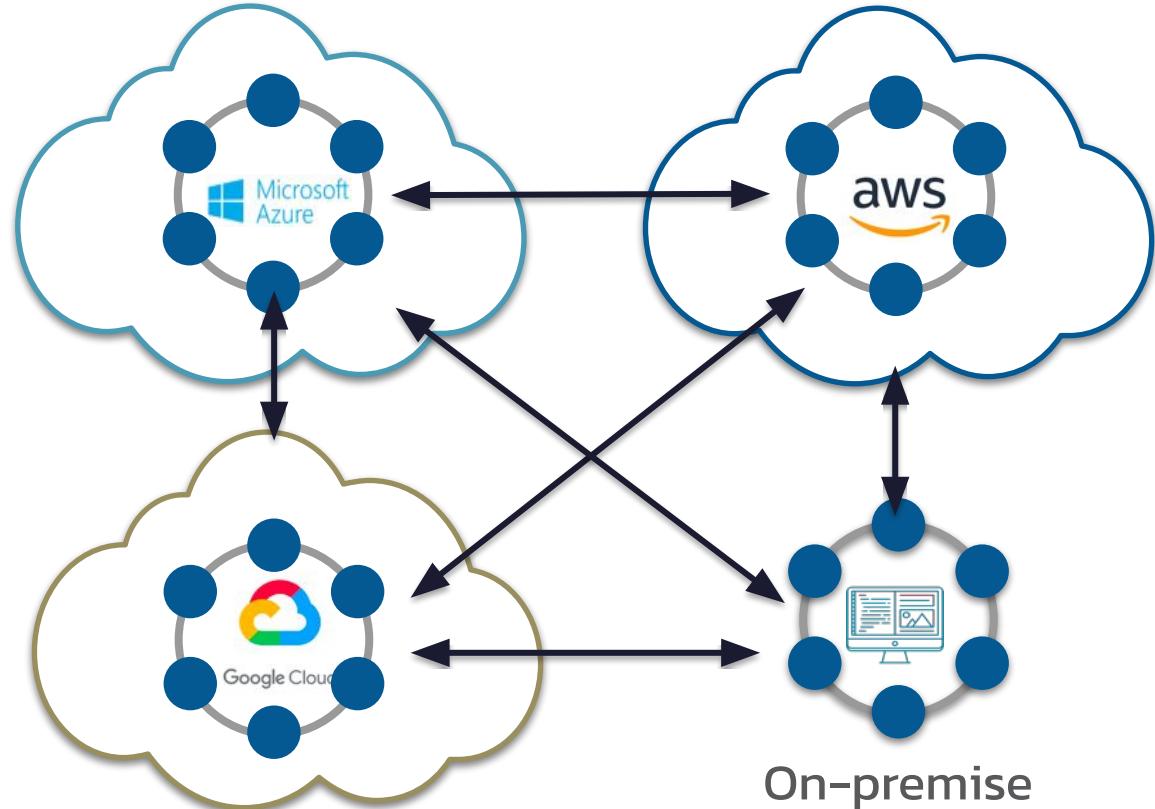
## Geographical Distribution

Operations for a huge cluster can be exhausting so Apache Cassandra clusters are smart and able to scale, change data placement and recover automagically.

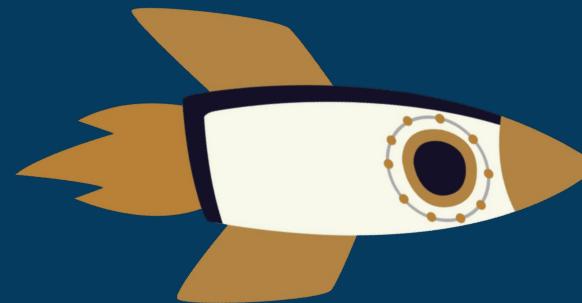
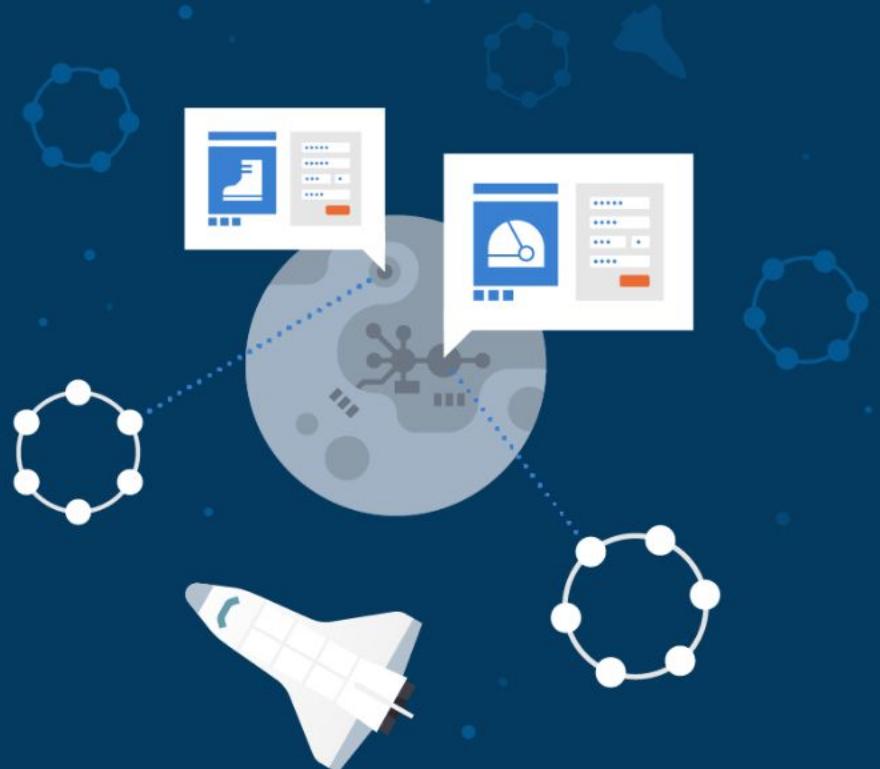


## Self-Healing and Automation

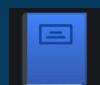
Apache Cassandra is **not bound to any platform** or service provider, helping you build hybrid-cloud and multi-cloud solutions with ease.



Platform Agnostic



# Let's GO (!github)

-  1. Objectives
-  2. Frequently asked questions
-  3. Materials (Slides)

#### Free to Use



Up to 80GB storage and/or 20 million operations monthly.

#### Serverless



Lower your costs by running Cassandra clusters only when needed.

#### No Operations



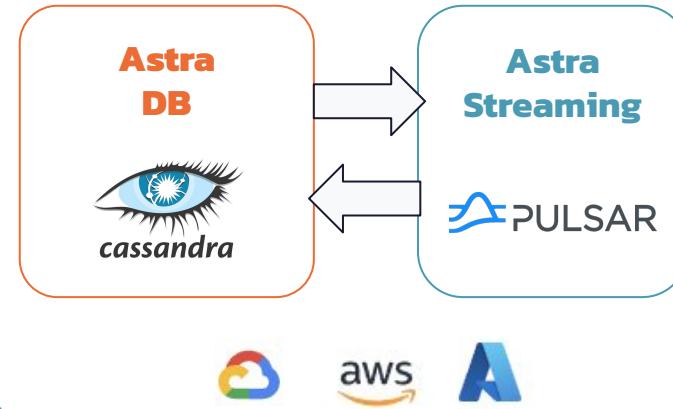
Eliminate the overhead to install, operate, and scale Cassandra.

#### Data APIs



Work natively with Document (JSON), REST, GraphQL and gRPC APIs.

## Astra = SaaS Platform



#### Global Scale



Put your data where you need it without compromising performance, availability or accessibility.

#### End-to-End Security



Secure connect with VPC peering and Private Link. Bring your own encryption key management. SAML SSO secure account access.

#### Zero Lock-in



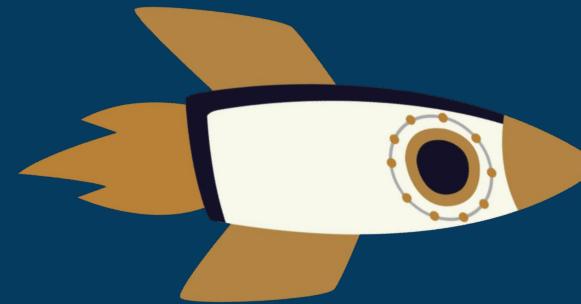
Deploy on AWS, GCP or Azure and keep compatibility with open-source Cassandra.

#### Relational Indexes



Storage Attached Indexing (SAI) lets you query tables using any columns.

Astra = Cassandra As a Service++



# Hands-on (!github)

-  4. Create a Database (or resume)
-  5. Create a token (if needed)

# 01



**Overview**

Apache Cassandra™ DB

# 02



**DB Design**

The Art of Data Modelling

# 03



**Connectivity**

Getting Started with Drivers

# 04



**Spring Data Reactive**  
Manifesto and usage

# 05



**Spring Webflux**  
Reactive APIs



# 06



**Game &**  
**Resources**

Agenda

1. Analyze raw data
2. Identify entities, their properties and relations
3. Design tables, using **normalization** and foreign keys.
4. Use JOIN when doing queries to join normalized data from multiple tables

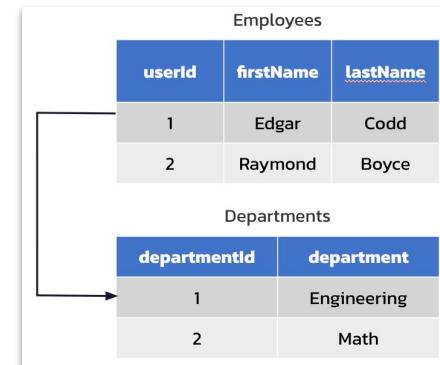
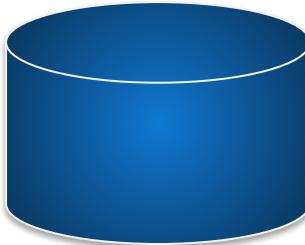


Diagram illustrating normalized data across two tables:

Employees		
userId	firstName	lastName
1	Edgar	Codd
2	Raymond	Boyce

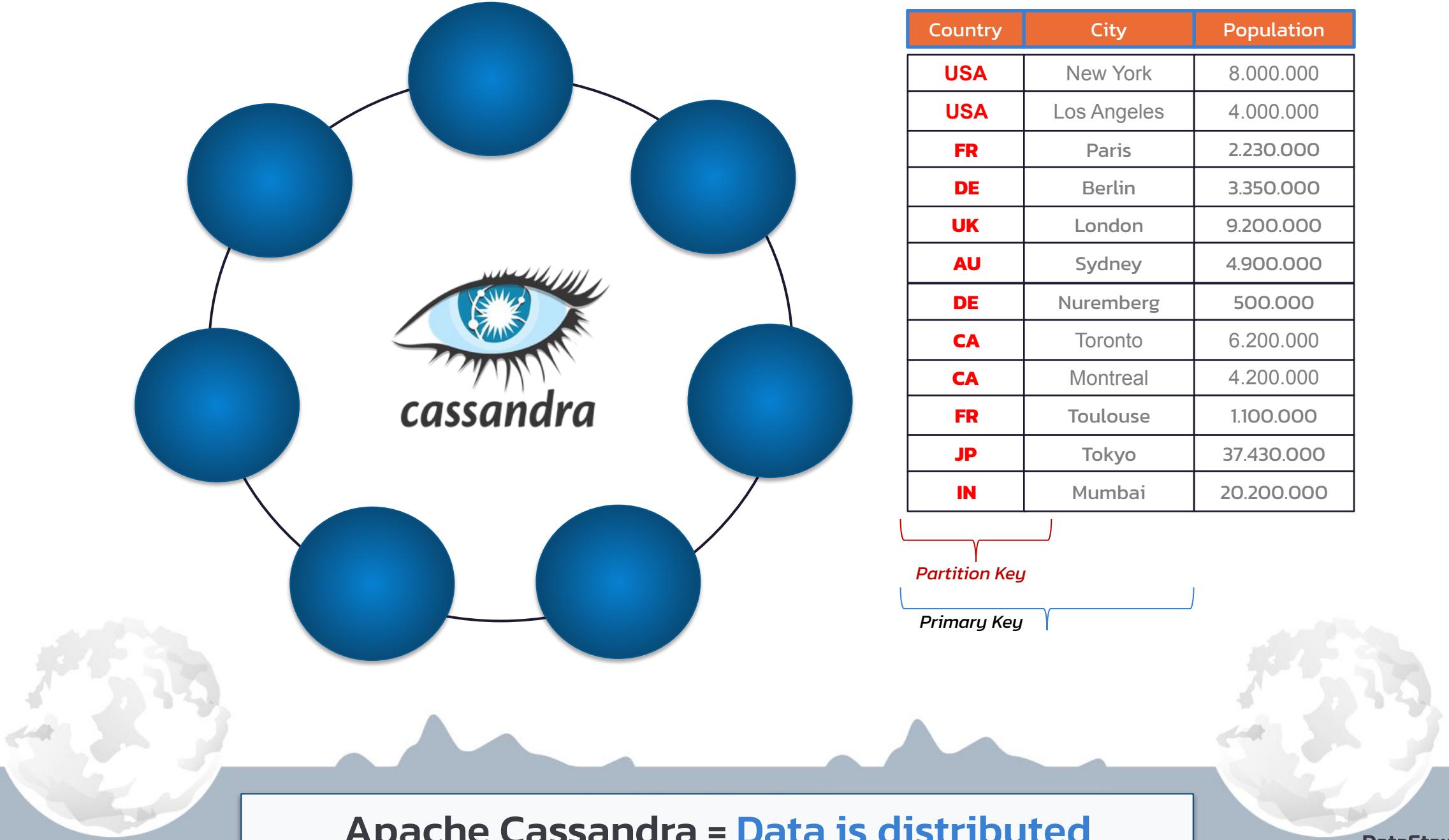
  

departmentId	department
1	Engineering
2	Math

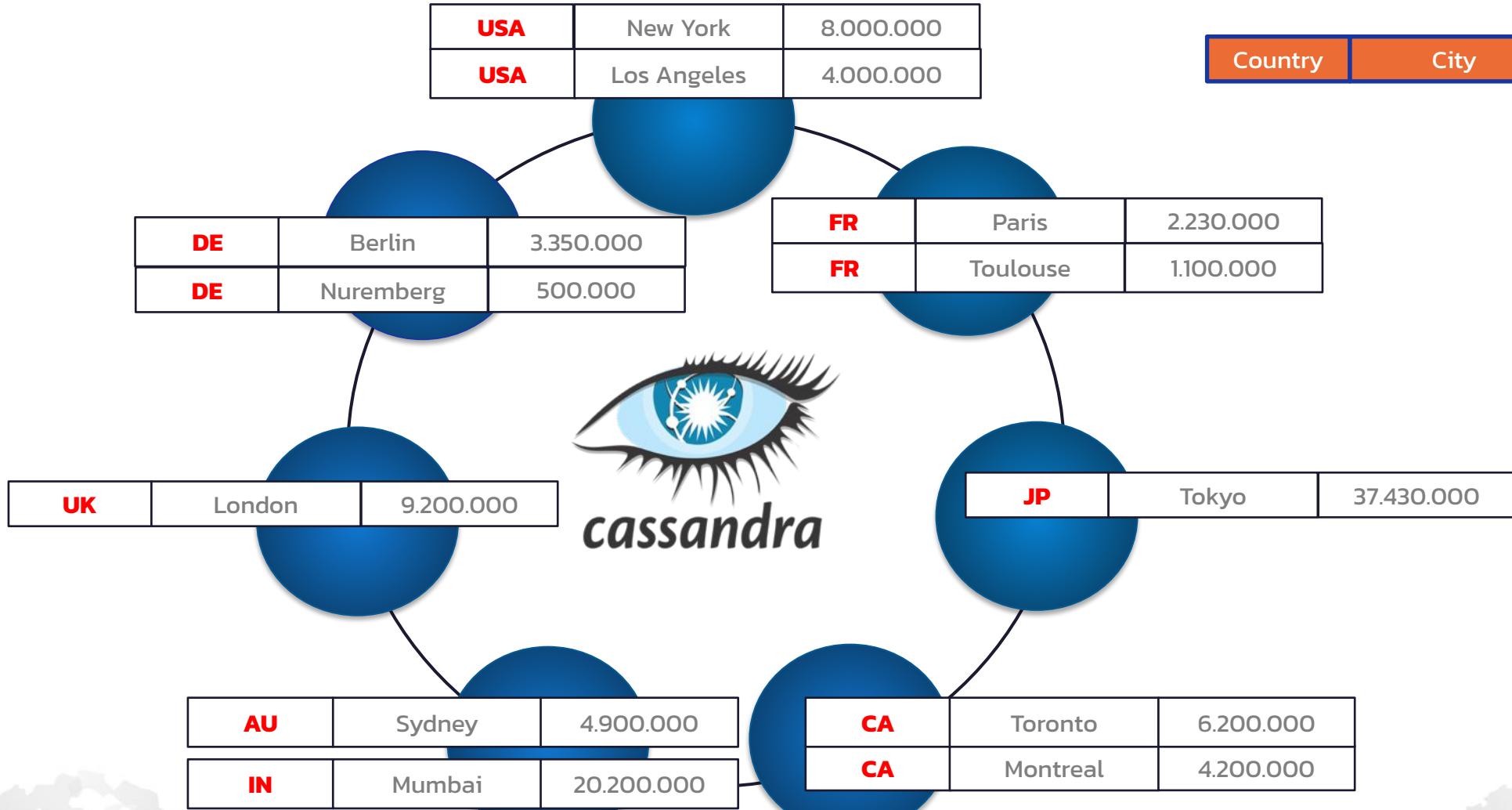
A white box highlights the "department" column in the first table, and a black box highlights the "departmentId" column in the second table, indicating a relationship between them.



**Relational Data Modelling**



Apache Cassandra = Data is distributed



Apache Cassandra = Data is distributed

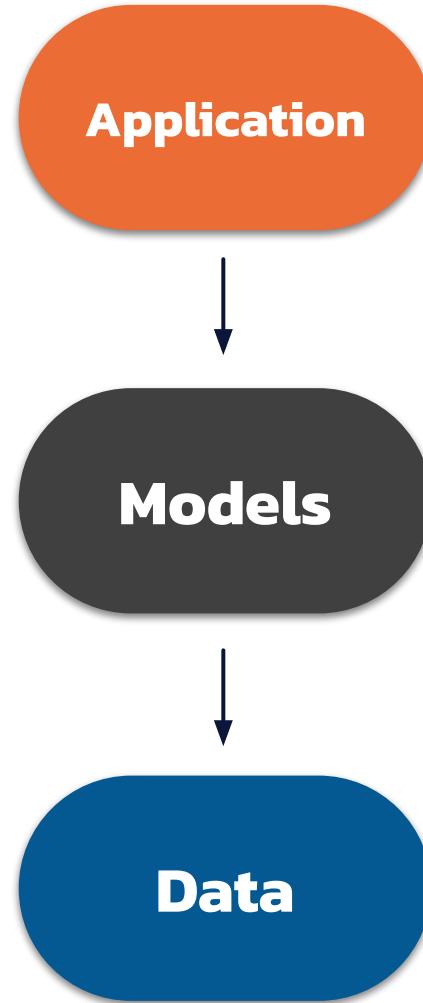
You cannot reuse the same  
data model as **Relational**

**no relations, no joins**

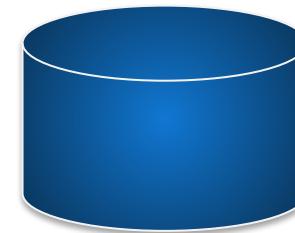
so How ?

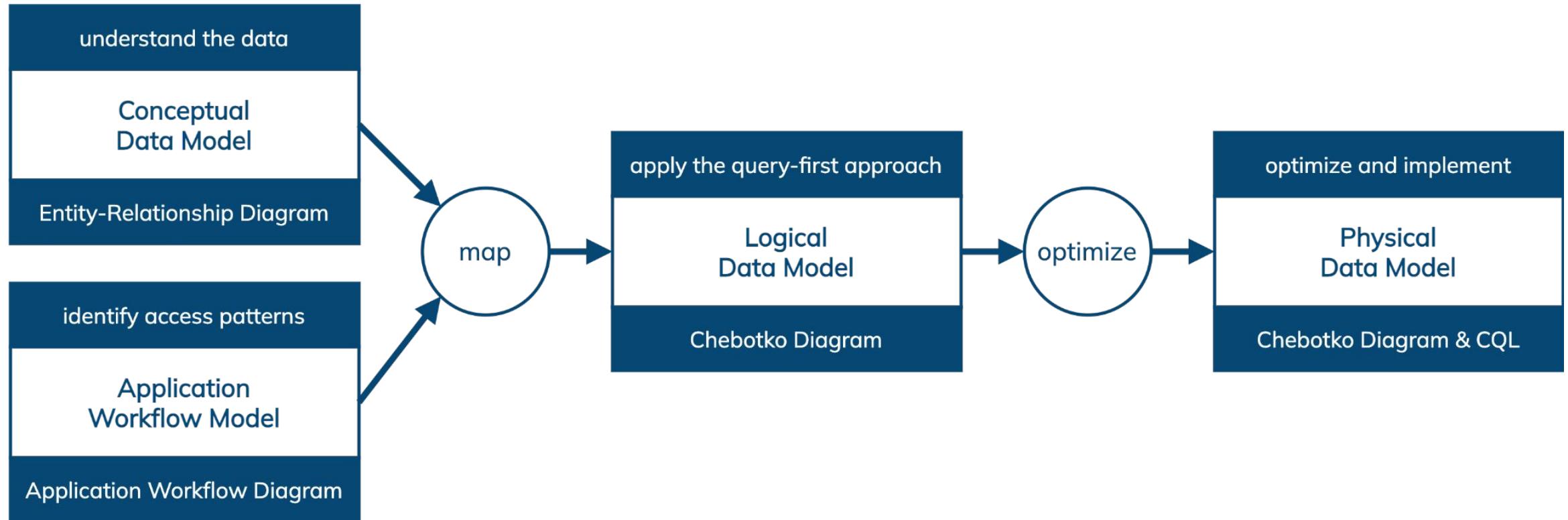


1. Analyze user behaviour  
(customer first!)
2. Identify workflows, their dependencies  
and needs
3. Define Queries to fulfill these workflows
4. Knowing the queries, design tables,  
using **denormalization**.
5. Use BATCH when inserting or updating  
denormalized data of multiple tables



Employees			
userId	firstName	lastName	department
1	Edgar	Codd	Engineering
2	Raymond	Boyce	Math
3	Sage	Lahja	Math
4	Juniper	Jones	Botany

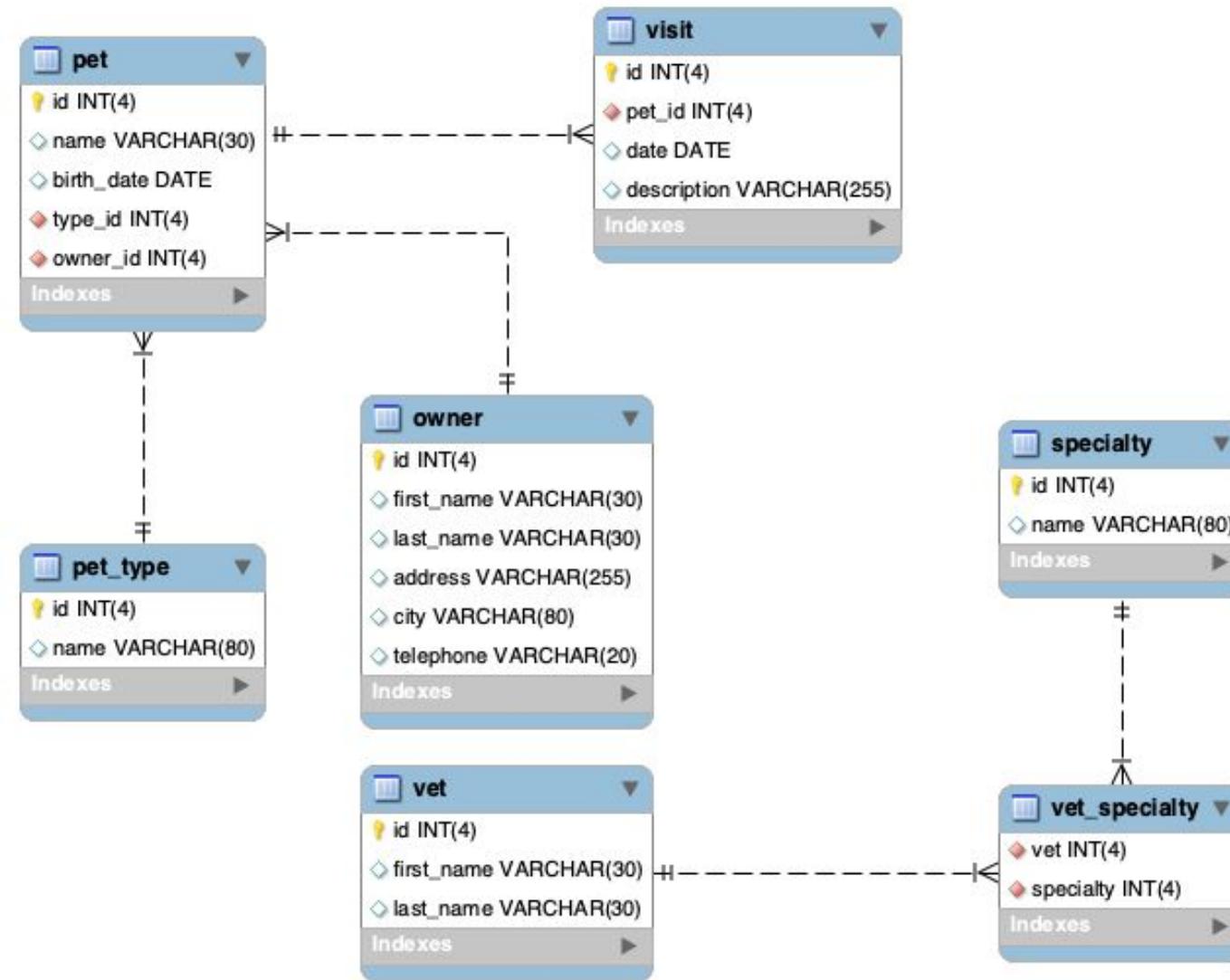




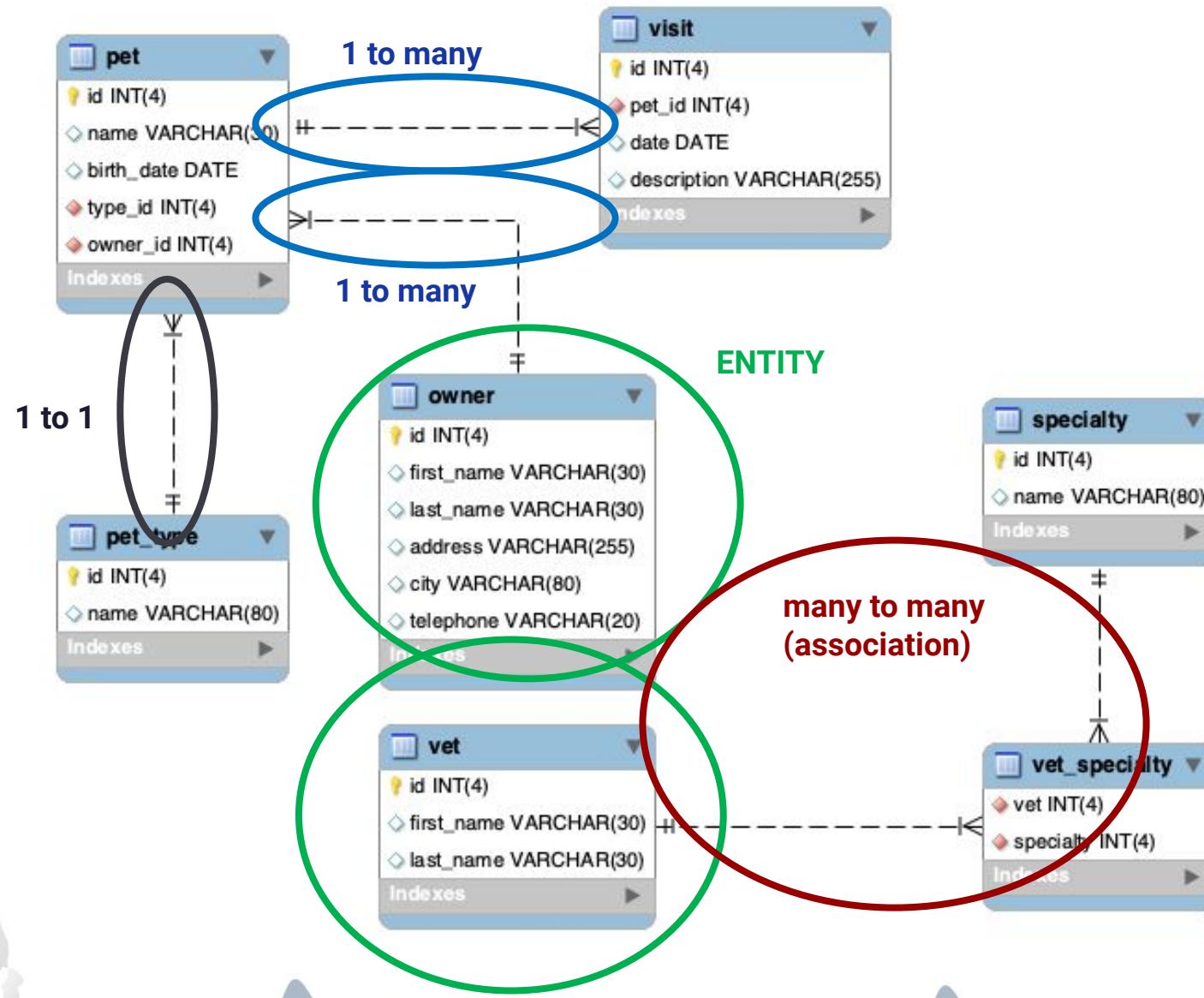
**very often, 1 query = 1 table**



## Data Modelling Methodology



## Relational Data Model



## Relational Data Model

## **Use-Case:**

A User opens the **owner** "ALL" page

## **Workflow:**

List all **owners**



## Welcome to Petclinic

Q ALL

Welcome

+ ADD NEW

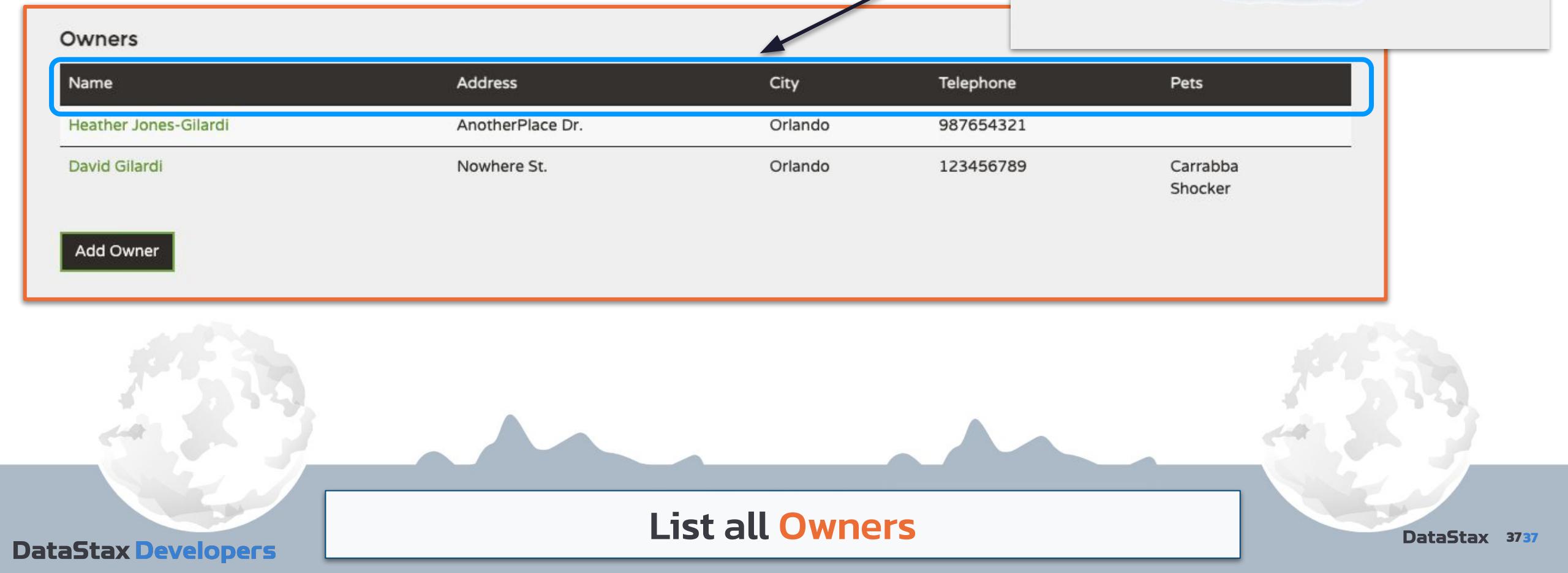


## Owners

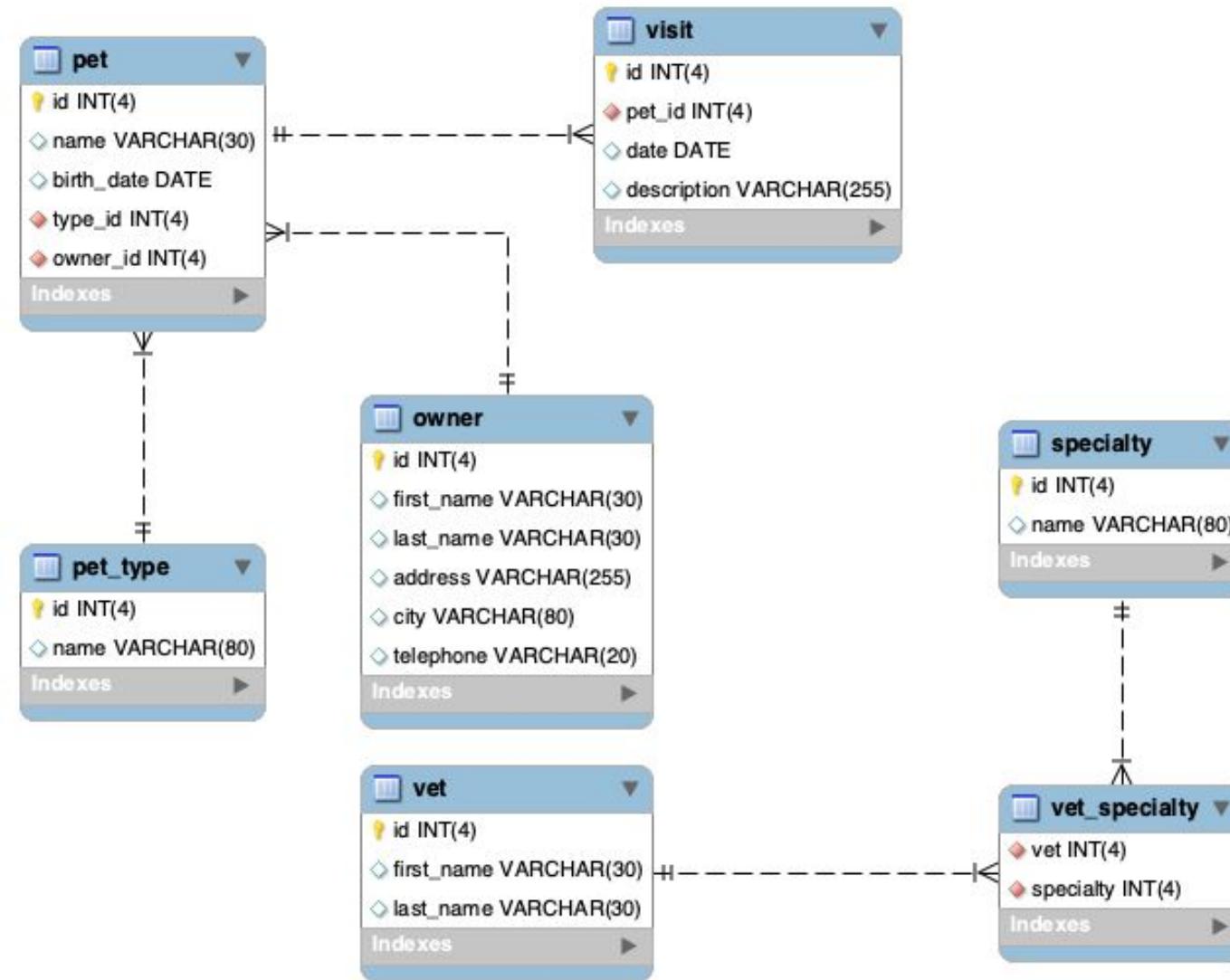
Name	Address	City	Telephone	Pets
------	---------	------	-----------	------

Heather Jones-Gilardi	AnotherPlace Dr.	Orlando	987654321	
-----------------------	------------------	---------	-----------	--

David Gilardi	Nowhere St.	Orlando	123456789	Carrabba Shocker
---------------	-------------	---------	-----------	---------------------

[Add Owner](#)

List all Owners



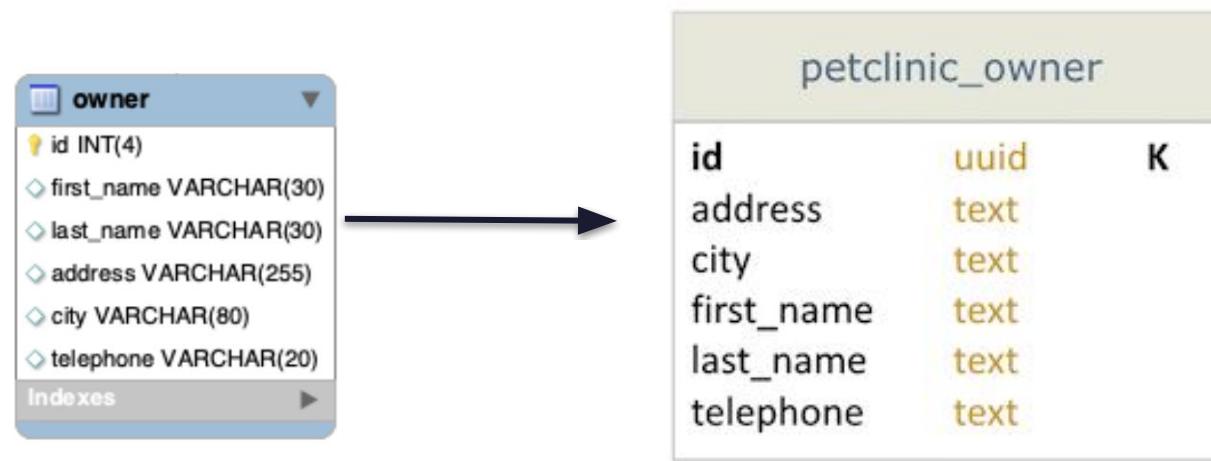
## Relation Schema

owner	
!	id INT(4)
◇	first_name VARCHAR(30)
◇	last_name VARCHAR(30)
◇	address VARCHAR(255)
◇	city VARCHAR(80)
◇	telephone VARCHAR(20)
Indexes	

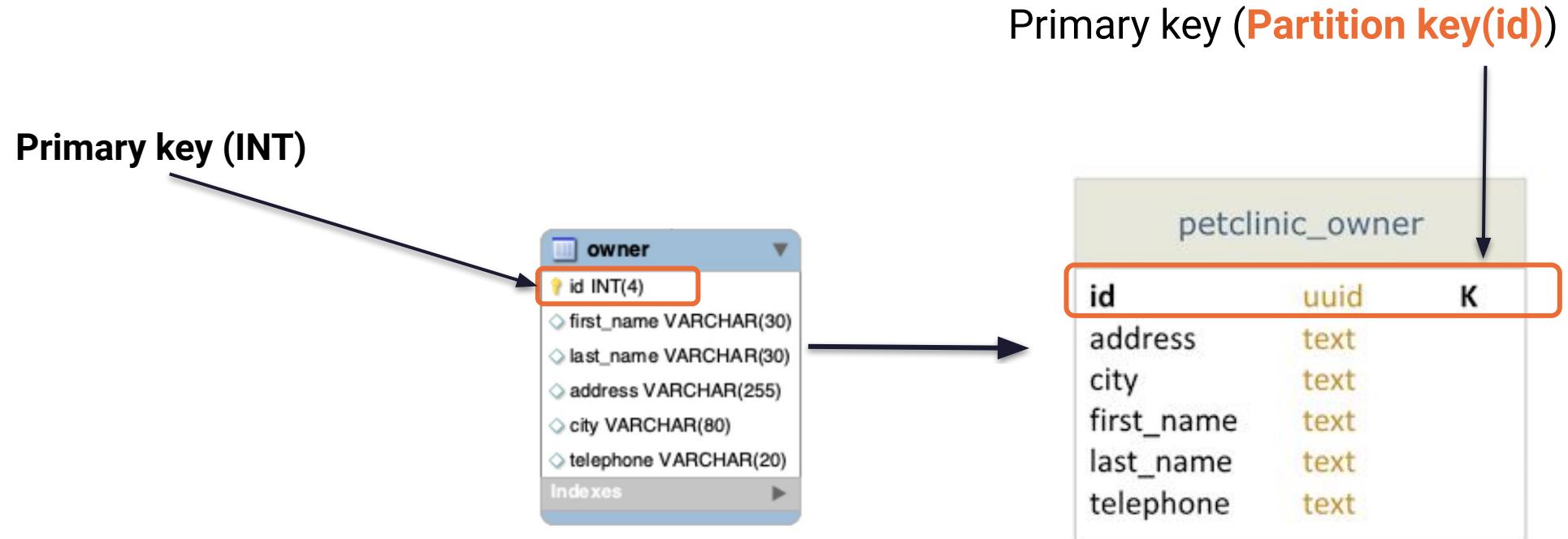
A simple list of owners and their properties

Primary key: **id**

List all **Owners** SQL



List all **Owners Cassandra**



*UUID's make good partition keys  
Row is unique  
One read gets ALL owner information*

List all **Owners Cassandra**

## **Use-Case:**

A User opens the owner detail page

## **Workflow:**

Find **owner** and any **pets** related to target  
**owner** using its identifier (**owner\_id**)



## Owners

Name	Address	City	Telephone	Pets
Heather Jones-Gilardi	AnotherPlace Dr.	Orlando	987654321	
David Gilardi	Nowhere St.	Orlando	123456789	Carrabba Shocker
<a href="#">Add Owner</a>				



Find Pets for Owner (one to many)

## Owner Information

Name  
Address  
City  
Telephone

David Gilardi  
Nowhere St.  
Orlando  
123456789

< Back

Edit Owner

Add New Pet

## Pets and Visits

Name Shocker  
Birth Date 2021/03/29  
Type dog

Edit Pet

Delete Pet

Add Visit

Name Carrabba  
Birth Date 2014/05/23  
Type dog

Edit Pet

Delete Pet

Add Visit

Find Pets for Owner (one to many)

### Owner Information

Name  
Address  
City  
Telephone

David Gilardi  
Nowhere St.  
Orlando  
123456789

< Back   Edit Owner   Add New Pet

One owner

### Pets and Visits

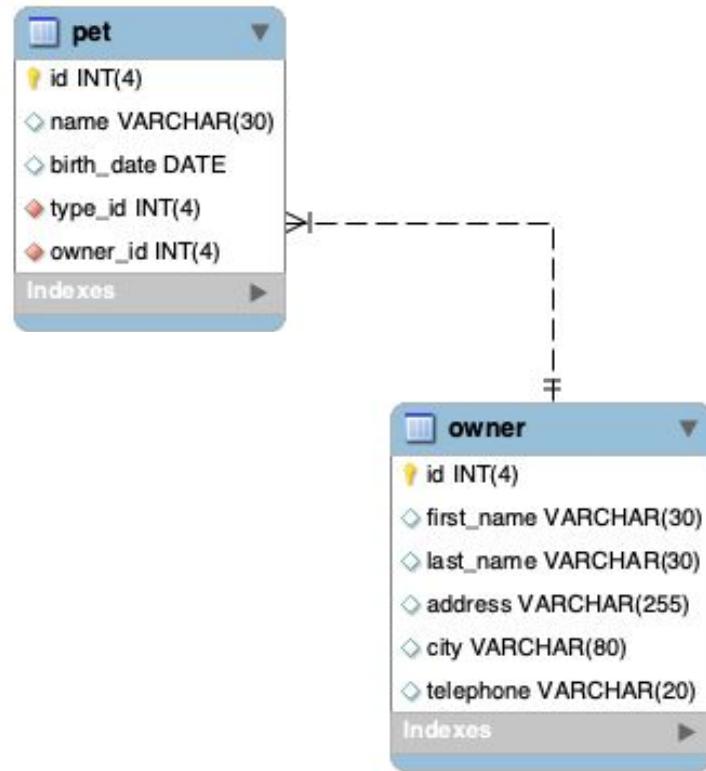
Name Shocker  
Birth Date 2021/03/29  
Type dog

Edit Pet   Delete Pet   Add Visit

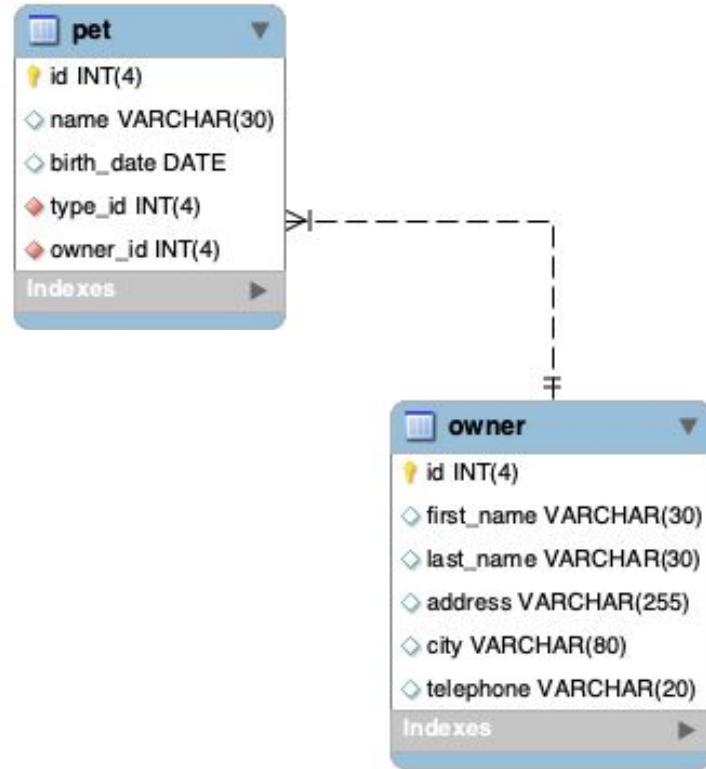
Name Carrabba  
Birth Date 2014/05/23  
Type dog

Edit Pet   Delete Pet   Add Visit

Multiple pets



## Relation Schema



## One to Many relationship

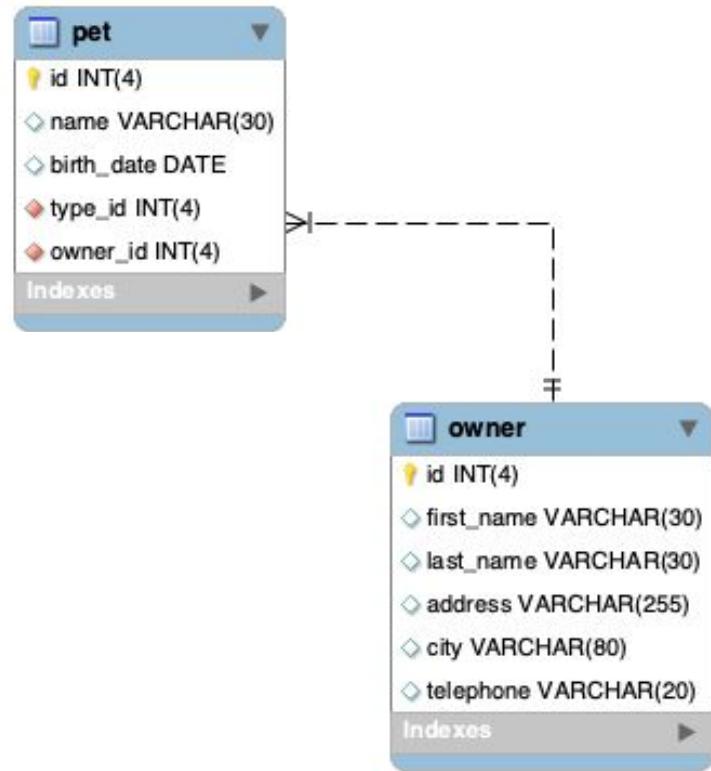
An owner can have multiple pets, but a pet can only have one owner

relationship: **id** to **owner\_id** (foreign key)



### Find Pets for Owner (SQL)



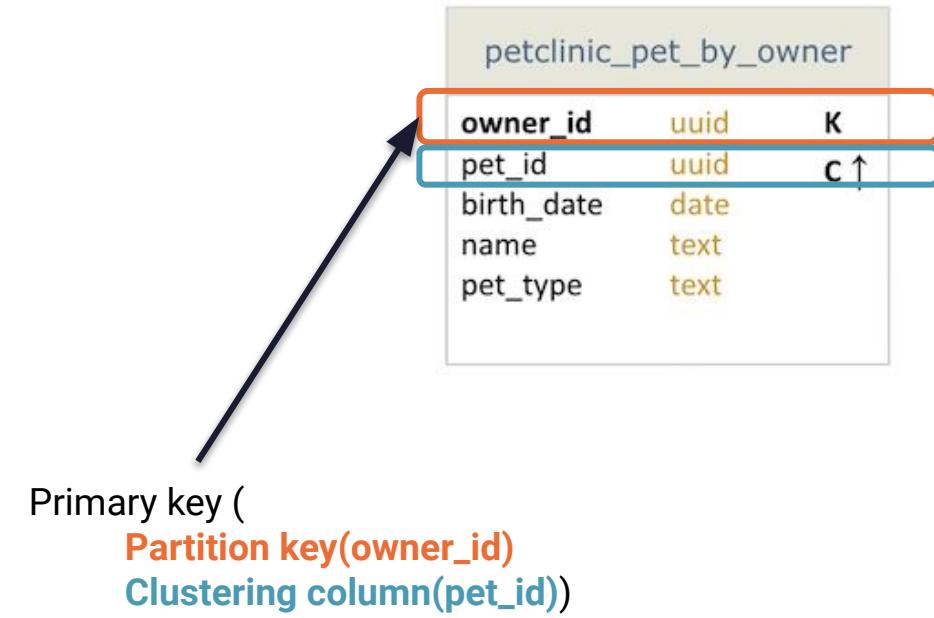
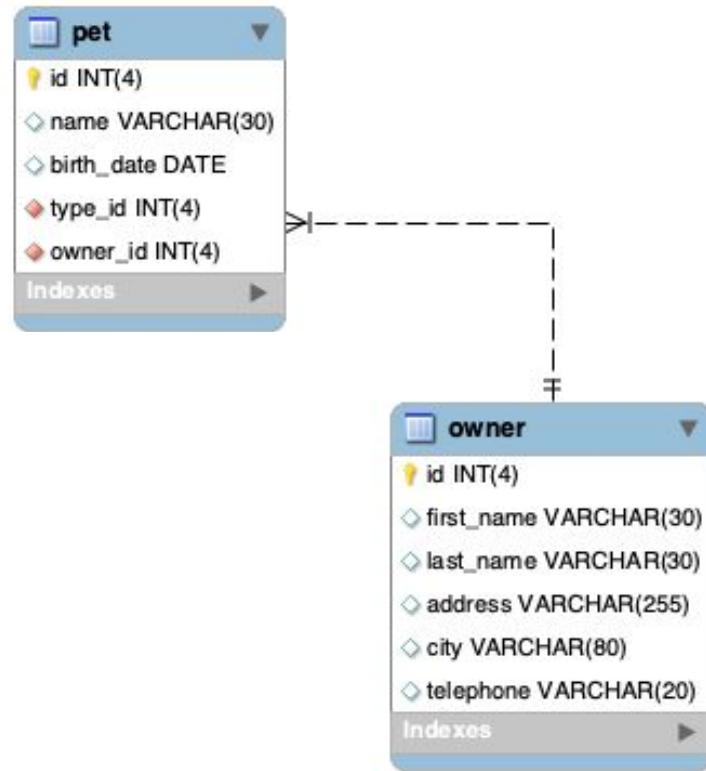


**petclinic\_pet\_by\_owner**

<b>owner_id</b>	uuid	K
pet_id	uuid	C ↑
birth_date	date	
name	text	
pet_type	text	

Primary key (**Partition key(owner\_id)**)





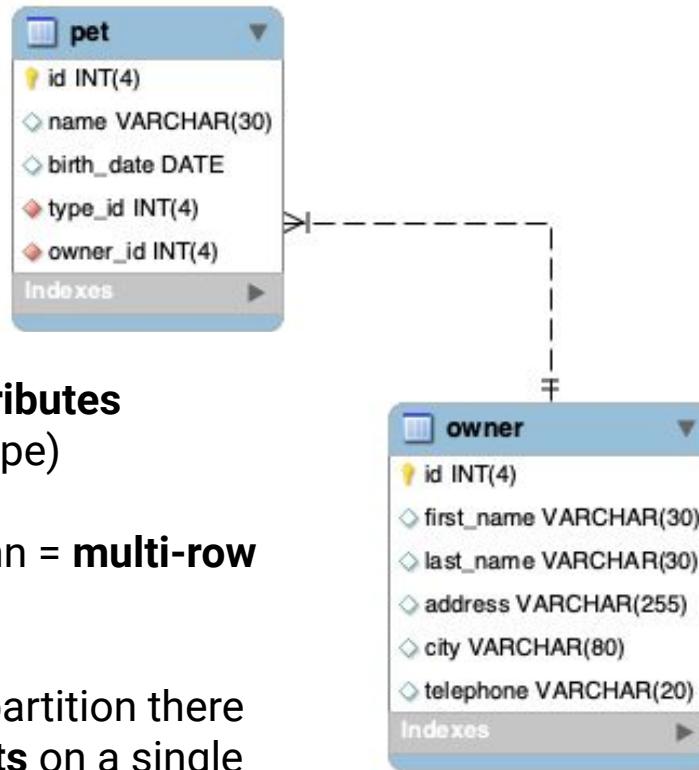
## Find Pets for Owner (Cassandra)

When using **multiple attributes**  
(birth\_date, name, pet\_type)

Using a clustering column = **multi-row partition**

Means for every owner partition there  
can be **1 to n rows of pets** on a single  
read

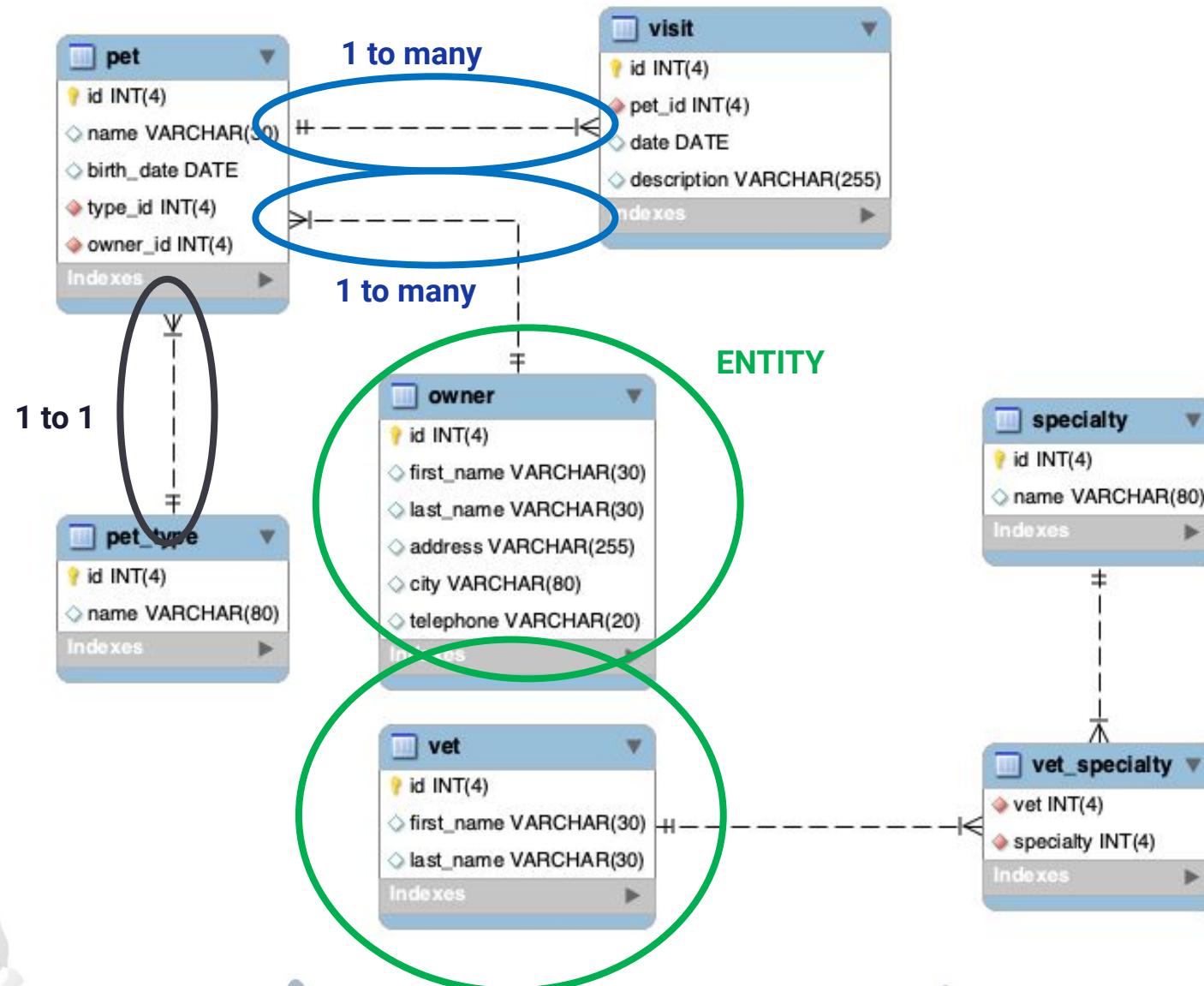
**One to Many**



petclinic_pet_by_owner		
owner_id	uuid	K
pet_id	uuid	c ↑
birth_date	date	
name	text	
pet_type	text	

Primary key (  
**Partition key(owner\_id)**  
**Clustering column(pet\_id)**)

Find Pets for Owner (Cassandra)



## Relational Data Model

petclinic_owner		
<b>id</b>	uuid	K
address	text	
city	text	
first_name	text	
last_name	text	
telephone	text	

ENTITY

petclinic_pet_by_owner		
<b>owner_id</b>	uuid	K
<b>pet_id</b>	uuid	C↑
birth_date	date	
name	text	
<b>pet_type</b>	text	

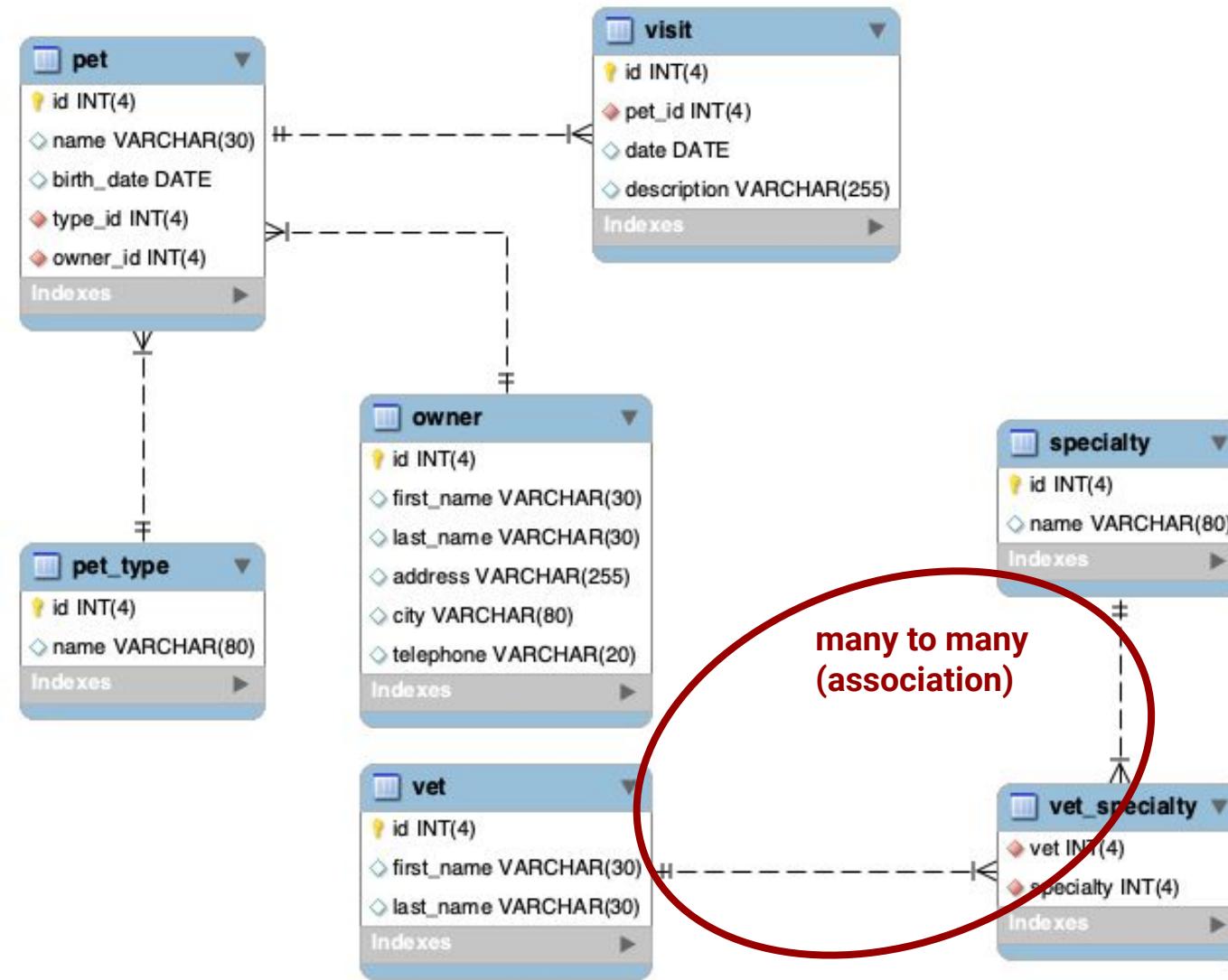
1 to many

petclinic_visit_by_pet		
<b>pet_id</b>	uuid	K
<b>visit_id</b>	uuid	C↑
visit_date	date	
description	text	
last_name	text	
telephone	text	

1 to many

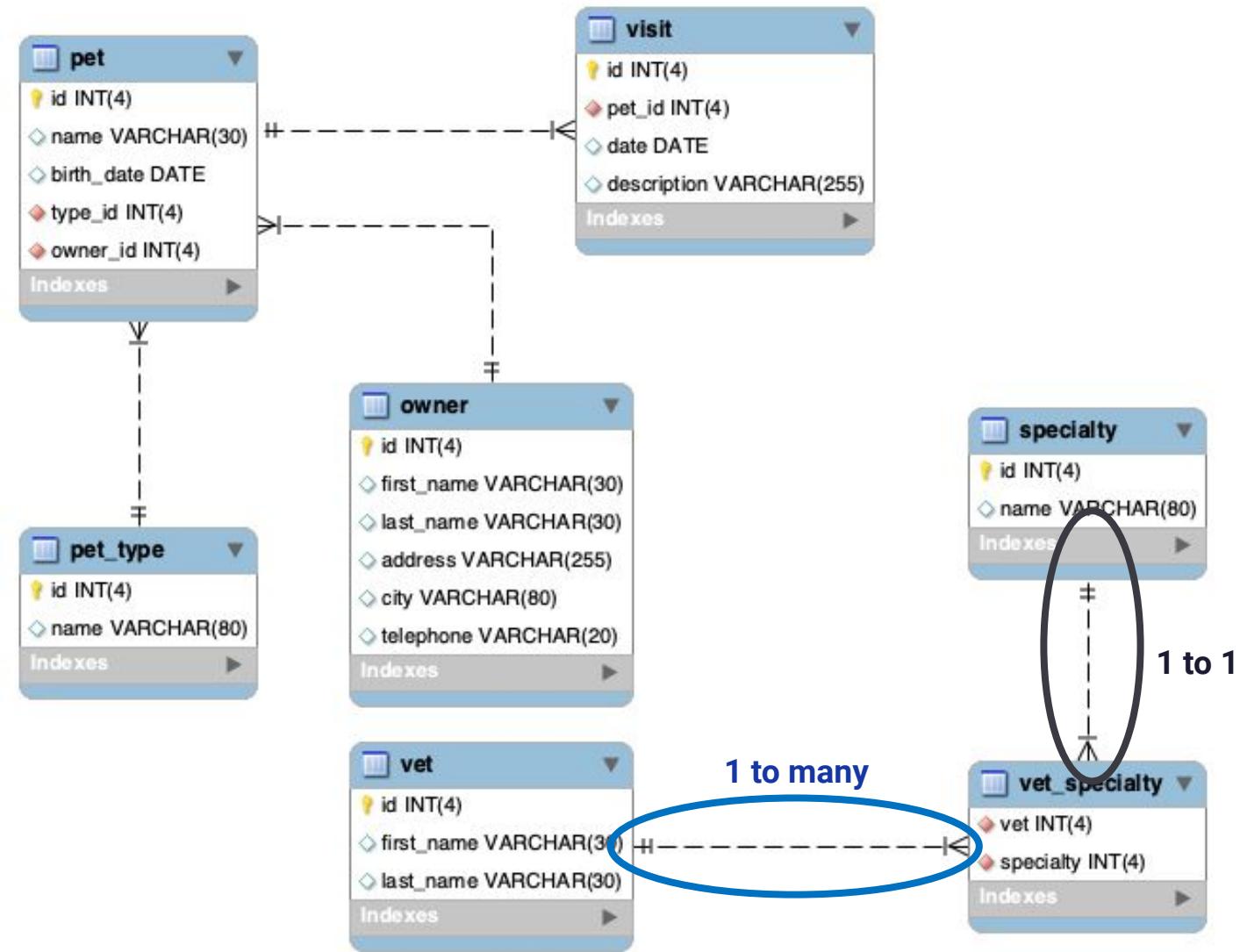
Notice there is no PET TABLE

Data Model so far



many to many  
(association)

## Relational Data Model



## Relational Data Model

petclinic_owner		
<b>id</b>	uuid	K
address	text	
city	text	
first_name	text	
last_name	text	
telephone	text	

ENTITY

petclinic_pet_by_owner		
<b>owner_id</b>	uuid	K
<b>pet_id</b>	uuid	C↑
birth_date	date	
name	text	
pet_type	text	

1 to many

petclinic_visit_by_pet		
<b>pet_id</b>	uuid	K
<b>visit_id</b>	uuid	C↑
visit_date	date	
description	text	
last_name	text	
telephone	text	

1 to many

petclinic_vet		
<b>id</b>	uuid	K
first_name	text	
last_name	text	
specialties	set<text>	

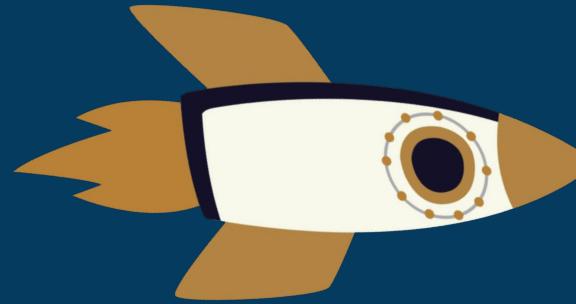
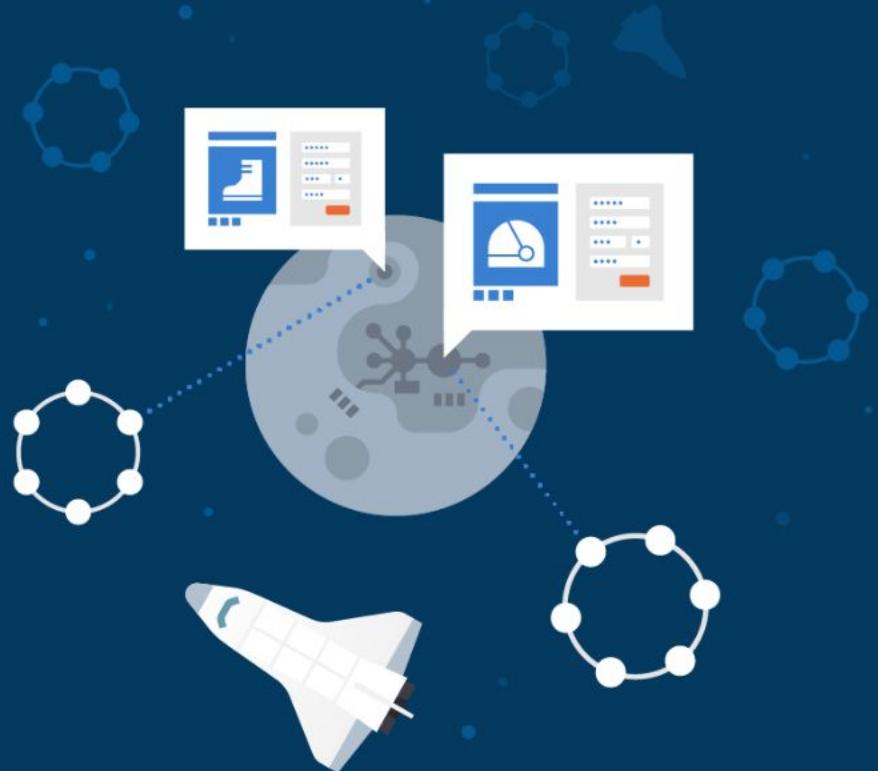
ENTITY

petclinic_vet_by_specialty		
<b>specialty</b>	text	K
<b>vet_id</b>	uuid	C↑
first_name	text	
last_name	text	

many to many

petclinic_reference_lists		
<b>list_name</b>	text	K
values	set<text>	

## Complete Data Model



# Hands-on (!github)

- 6. Start and setup gitpod
- 7. Create Database Schema

# 01



**Overview**  
**Application and DB**

# 02



**DB Design**  
**The Art of Data Modelling**

# 03



**Connectivity**  
**Getting Started with Drivers**

# 04



**Spring Data Reactive**  
**Manifesto and usage**

# 05



**Spring Webflux**  
**Reactive APIs**

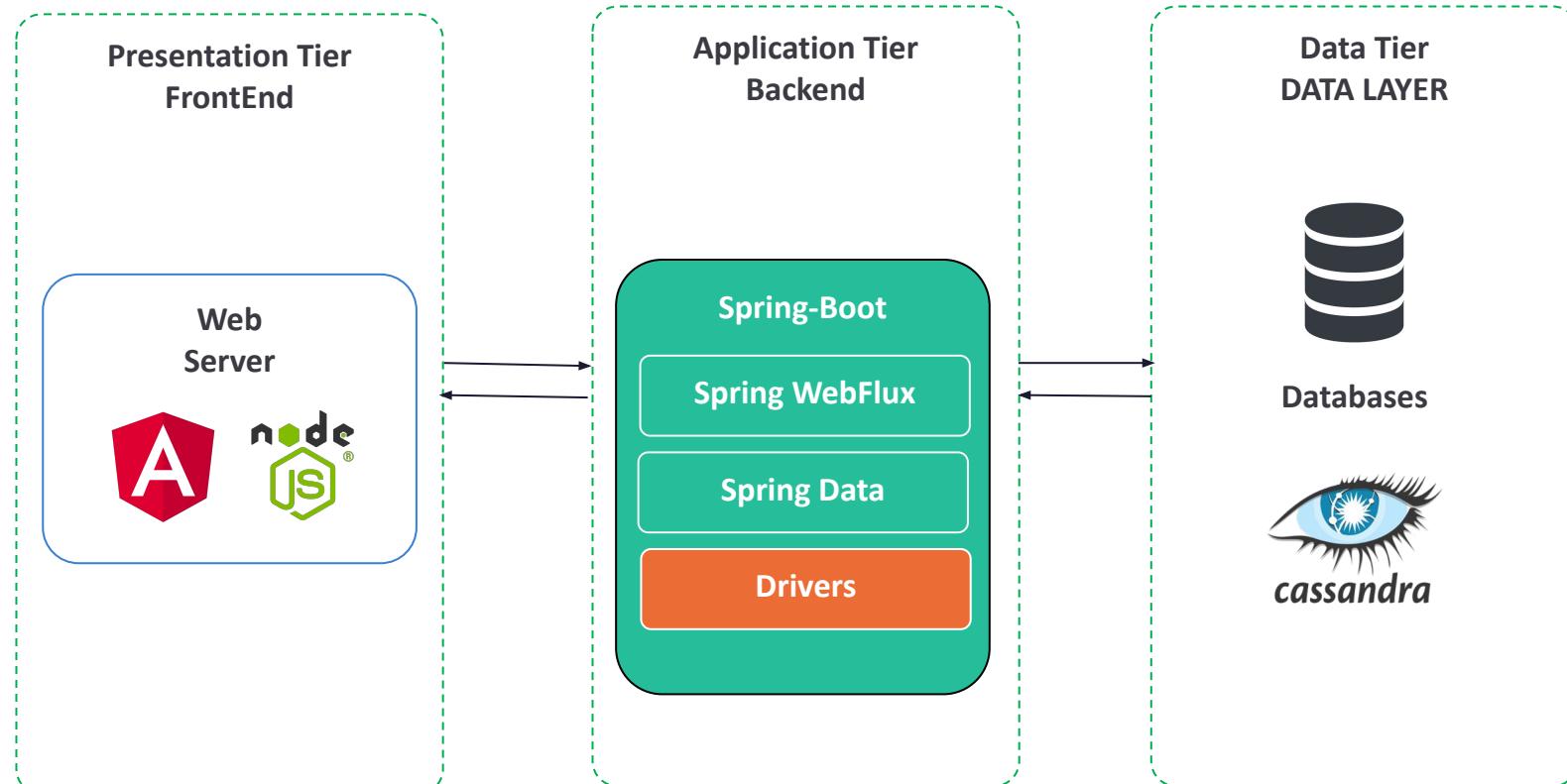


# 06



**Game &**  
**Resources**

**Agenda**



Gitpod

Gitpod

DataStax  
**Astra DB**

## Architecture Overview



### Connectivity

- ★ Token & Datacenter Aware
- ★ Load Balancing Policies
- ★ Retry Policies
- ★ Reconnection Policies
- ★ Connection Pooling
- ★ Health Checks
- ★ Authentication | Authorization
- ★ SSL

### Query

- ★ CQL Support
- ★ Schema Management
- ★ Sync/Async/Reactive API
- ★ Query Builder
- ★ Compression
- ★ Paging

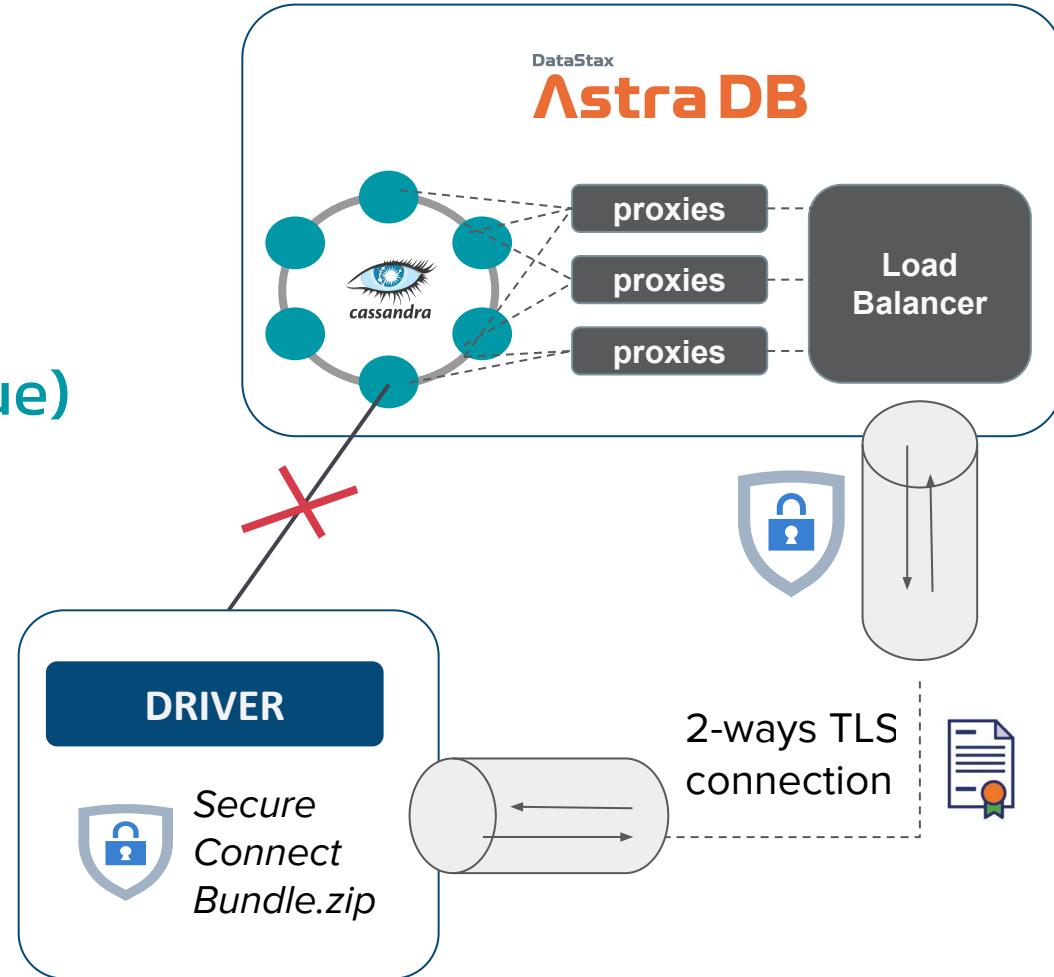
### Parsing Results

- ★ Lazy Load
- ★ Object Mapper
- ★ Spring Support
- ★ Paging



Drivers

- Secured connection over HTTP required.
- A `secureConnectBundle` ZIP is expected
- Your username is `clientId` (or 'token')
- Your Password is `clientSecret` (or token value)
- No Single Point of failure (SPOF)

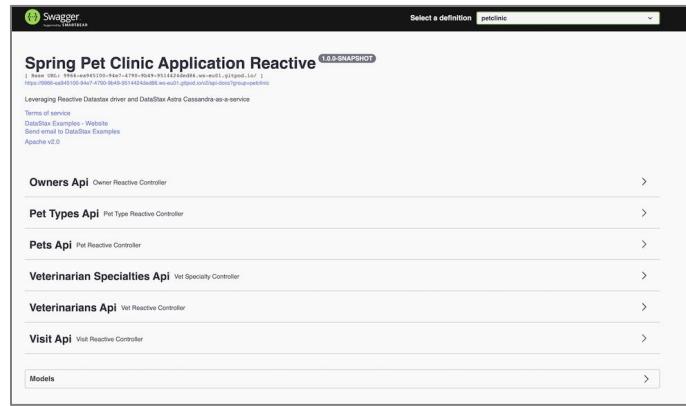


Contact Points with ASTRA

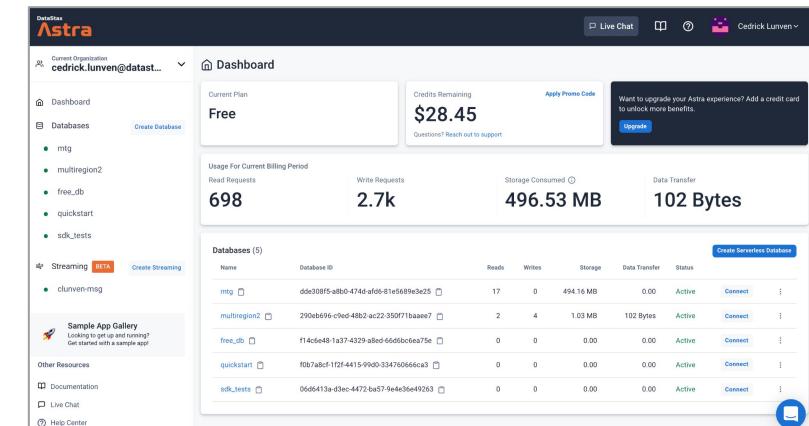
## Presentation Tier FrontEnd



## Application Tier Backend



## Data Tier



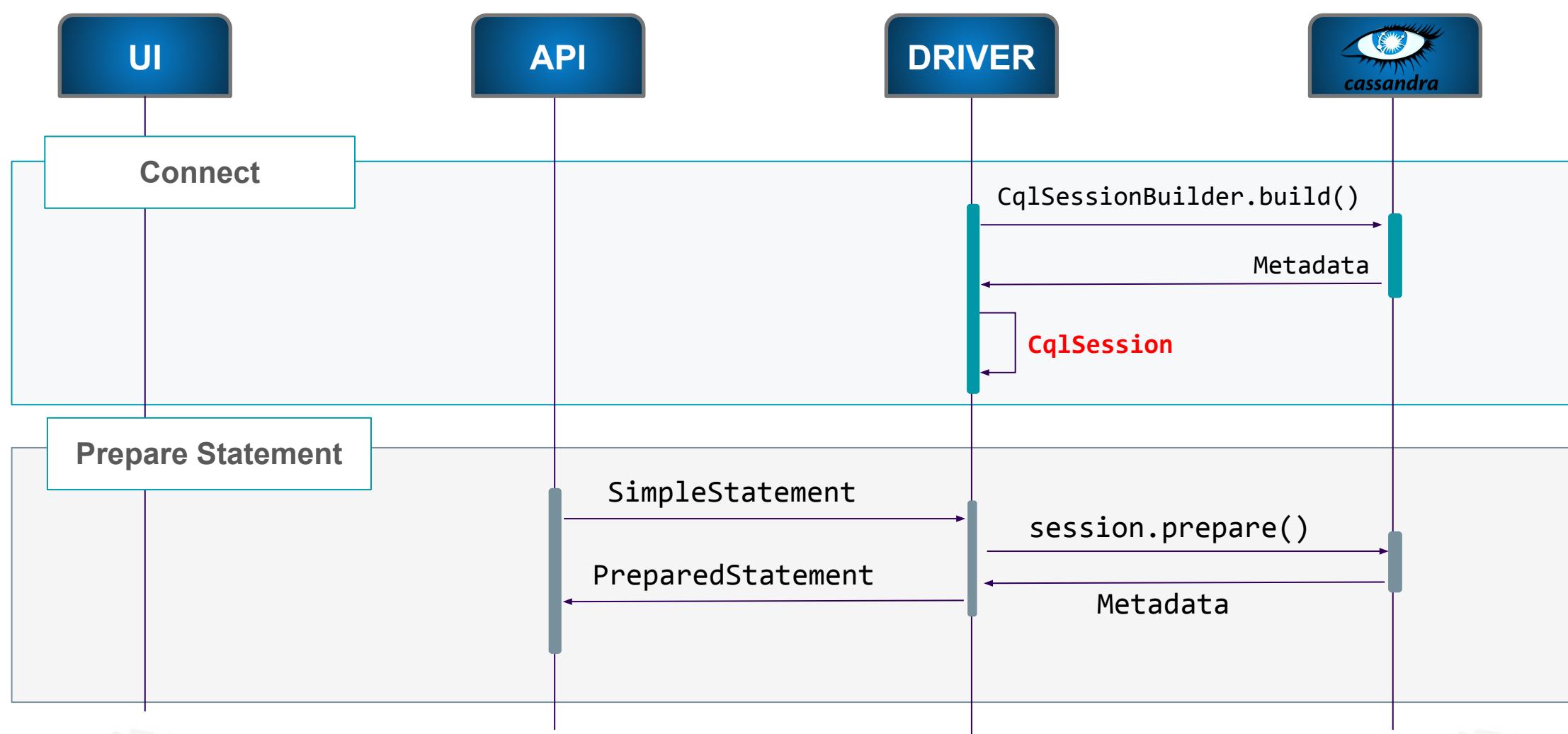
UI

API

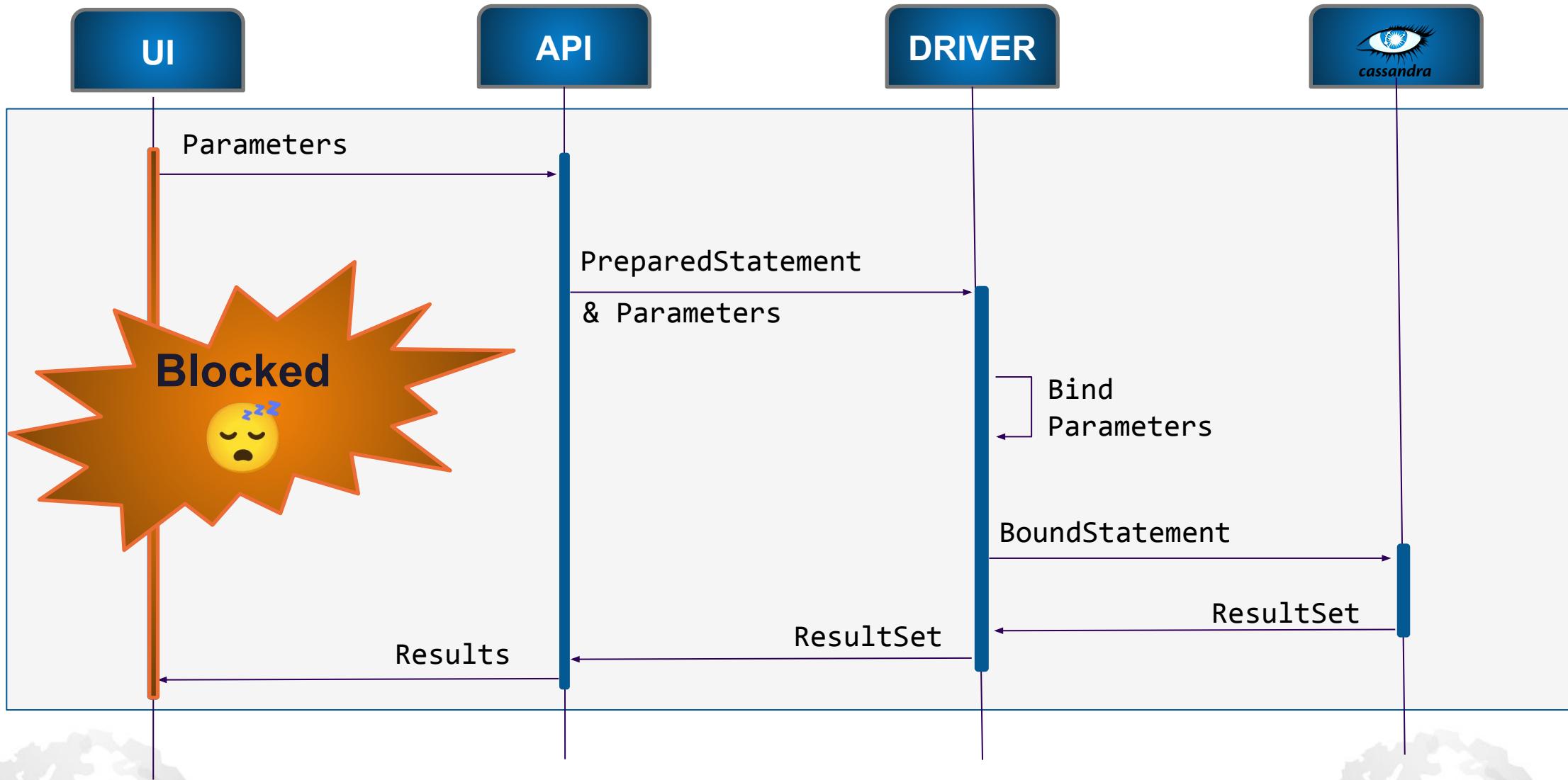
DRIVER

DB

Sequence Diagram



Initializations



## Synchronous Queries

## Strengths

Simple

## Weaknesses

Blocking 😴

## Opportunities

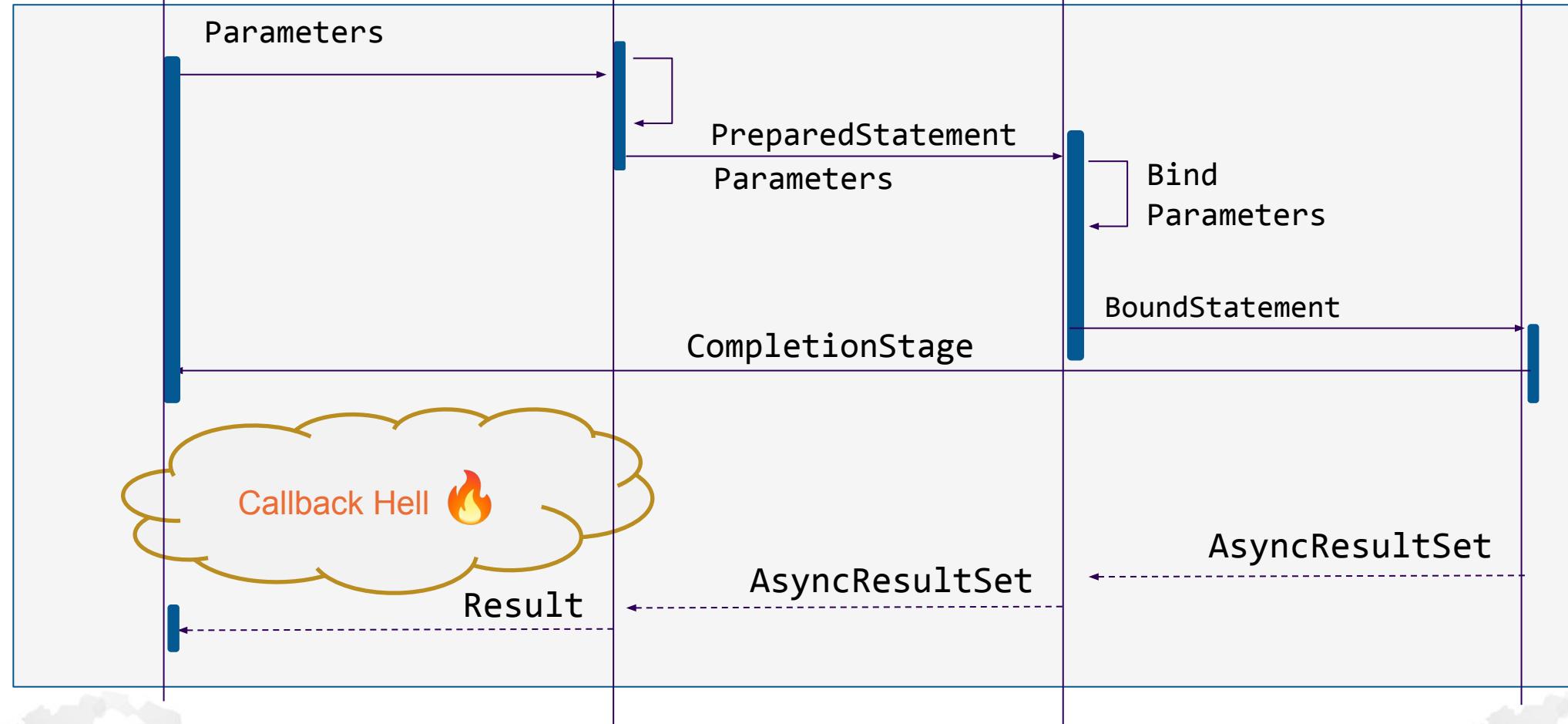
Easy to Test & Maintain

## Threats

Scalability !



Synchronous



## Asynchronous Queries

## Strengths

Non Blocking

## Weaknesses

Callback Hell 

## Opportunities

Scalability

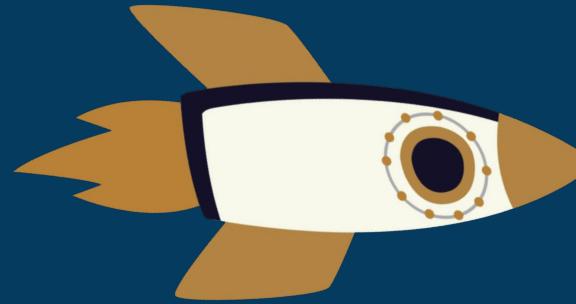
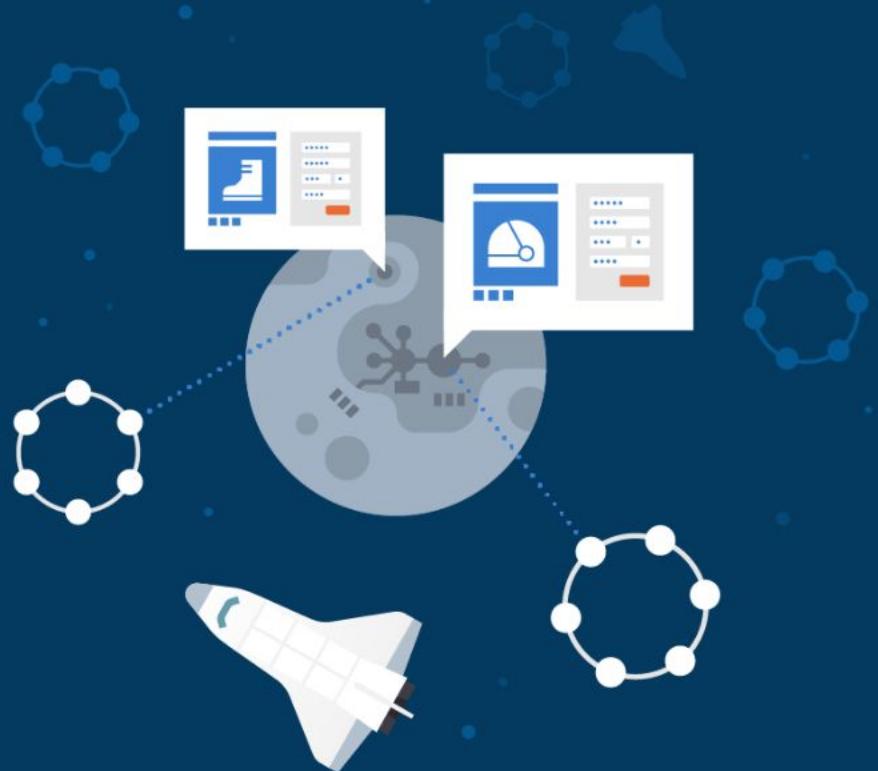
## Threats

Maintainability 



Asynchronous Queries



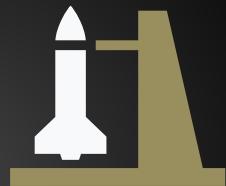


# Hands-on (!github)



8. Working with Drivers

# 01



**Overview**  
**Application and DB**

# 02



*cassandra*

**DB Design**  
**The Art of Data Modelling**

# 03



# 03



**Connectivity**  
**Getting Started with Drivers**

**Spring Data Reactive**  
**Manifesto and usage**



# 04



**Spring Webflux**  
**Reactive APIs**



# 05



**Game &**  
**Resources**

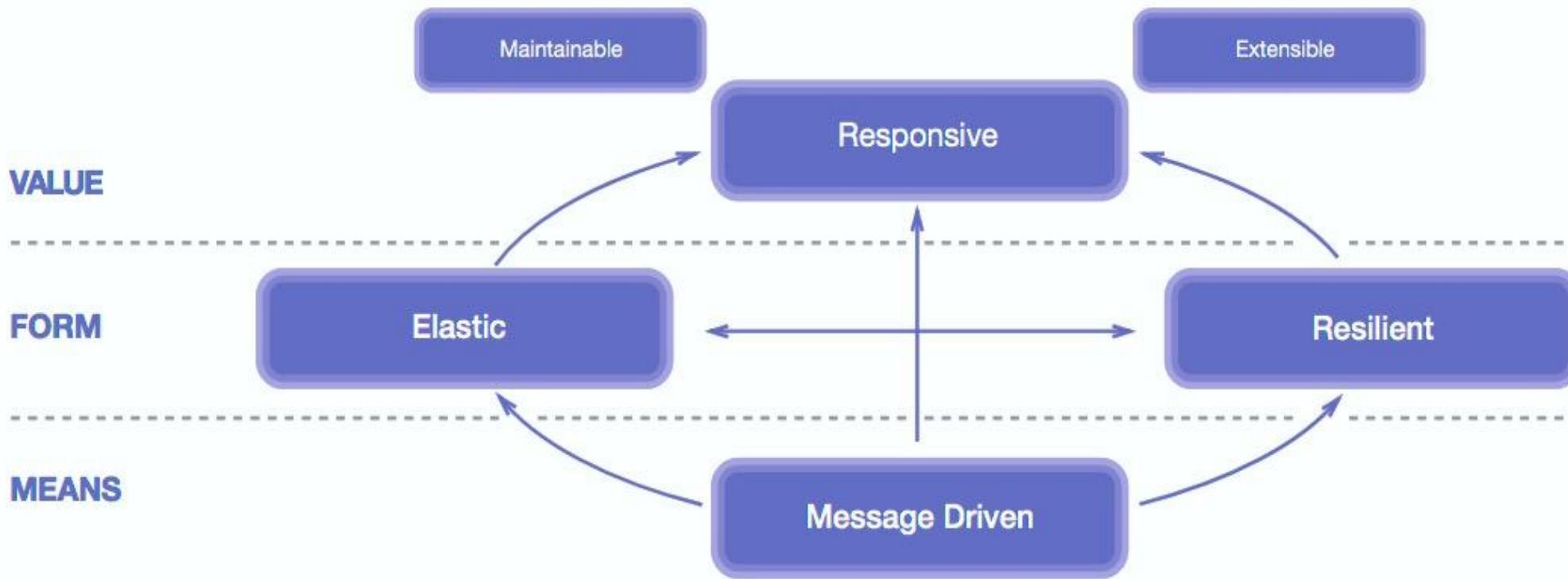


**Agenda**

# Reactive



DataStax



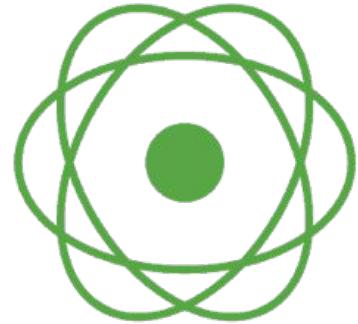
<https://www.reactivemanifesto.org/>



## Reactive Manifesto



VERT.X



akka



SUBSCRIBER

PUBLISHER

`subscribe(this)`

`onSubscribe(subscription)`

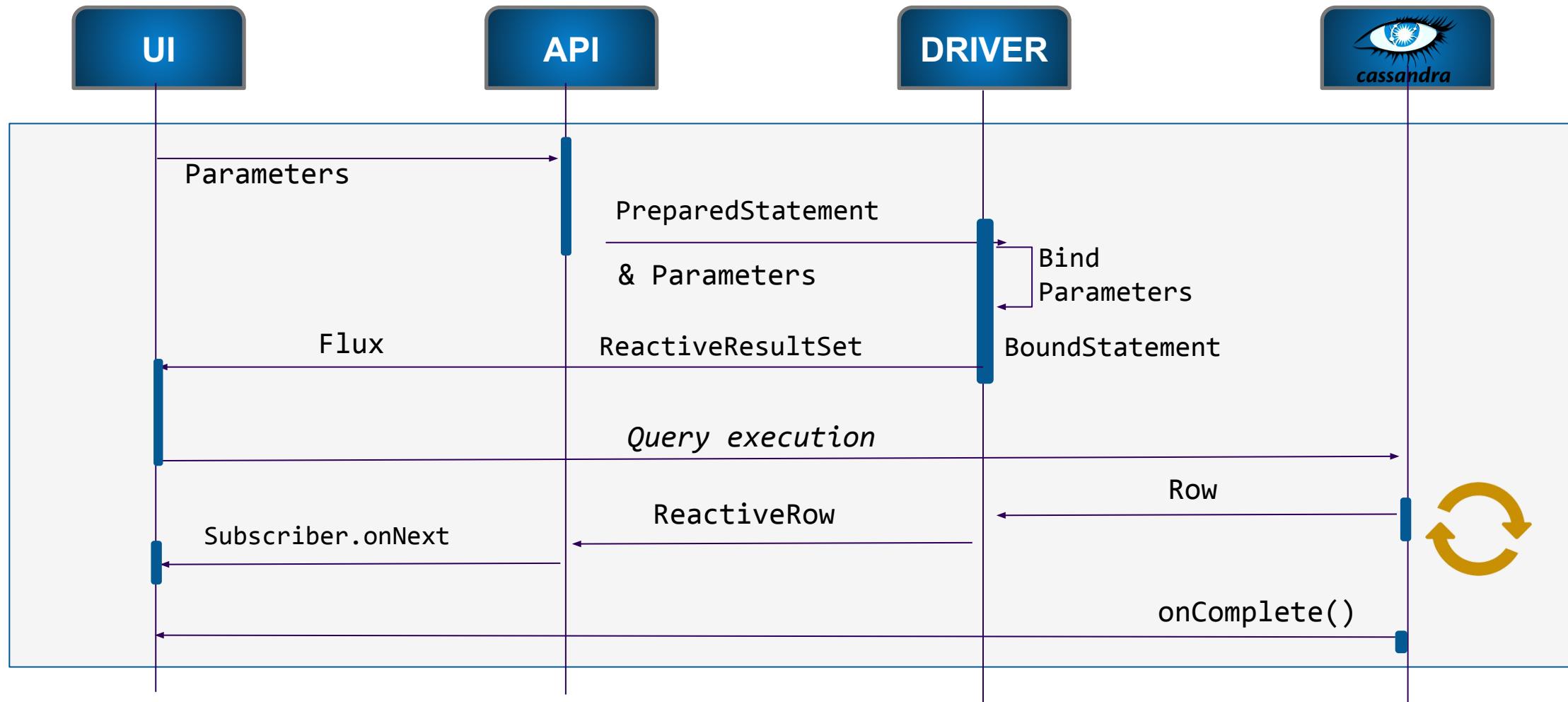
`subscription.request(...)`

`onNext(...)`

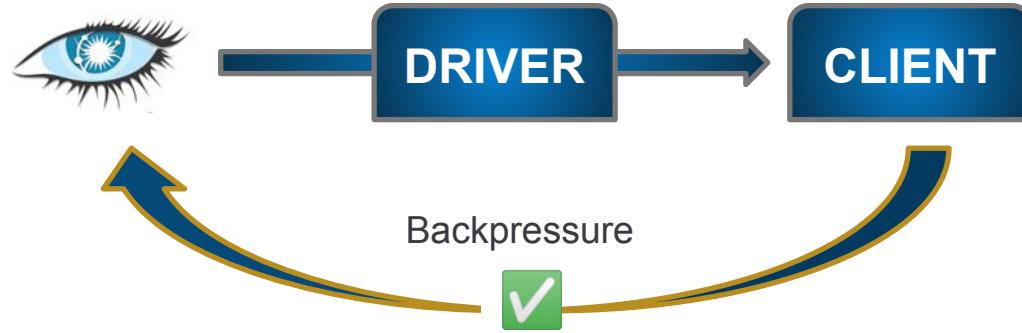
`onComplete()`



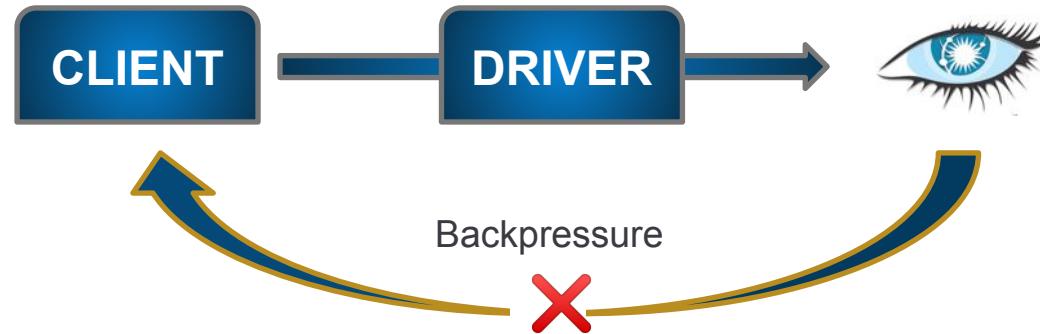
Reactive Stream Api



## Reactive Queries



READ



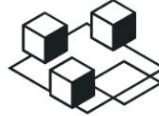
WRITE

Back Pressure

# Spring Data



DataStax



## Microservices

Quickly deliver production-grade features with independently evolvable microservices.



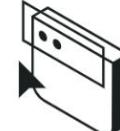
## Reactive

Spring's asynchronous, nonblocking architecture means you can get more from your computing resources.



## Cloud

Your code, any cloud—we've got you covered. Connect and scale your services, whatever your platform.



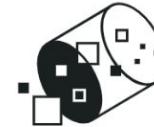
## Web apps

Frameworks for fast, secure, and responsive web applications connected to any data store.



## Serverless

The ultimate flexibility. Scale up on demand and scale to zero when there's no demand.



## Event Driven

Integrate with your enterprise. React to business events. Act on your streaming data in realtime.



## Batch

Automated tasks. Offline processing of data at a time to suit you.



# Spring Framework





## Spring Boot

Takes an opinionated view of building Spring applications and gets you up and running as quickly as possible.



## Spring Data

Provides a consistent approach to data access – relational, non-relational, map-reduce, and beyond.



## Spring Security

Protects your application with comprehensive and extensible authentication and authorization support.



## Spring Batch

Simplifies and optimizes the work of processing high-volume batch operations.



## Spring Cloud

Provides a set of tools for common patterns in distributed systems. Useful for building and deploying microservices.



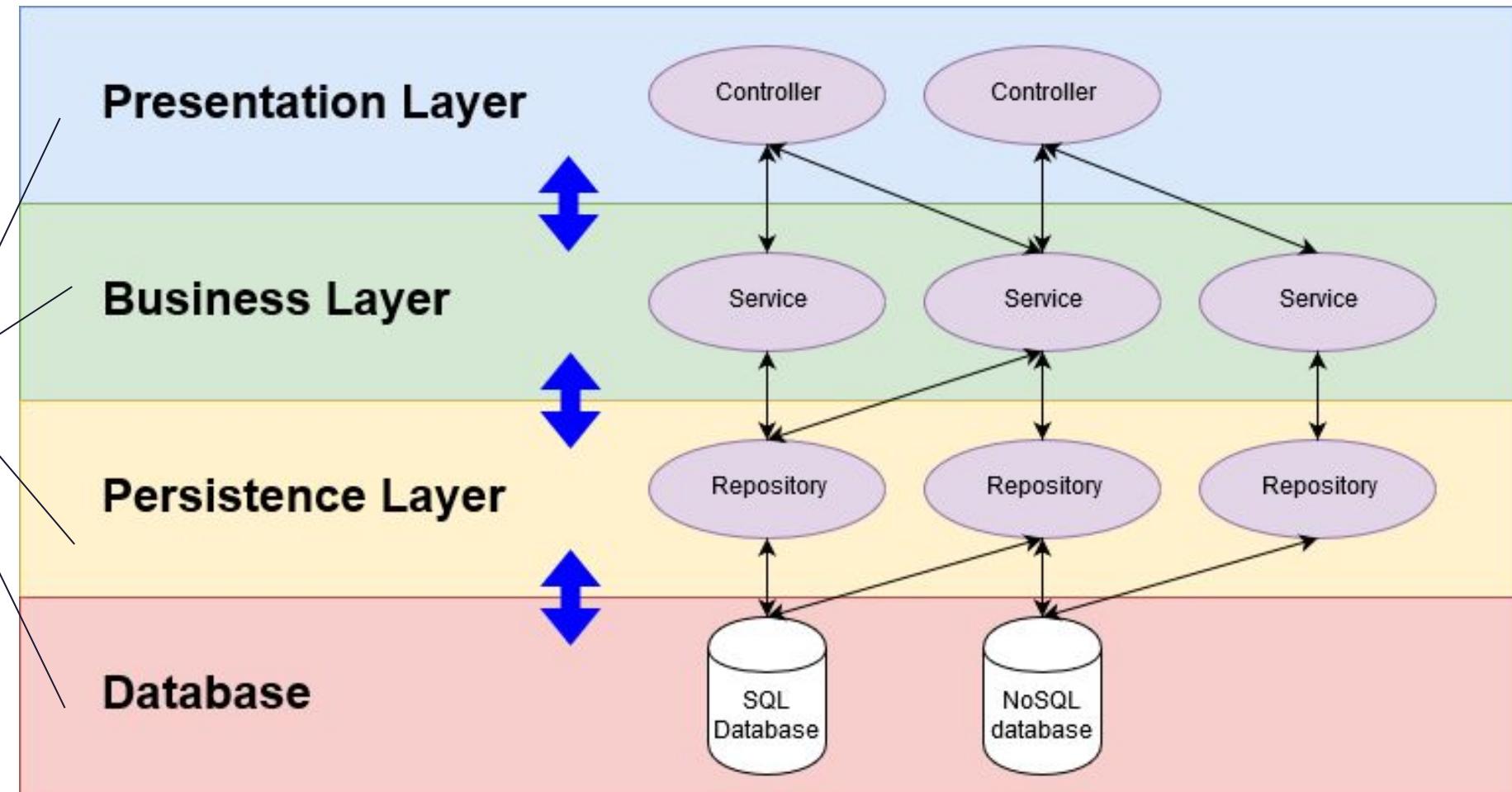
## Spring REST Docs

Lets you document RESTful services by combining hand-written documentation with auto-generated snippets produced with Spring MVC Test or REST Assured.



Spring Projects.. and many more





Spring Boot Application



## Reactive Stack

Spring WebFlux is a non-blocking web framework built from the ground up to take advantage of multi-core, next-generation processors and handle massive numbers of concurrent connections.

Netty, Servlet 3.1+ Containers

Reactive Streams Adapters

Spring Security Reactive

Spring WebFlux

Spring Data Reactive Repositories  
Mongo, Cassandra, Redis, Couchbase, R2DBC

## Servlet Stack

Spring MVC is built on the Servlet API and uses a synchronous blocking I/O architecture with a one-request-per-thread model.

Servlet Containers

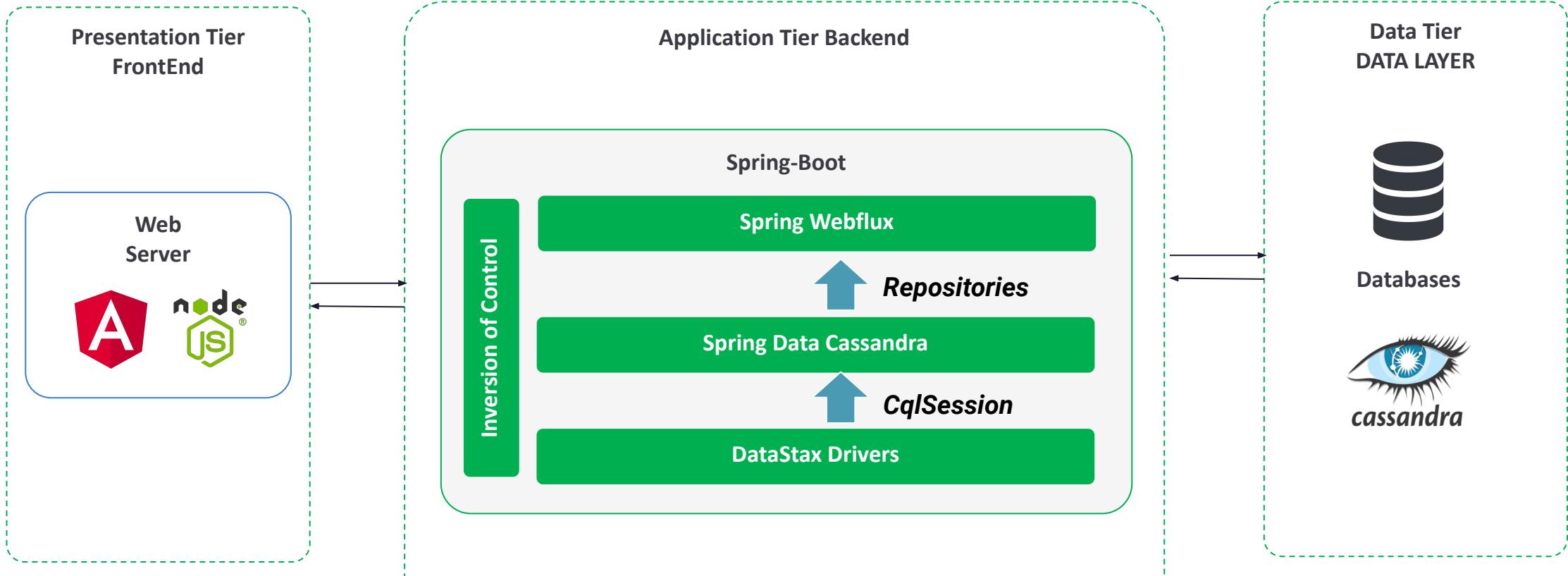
Servlet API

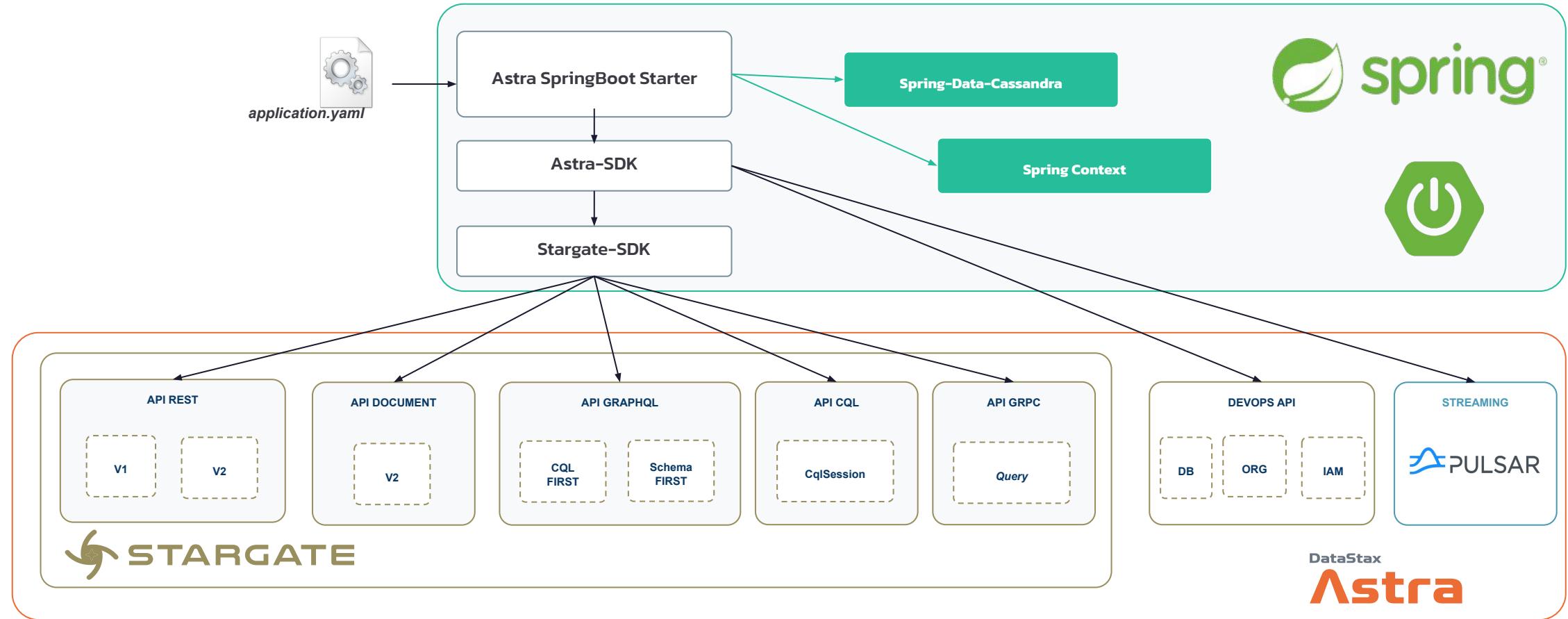
Spring Security

Spring MVC

Spring Data Repositories  
JDBC, JPA, NoSQL







# Spring-Data

- CrudRepository<BEAN, ID>
- Working with interface
- Object Mapping
- Working with templates
- Conventions over code
- spring-boot-starter
- autoconfiguration
- keys in application.yaml
- Schema Management

# For Cassandra

- Leveraging **CqlSession**
- **CassandraRepository<ID, BEAN>**
- CassandraTemplate, CassandraOperations
- @Table, @PrimaryKey, @Column, @Query

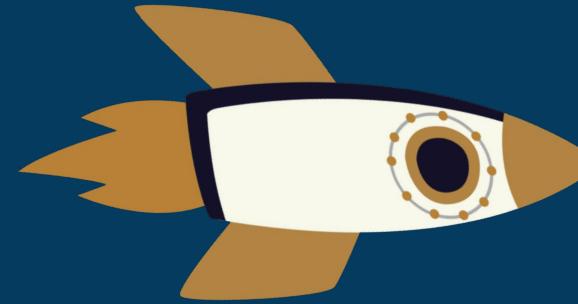
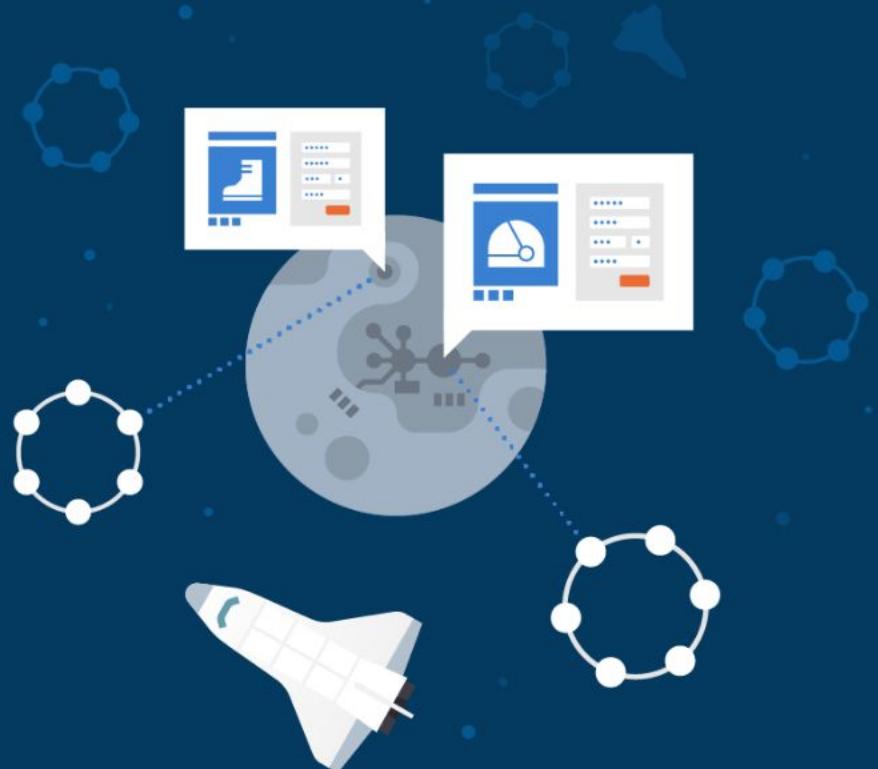
## Be “aware”:

- **findAll()**, **@AllowFiltering**,
- Create your own **CqlSession** bean
- Schema creation not recommended
- Data Model first, objects second
- **SimpleCassandraRepository<ID, BEAN>**



Spring-Data-Cassandra





# Hands-on (!github)



9. Working with Spring Data

# 01



**Overview**  
**Application and DB**

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*cassandra*

**DB Design**  
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**Spring Data Reactive**  
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# 05



**Spring Webflux**  
**Reactive APIs**



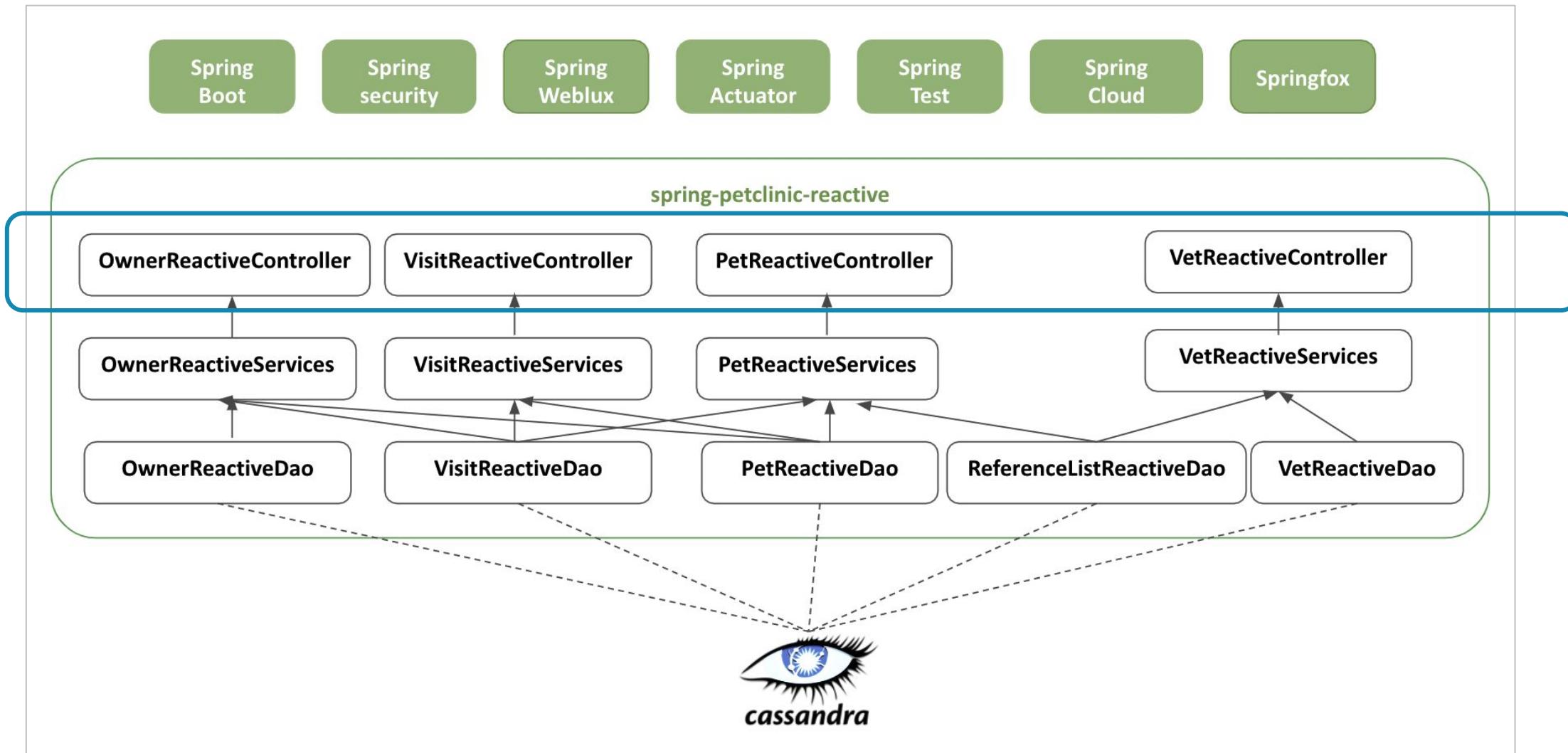
# 06

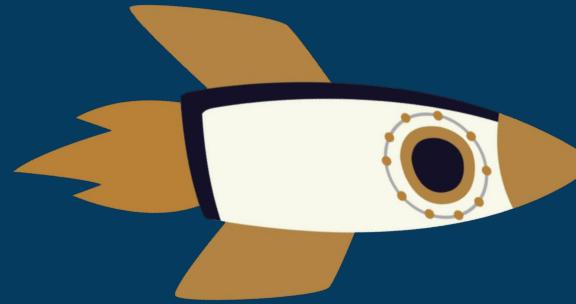
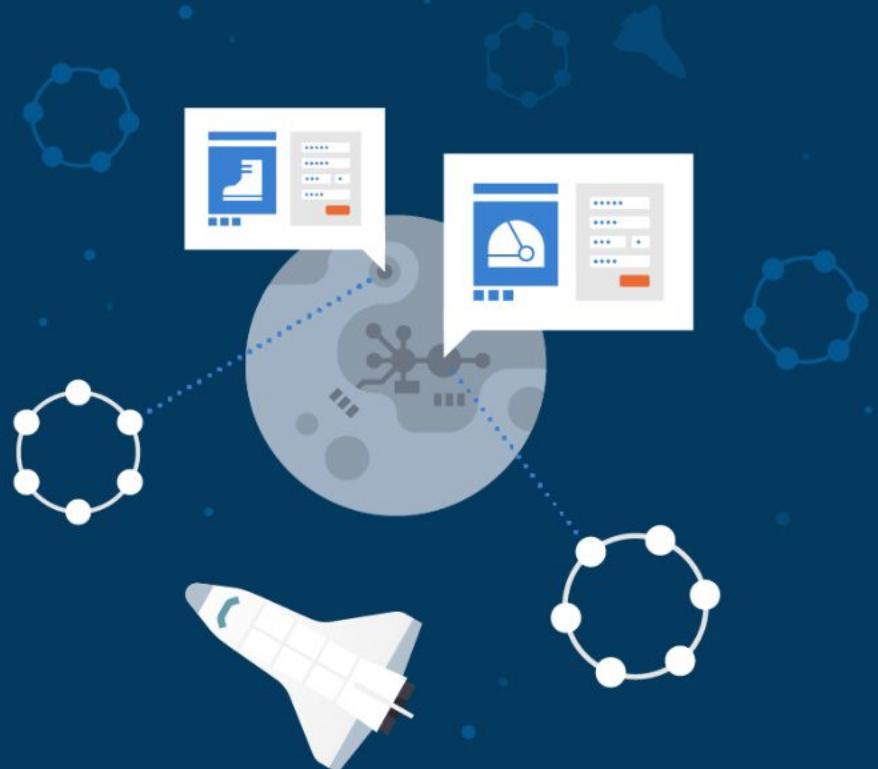
**Game &**  
**Resources**



**Agenda**

# Spring Boot Application





# Hands-on (!github)



- 10. Working with Spring Webflux
- 11. Run Full Application



# 01



**Overview**  
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*cassandra*

**DB Design**  
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**Connectivity**  
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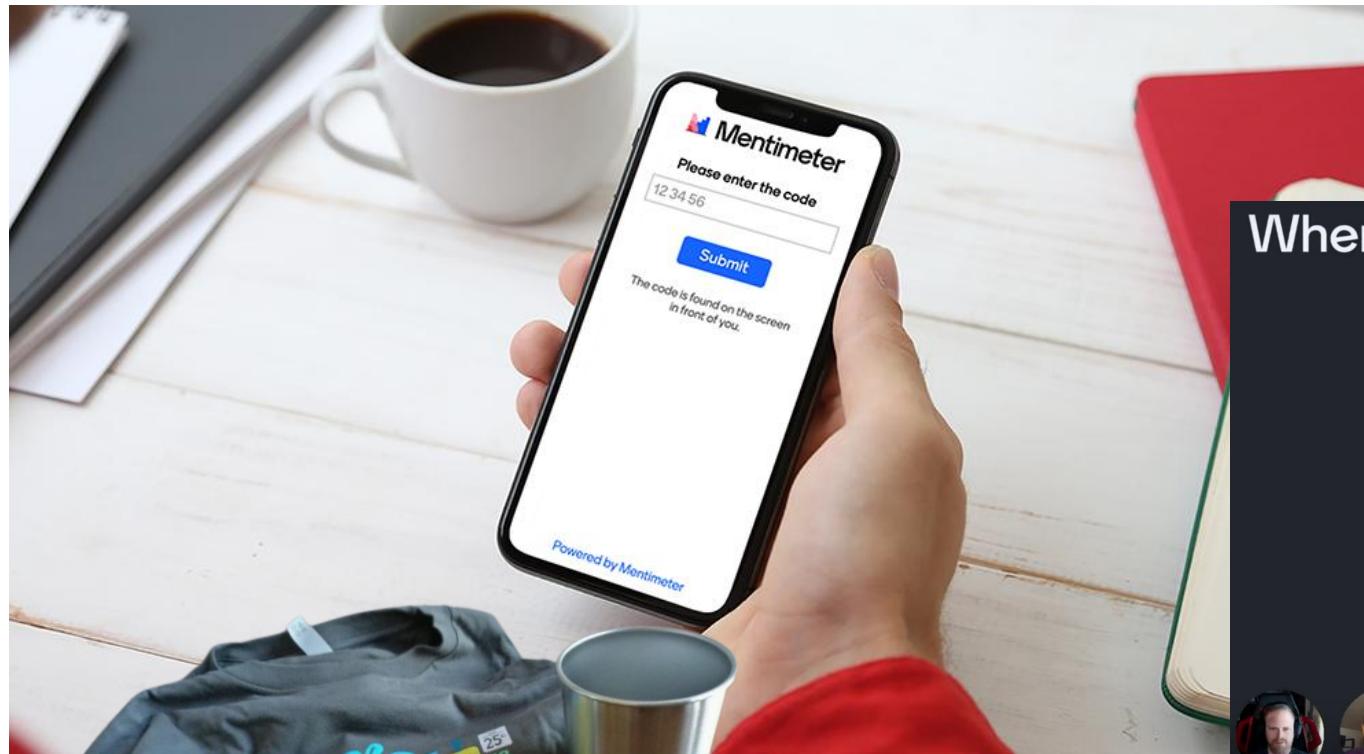
# 05



**Game &**  
**Resources**



**Agenda**



Where are you from?

Mentimeter



[menti.com](https://menti.com) ⇒ enter code  
Don't answer in YT chat  
Look at phone (not at YT)  
Keep it open for later

"Menti" for survey and quiz !

DataStax

# SWAG WINNERS



Congratulations to 1st, 2nd and 3rd place on the Menti quiz!

To claim your prize, please send an email to:

[jack.fryer@datastax.com](mailto:jack.fryer@datastax.com)

**\*\* Include a screenshot of your Menti screen**



Swag Winners!



# ASTRA DB'S BUILD-A-THON

MAKING SIDE-HUSTLES A REALITY

21 February - 28 May 2022



# ASTRA DB'S BUILD-A-THON

MAKING SIDE-HUSTLES A REALITY

21 February - 28 May 2022



## JOIN OUR ASTRA DB BUILD-A-THON HACK!

📍 3 months, 3 rounds of challenges. 📍  
Join 1 month, 2 months or all 3

Each month, we'll reveal a fresh new set of challenges you can partake in.

All you have to do is have Astra DB as your backend.

**USD\$41,000 worth of prizes**



**REGISTER -**  
**[buildathonhack.com](http://buildathonhack.com)**



# !discord

[dtsx.io/discord](https://dtsx.io/discord)

DataStax Developers

# workshop-chat

<https://www.youtube.com/watch?v=MuwT5xkFVWI> - Subscribe to mailing list: [http...](http://)

PRESENTER — 1  
David Jones-Gilardi

HELPER — 7  
012345  
AaronP  
B1nary  
Chelsea Navo  
Jeremy Hanna  
John Sanda  
Patrick\_McFadin

EN LIGNE — 560  
-samu-  
6304-42J8  
Aahlya  
Abdurahim  
abhi3pathi  
Abhiis.s  
Abhineet  
Abirsh

Événements  
moderator-only  
. WELCOME  
start-here  
code-of-conduct  
introductions  
upcoming-events  
useful-resources  
memes  
your-ideas  
the-stage

WORKSHOPS  
# workshop-chat  
# workshop-feedback  
workshop-materials  
upcoming-workshops

ASTRA DB  
getting-started  
astra-apis  
astra-development  
sample-applications

APACHE CASSANDRA

Cedrick Lun...

RIGGITYREKT Hier à 21:14  
I have a 5 node datacenter, 4 nodes are on dse version 5.1.20, one is on dse5.0.15. I am doing some mixed version testing for a class and the one node that is 5.0.15 is coming up as an analytics workload. I dont have /etc/default/dse, instead I am using /etc/init.d/dse-cassandra. how do i make that node start in cassandra workload, not in analytics?

RIGGITYREKT Hier à 23:39  
Okay I found out my issue, when I started DSE 5.0.15 it had endpointSnitch set to DseSimpleSnitch, the rest of my cluster is using PropertyFileSnitch, when I change it to PropertyFileSnitch, it still uses the simple snitch config. looking at the docs I see there is a way to go to GossipingPropertyFileSnitch, but I need the property file one. I can wipe this dbs, do anything with this node to get this done. how do I fix this?  
@here

19 novembre 2021

@RIGGITYREKT Okay I found out my issue, when I started DSE 5.0.15 it had endpointSnitch set to DseSimpleSnitch, the rest...  
Erick Ramirez Aujourd'hui à 02:19  
mixed versions isn't supported and you're guaranteed to run into weird issues that will cause further problems down the track

@RIGGITYREKT I have a 5 node datacenter, 4 nodes are on dse version 5.1.20, one is on dse5.0.15. I am doing some mixed v...  
Cedrick Lunven Aujourd'hui à 09:01  
When you start a node you have parameters -k for analytics, -g for graph and -s for search. To remove analytics check and remove -k

Envoyer un message dans #workshop-chat



Datastax Developers Discord (18k+)

**Subscribe**

Introduction to NoSQL!  
2:17:59

Crash Course | Introduction to Cassandra for Developers  
1:09:34

Introduction to NoSQL Databases  
2:18:01

Introduction to NoSQL Databases  
2:19:57

#AppDev Learning Series  
Week 3  
Building your own NETFLIX Clone!  
DataStax Developers  
2:16:46

Build your own NETFLIX clone!  
4K views • Streamed 2 weeks ago

Build your own NETFLIX clone!  
7.4K views • Streamed 2 weeks ago

Astra Streaming Demo  
177 views • 2 weeks ago

Kubernetes Ingress Management with Traefik Proxy  
1:15:49

Build your own TikTok clone!  
1.9K views • Streamed 3 weeks ago

Build your own TikTok clone!  
4K views • Streamed 3 weeks ago

How to use the Connect Driver in Astra DB  
113 views • 4 weeks ago

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How to use Secure Connect in Astra DB  
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Cassandra Day India 2021  
Room 2: Workshops  
#CassandraDay  
7:45:45

Cassandra Day India 2021  
Room 1: Talks  
#CassandraDay  
5:07:03

# Thank You!



