# The Realm Mobile Platform Experience

Realm World Tour 2017, #RealmWorldTour

JP Simard

# An estimated billion people rely on Realm. Most probably you do too.



















































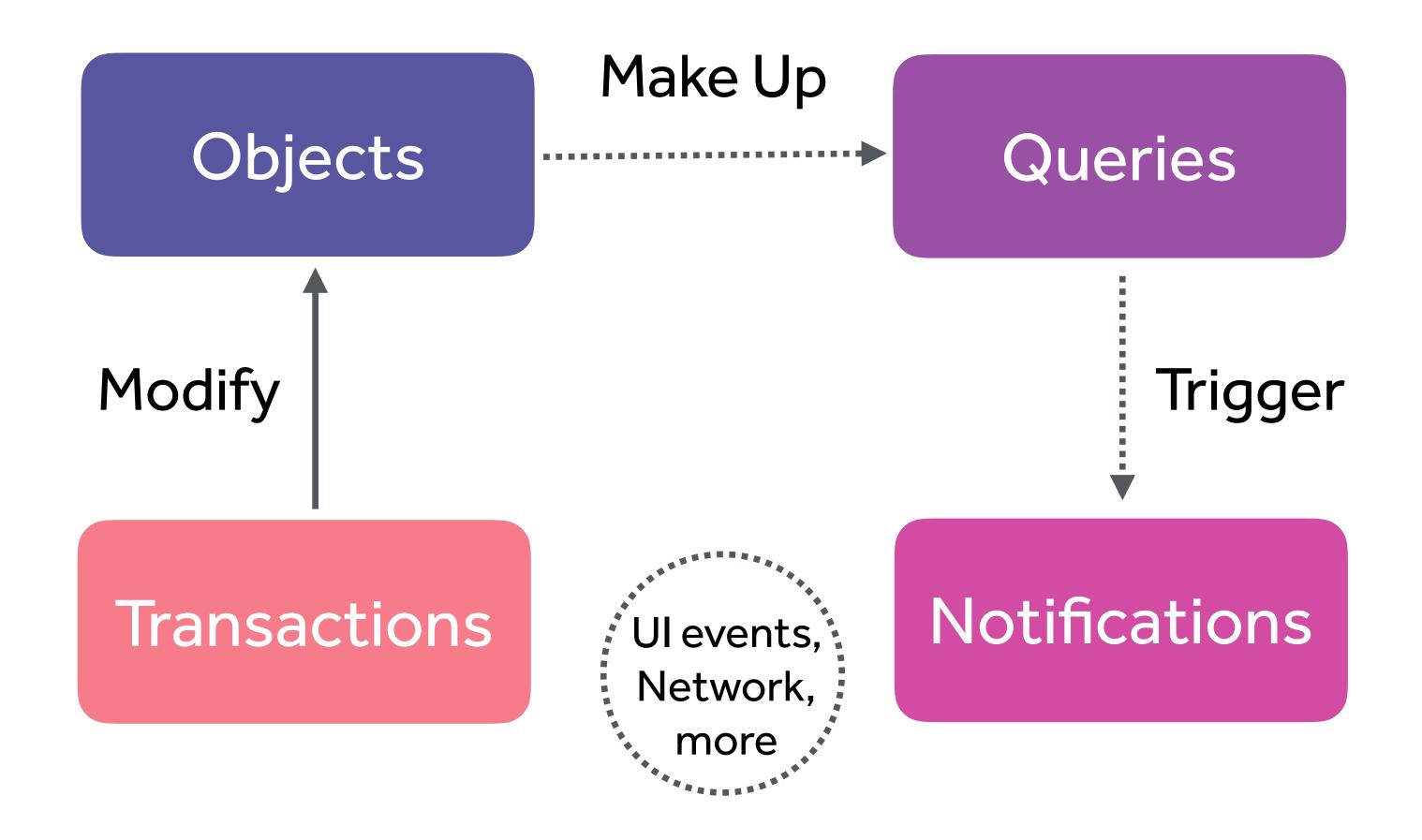


# Reactive Mobile Database with Live Objects

Open Source and Free



#### Realm Mobile Database

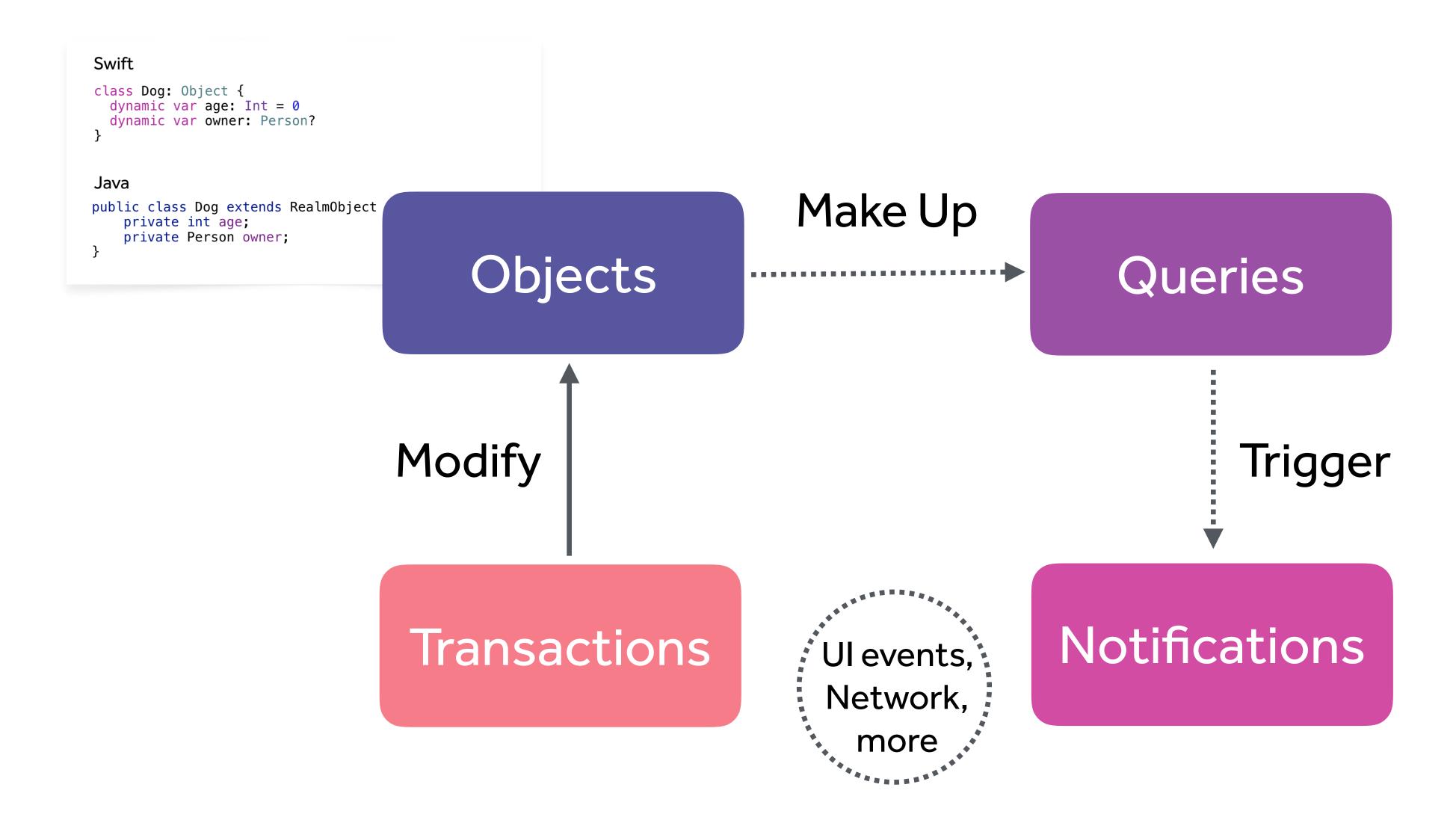




## Objects

```
Swift
class Dog: Object {
  dynamic var age: Int = 0
  dynamic var owner: Person?
Java
public class Dog extends RealmObject {
    private int age;
    private Person owner;
```







### Queries

#### Swift

```
class Dog: Object {
   dynamic var age: Int = 0
   dynamic var owner: Person?
}

Java

public class Dog extends Realn
   private int age;
   private Person owner;
}
```

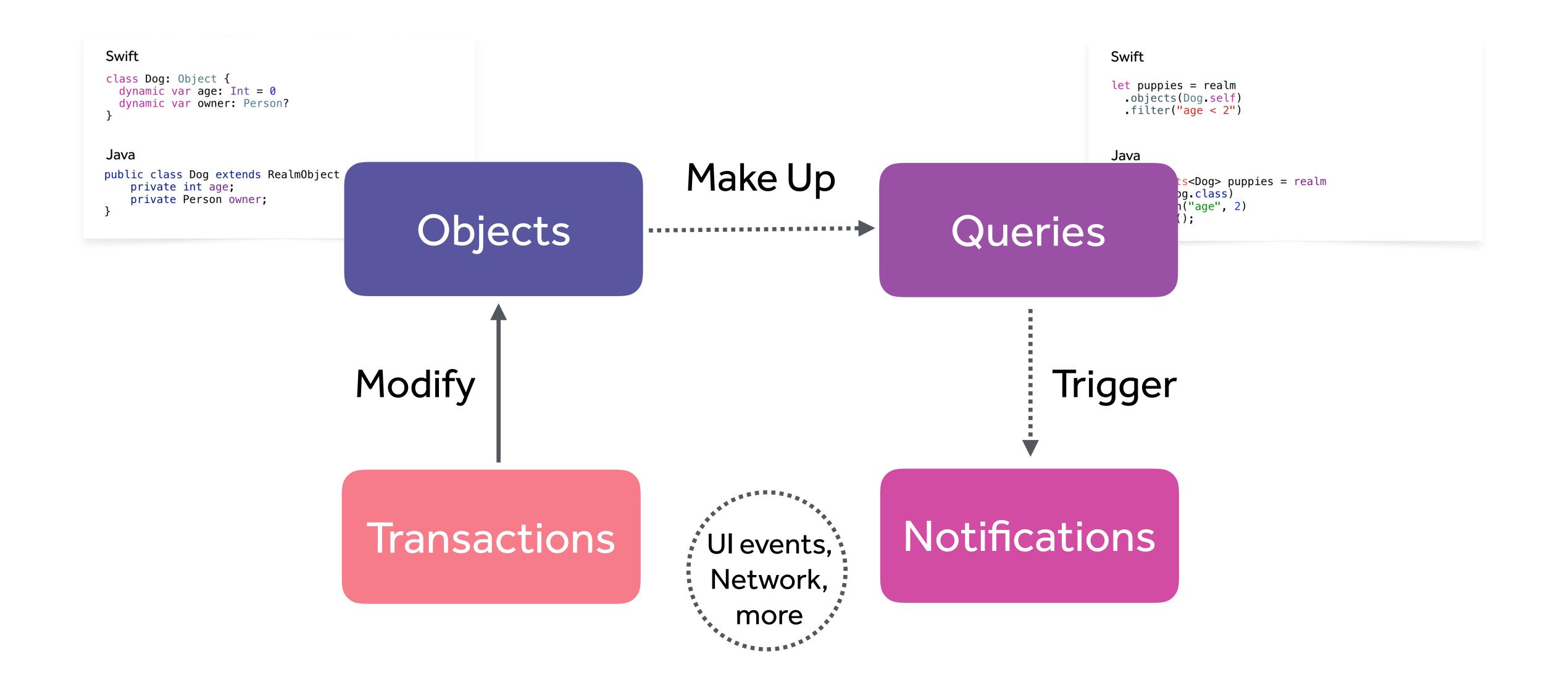
#### **Swift**

```
let puppies = realm
.objects(Dog.self)
.filter("age < 2")</pre>
```

#### Java

```
RealmResults<Dog> puppies = realm
.where(Dog.class)
.lessThan("age", 2)
.findAll();
```







```
Notifications
```

```
Swift
let puppies = realm
  .objects(Dog.self)
  .filter("age < 2")</pre>
```

; = realm

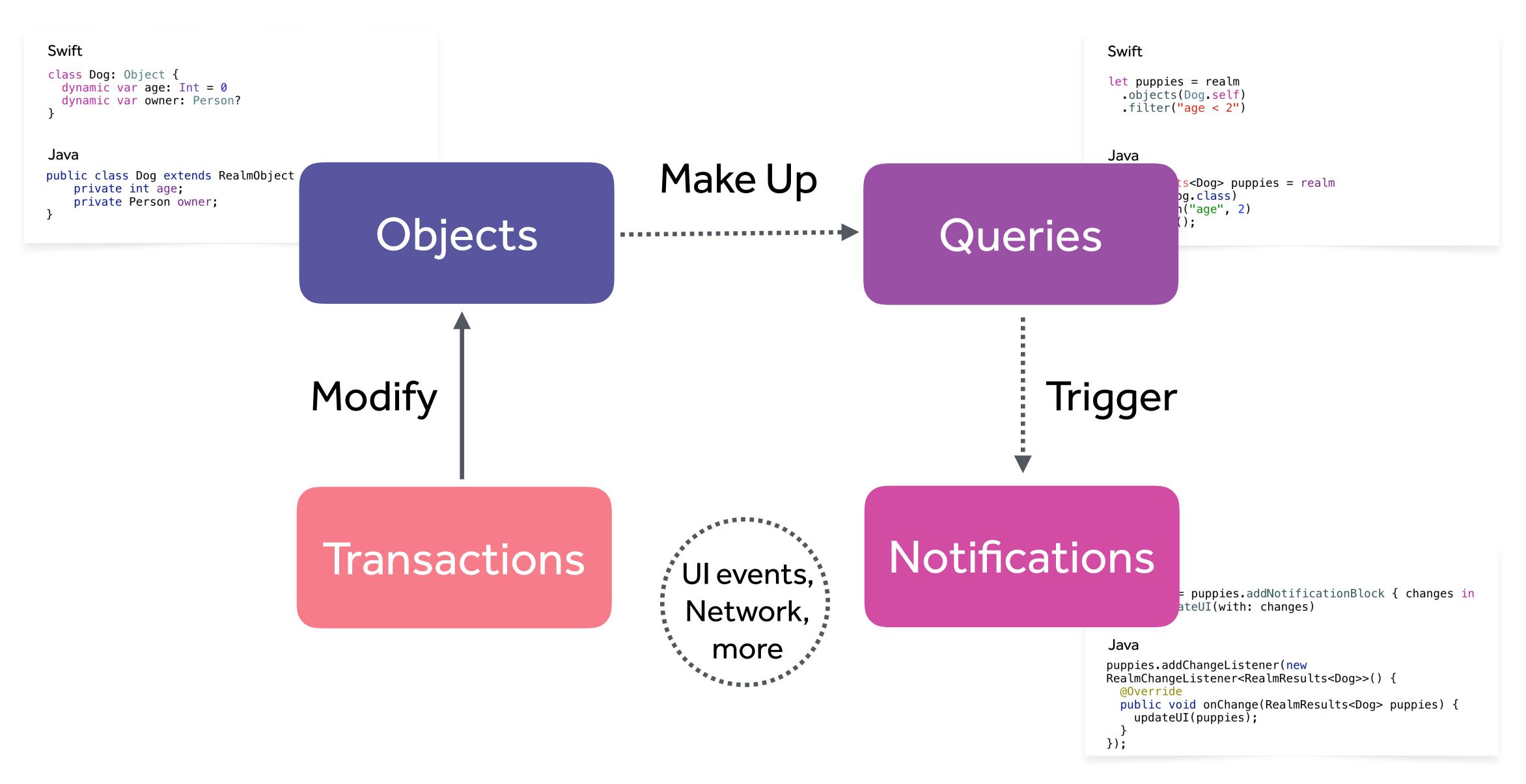
```
class Dog: Object {
  dynamic var age: Int = 0
  dynamic var owner: Person?
public class Dog extends Realm
    private int age;
    private Person owner;
```

Swift

#### Swift

```
let token = puppies.addNotificationBlock { changes in
  self.updateUI(with: changes)
Java
puppies.addChangeListener(new
RealmChangeListener<RealmResults<Dog>>() {
  @Override
 public void onChange(RealmResults<Dog>> puppies) {
   updateUI(puppies);
```







#### Transactions

```
Swift
class Dog: Object {
 dynamic var age: Int = 0
 dynamic var owner: Person?
public class Dog extends Realm
   private int age;
    private Person owner;
```

```
let puppies = realm
 .objects(Dog.self)
  .filter("age < 2")</pre>
                           s = realm
```

```
Swift
try realm.write {
  dog.owner = Person(name: "me")
Java
realm.executeTransaction(new Realm.Transaction() {
  @Override
  public void execute(Realm r) {
     Person me = new Person("me");
     r.copyToRealm(me)
    dog.setOwner(me);
                                                                        ptificationBlock { changes in
                                                                        nResults<Dog>>() {
                                                             public void onChange(RealmResults<Dog> puppies) {
                                                              updateUI(puppies);
```



#### Transactions Swift Swift class Dog: Object { let puppies = realm dynamic var age: Int = 0 .objects(Dog.self) .filter("age < 2")</pre> dynamic var owner: Person? Java Java Make Up public class Dog extends RealmObject s<Dog> puppies = realm private int age; og class) private Person owner; n("age", 2) Queries Objects Modify Trigger Notifications Transactions UI events, Swift try realm.write { = puppies.addNotificationBlock { changes in dog.owner = Person(name: "me") Network, ateUI(with: changes) Java more realm.executeTransaction(new Realm.Transaction() { puppies.addChangeListener(new public void execute(Realm r) { RealmChangeListener<RealmResults<Dog>>() { Person me = new Person("me"); public void onChange(RealmResults<Dog> puppies) { r.copyToRealm(me) dog.setOwner(me); updateUI(puppies); }); });

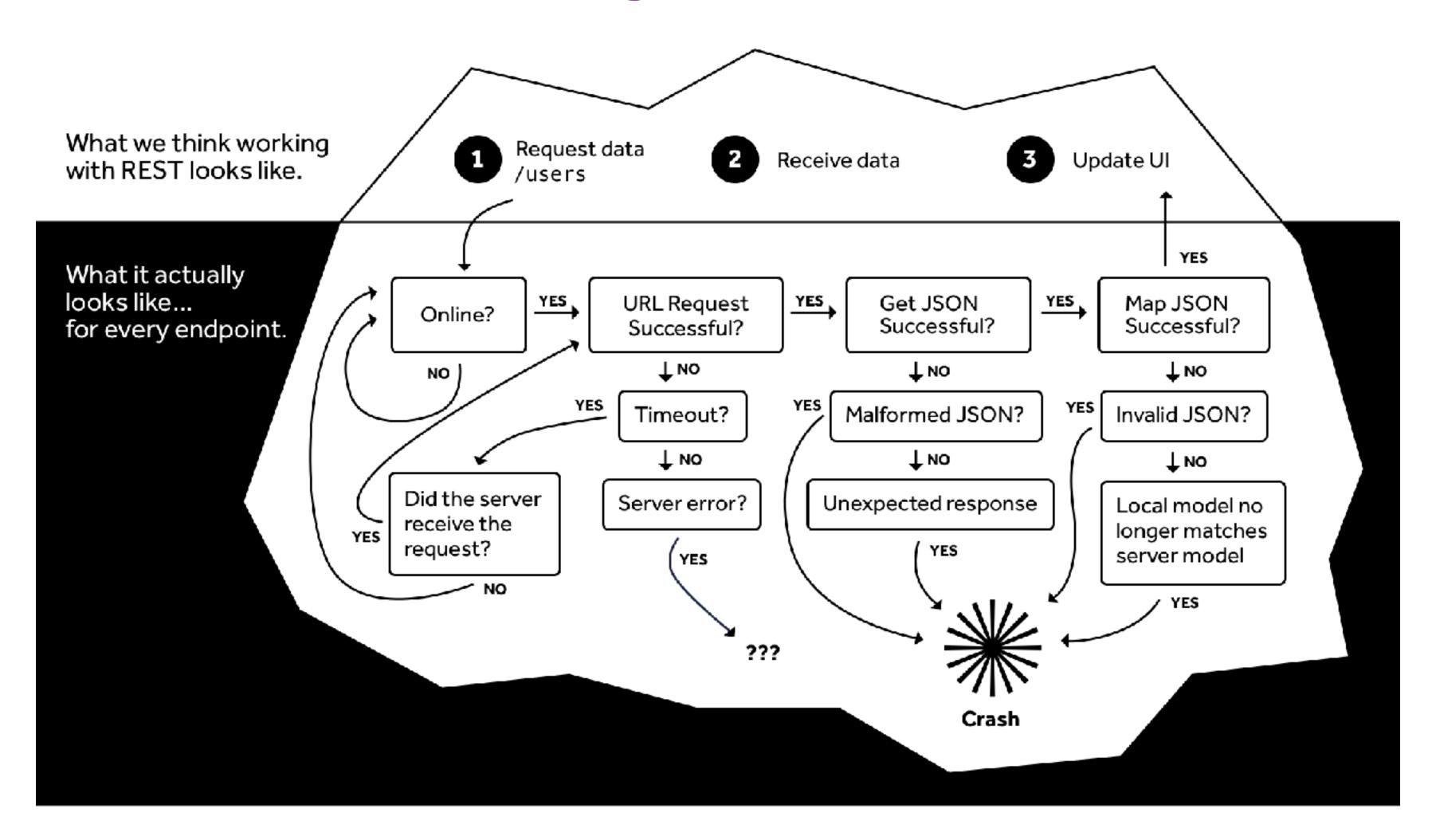


# Seamless Data Sync for Realtime Apps and Collaborative Features

Realm Mobile Platform

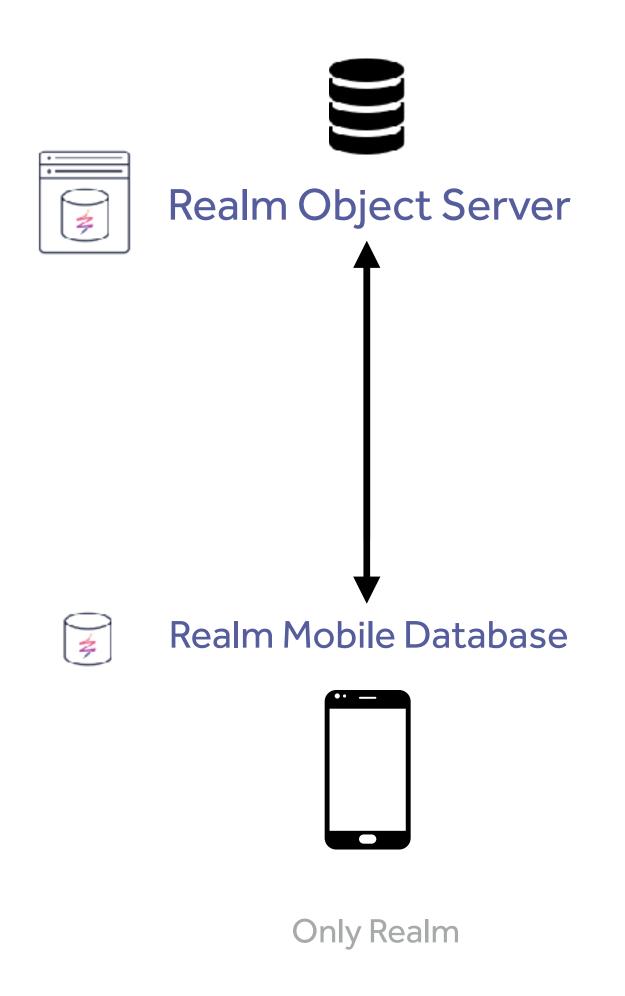


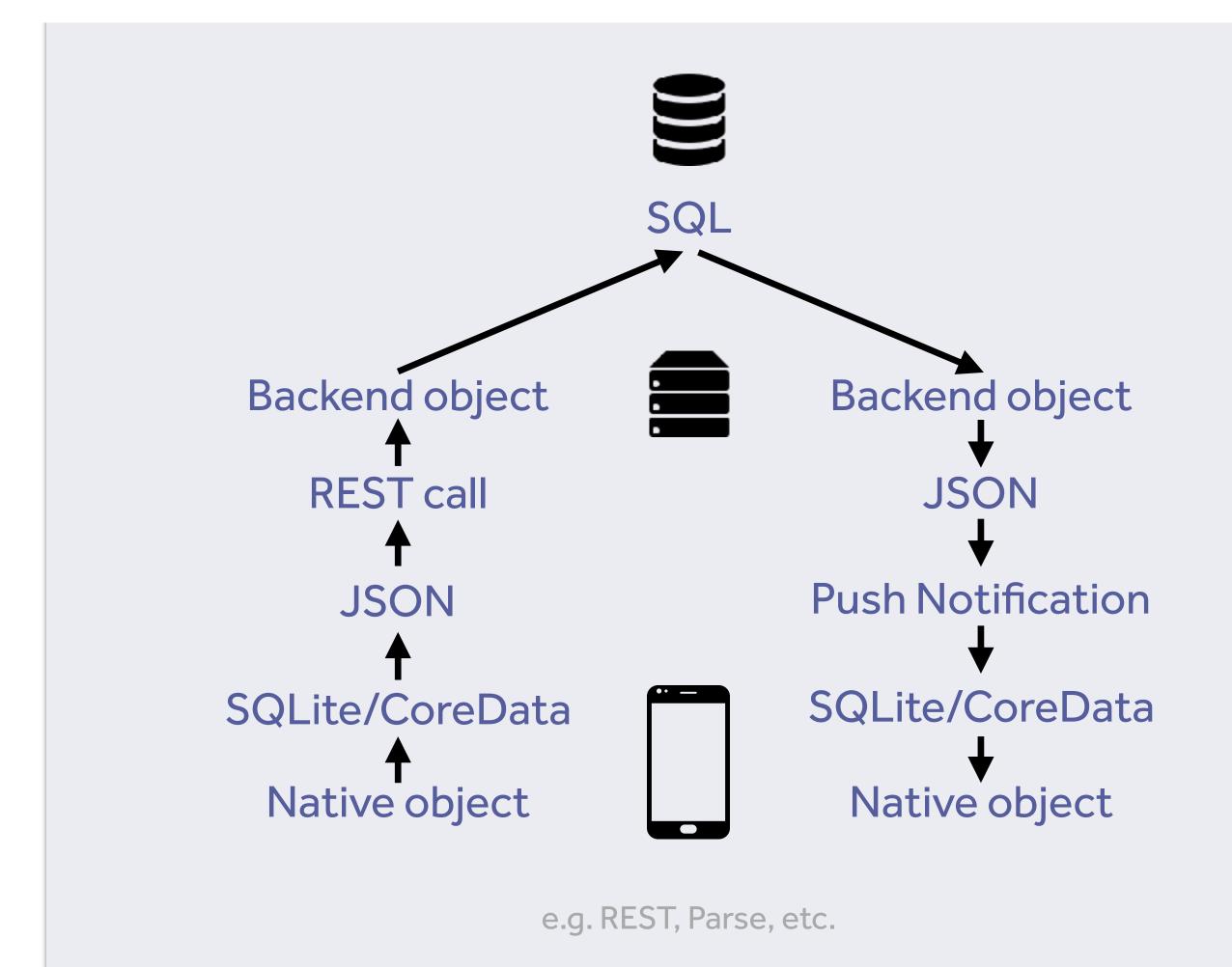
# Realtime sync with REST





#### The Realm Mobile Platform Experience

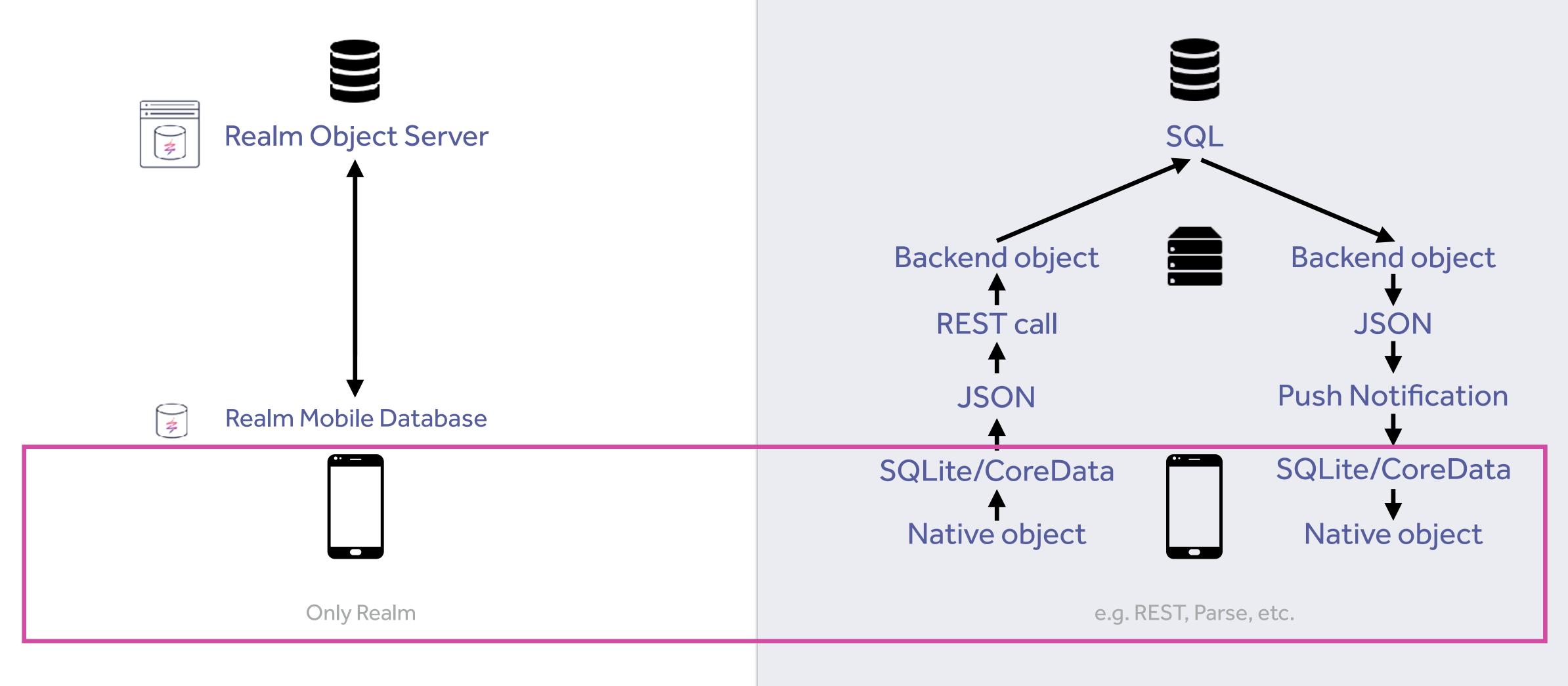






#### Realm

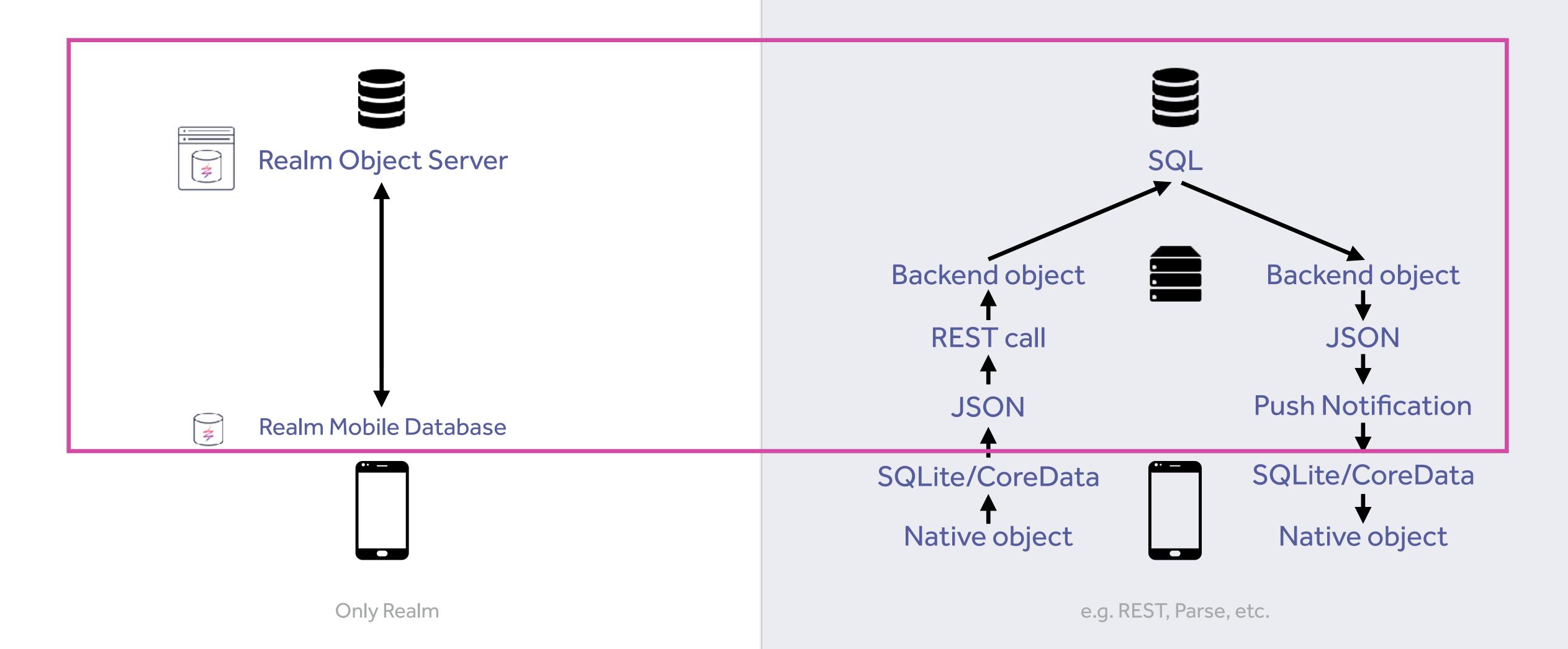
#### REST/JSON





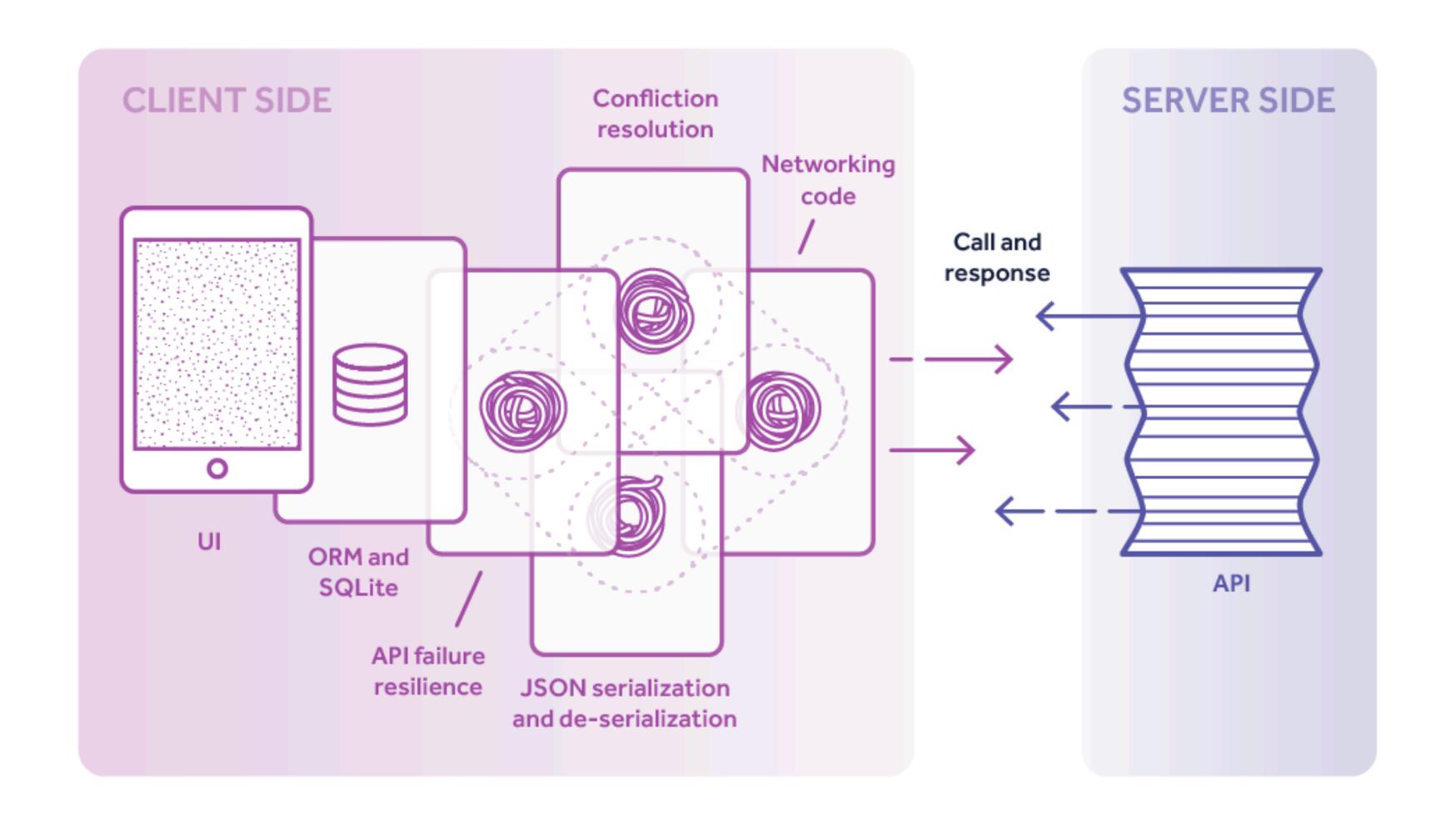
#### Realm

#### REST/JSON



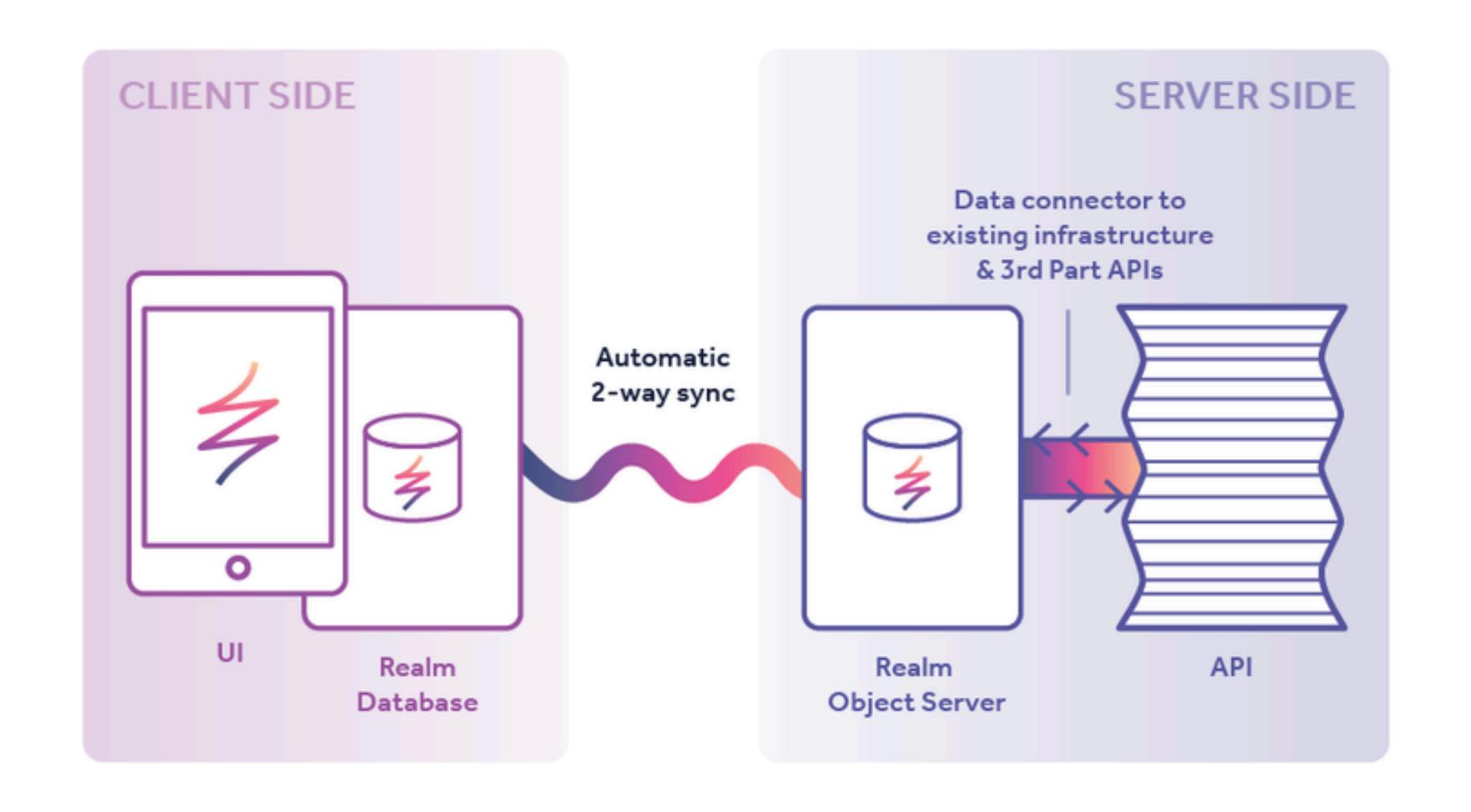


#### Changing your apps architecture from this...





#### ...to this





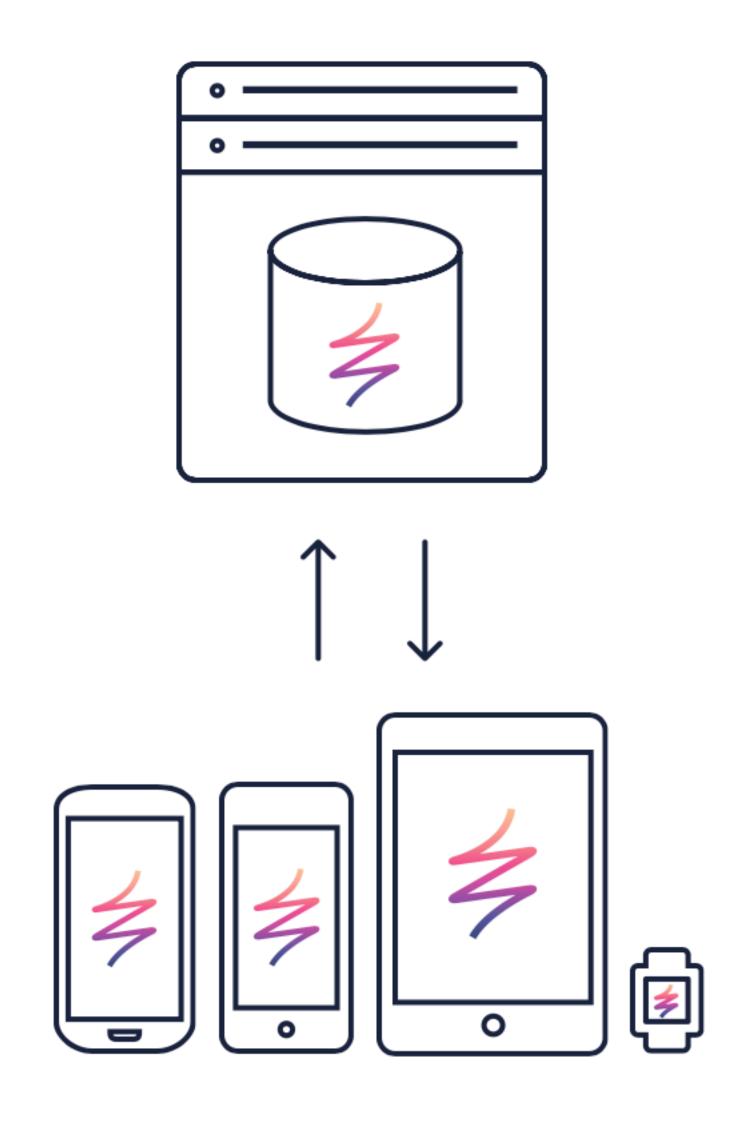
#### Data Access API

```
var Realm = require('realm');
var results = realm.objects("Dog");
realm.write(function() {
    results[0].owner = me
})
```



#### More Server Features

- Realm Database SDK
- Authorization
- Encrypted Transport
- Realtime Synchronization
- Server Side Event Handling
- Horizontal Scaling
- Continuous Backup





## Demo

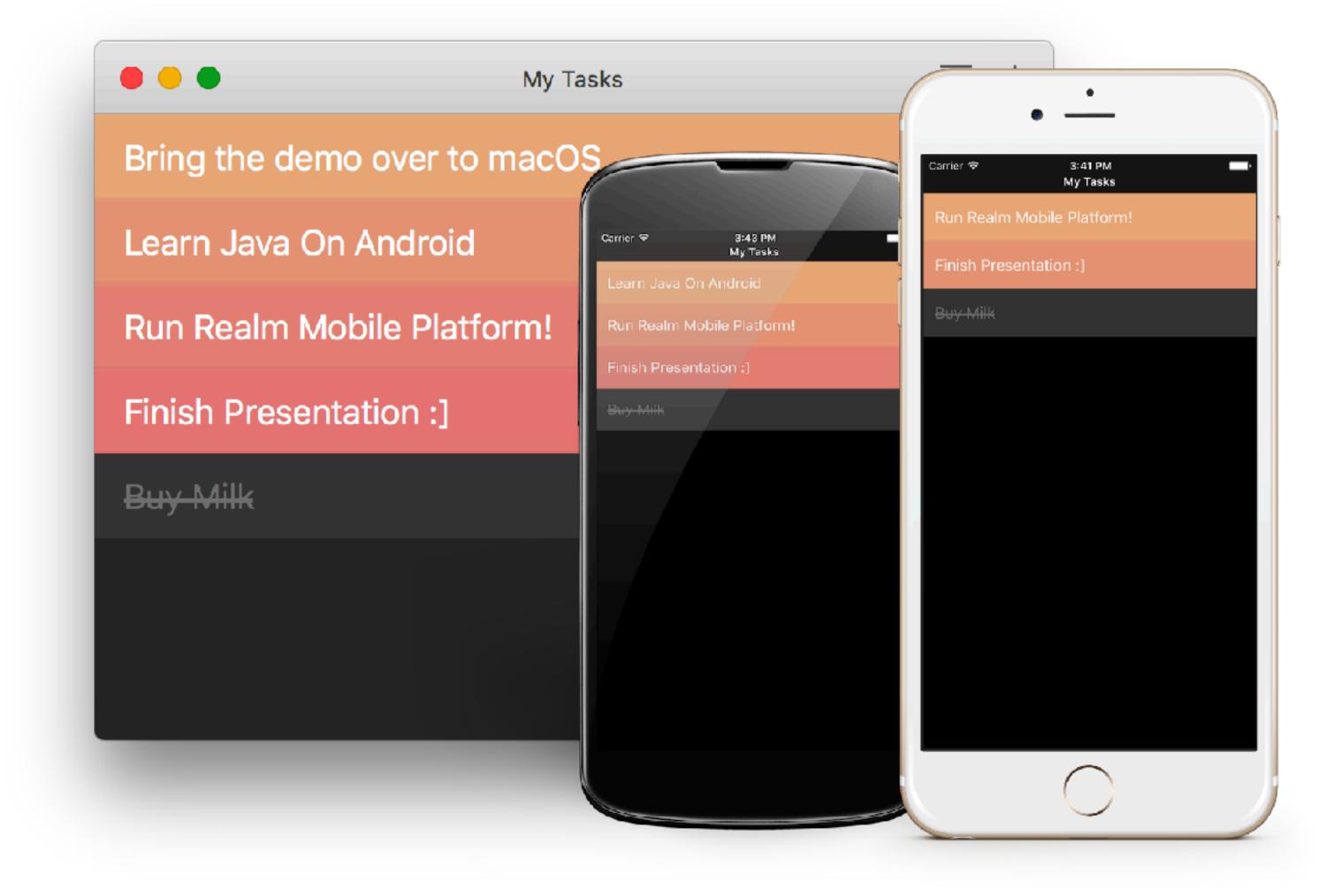
Realm Pop

Connecting to the Realm Server Object, Server Events



#### Realm Mobile Platform

- https://realm.io
- RealmTasks to demo all features
- DE is free for all
- PE has 2 month trial





## We're hiring

- Distributed Systems Eng.
- JavaScript Engineer
- Product Manager
- Sales Engineer
- Account Executive
- local / remote!

realm.io/jobs





# Questions?

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- 1. Join realm-guest
- 2. password is: piedpiper
- 3. go to <a href="https://worldtour.realm.io">https://worldtour.realm.io</a> or scan:
- 4. install RealmPop and play!



