Building Apps With Couchbase Mobile

Wayne Carter - Chief Architect of Mobile

Agenda

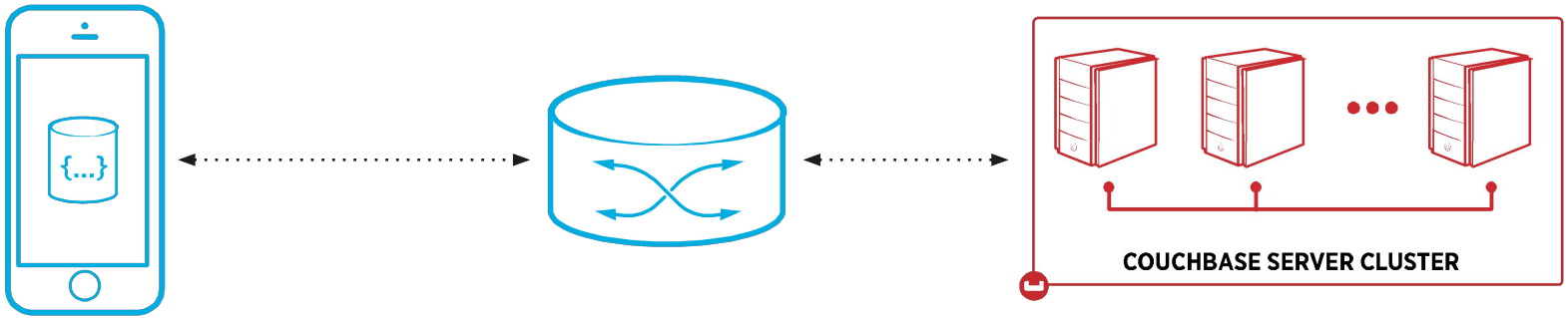
- What is Couchbase Mobile?
- What are we going to build?
- Demo
- Write code!

github.com/couchbaselabs/mobile-training-todo

What is Couchbase Mobile?

Couchbase Mobile

Couchbase Mobile is the NoSQL database for mobile apps. It has a consistent set of APIs and capabilities that span the entire application stack from the device to the cloud.



Couchbase Lite

Embedded NoSQL database

Sync Gateway

Secure authentication, data access, and synchronization

Couchbase Server

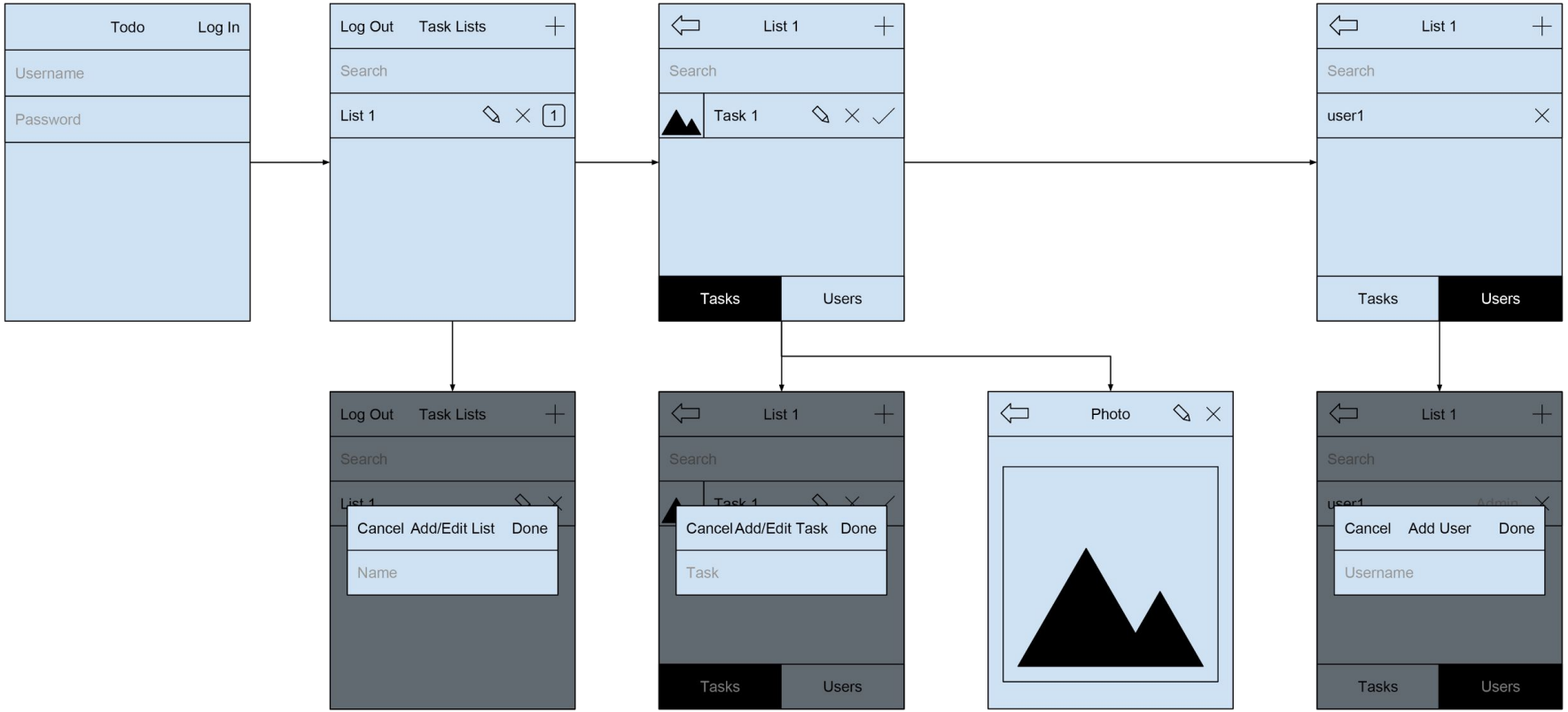
Highly scalable NoSQL database server cluster

github.com/couchbaselabs/mobile-training-todo

What are we going to build?

github.com/couchbaselabs/mobile-training-todo

Wireframes & Navigation Flow

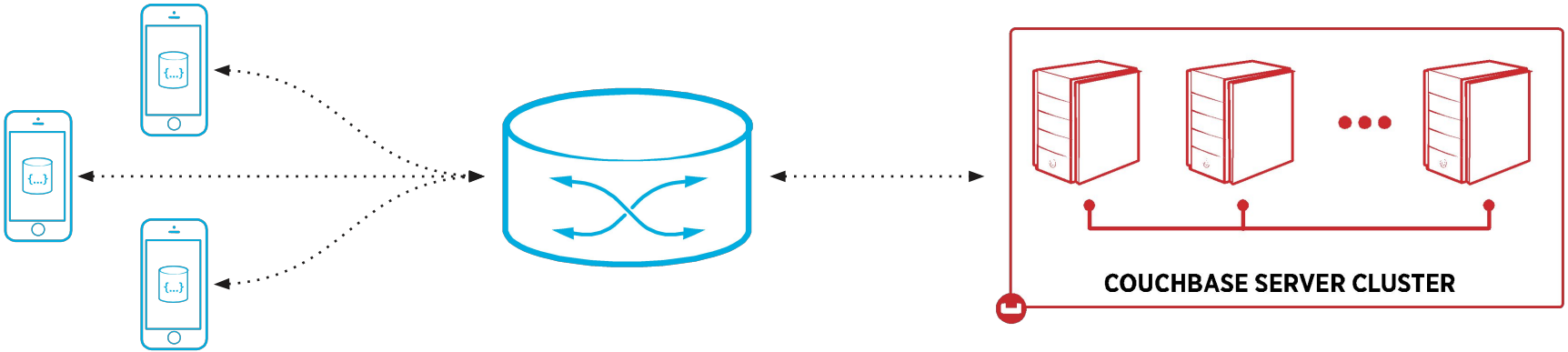


github.com/couchbaselabs/mobile-training-todo

Model

{
"type" : "task-list",
"_id" : "{owner}.eb6b9e54-6014-..."
"name" : "List 1",
"owner" : "user1"
}
1
∞
∞
{
"type" : "task",
"_id" : "de305d54-75b4-...",
"_attachments" : {
"image" : {...}
},
"taskList" : {
"id" : "{taskList._id}",
"owner" : "{taskList.owner}"
},
"createdAt" : "1997-07-16T19:20:30.45+01:00",
"task" : "Task 1",
"complete" : true
}
{
"type" : "task-list.user",
"_id" : "{taskList.id}.{username}",
"taskList" : {
"id" : "{taskList._id}",
"owner" : "{taskList.owner}"
},
"username" : "user2"
}
{
"type" : "moderator",
"_id" : "moderator.{username}",
"username" : "user3"
}

Deployment Topology



github.com/couchbaselabs/mobile-training-todo

Demo

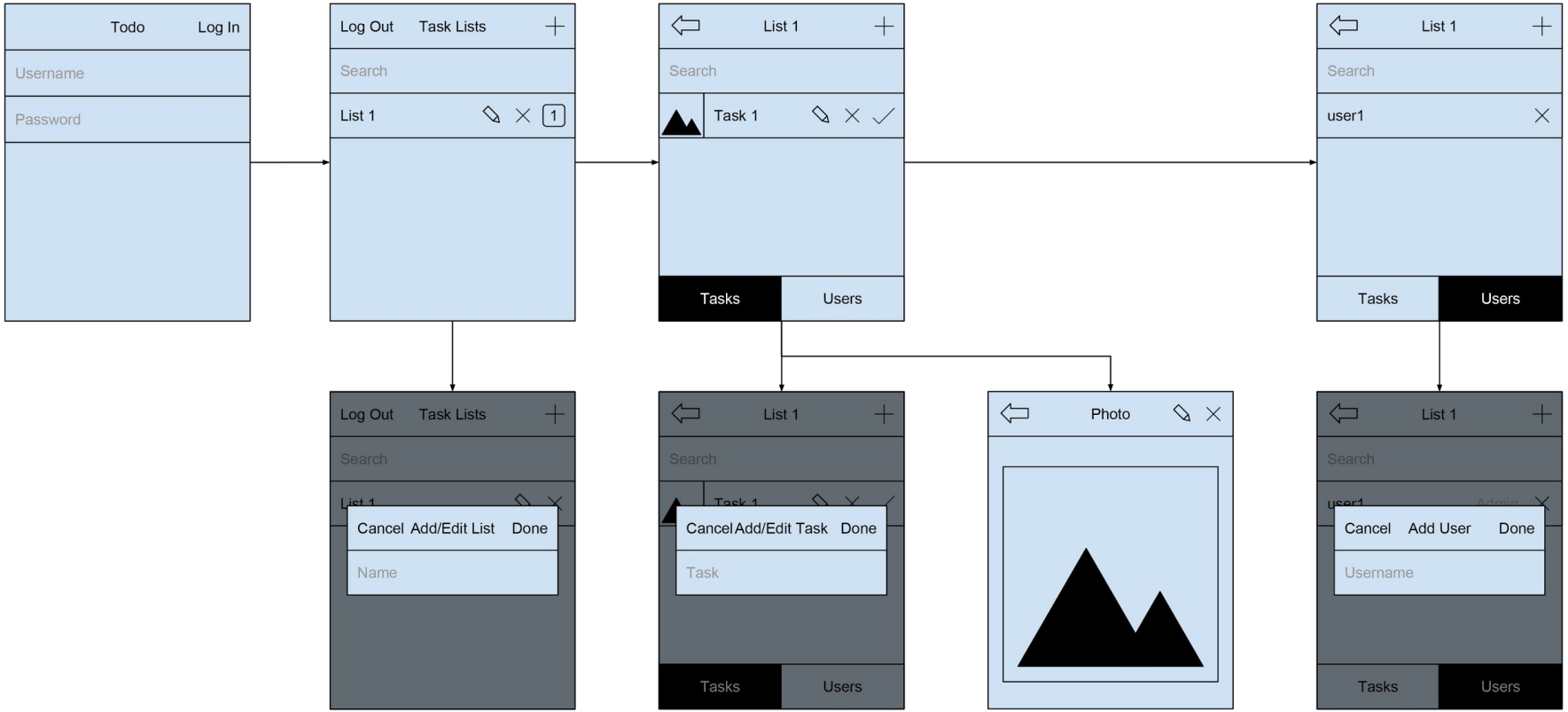
github.com/couchbaselabs/mobile-training-todo

Write Code!

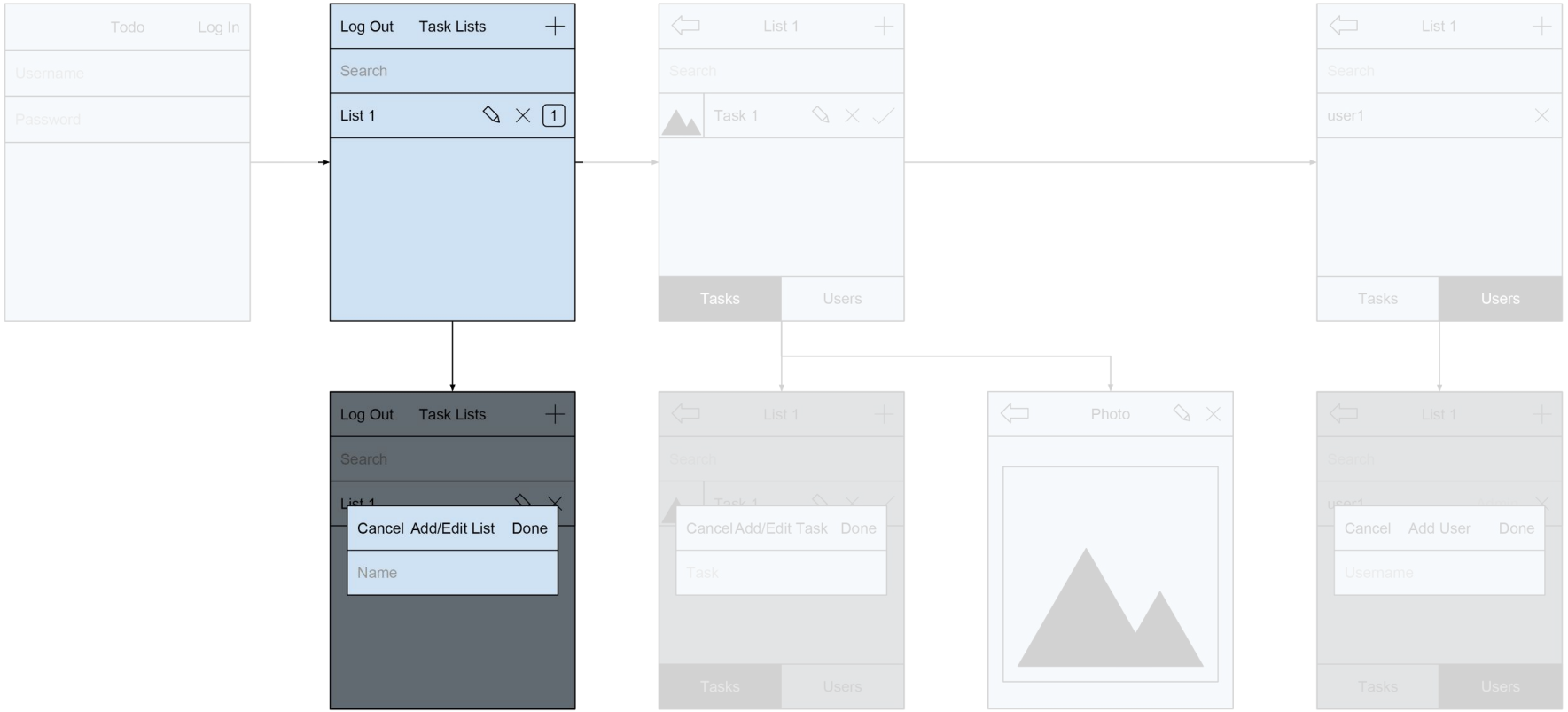
github.com/couchbaselabs/mobile-training-todo

Build App Using Local Database

Wireframes & Navigation Flow



Task Lists


Todo
Log In
Username
Password
Log Out
Task Lists
Search
List 1
1
List 1
Search
Task 1
Tasks
Users
List 1
Search
user1
Tasks
Users
Log Out
Task Lists
Search
List 1
Cancel
Add/Edit List
Done
Name
List 1
Search
Task 1
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Add User
Done
Username
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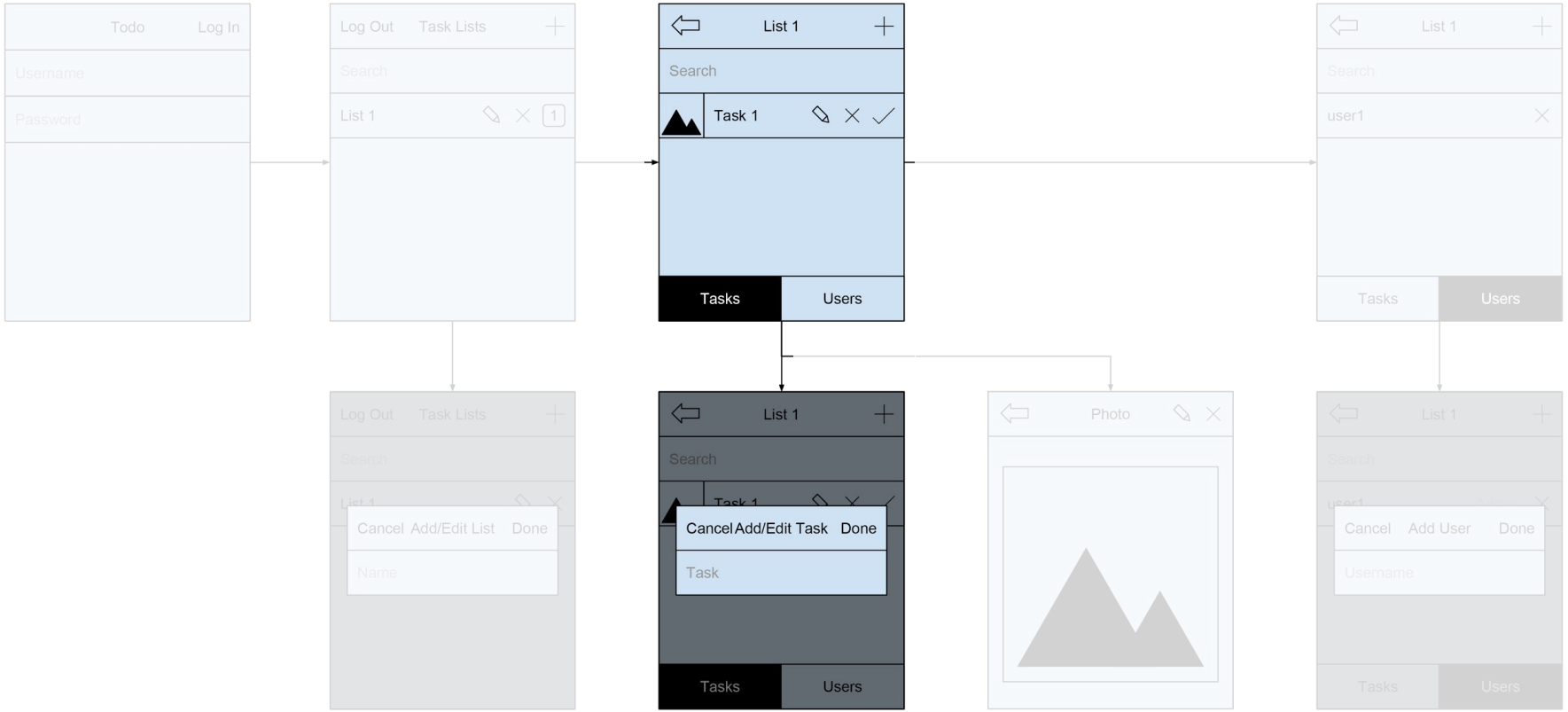
Tasks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Users
Log Out
Task Lists
Search
List 1
Cancel
Add/Edit List
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Name
List 1
Search
Task 1
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Task
Tasks
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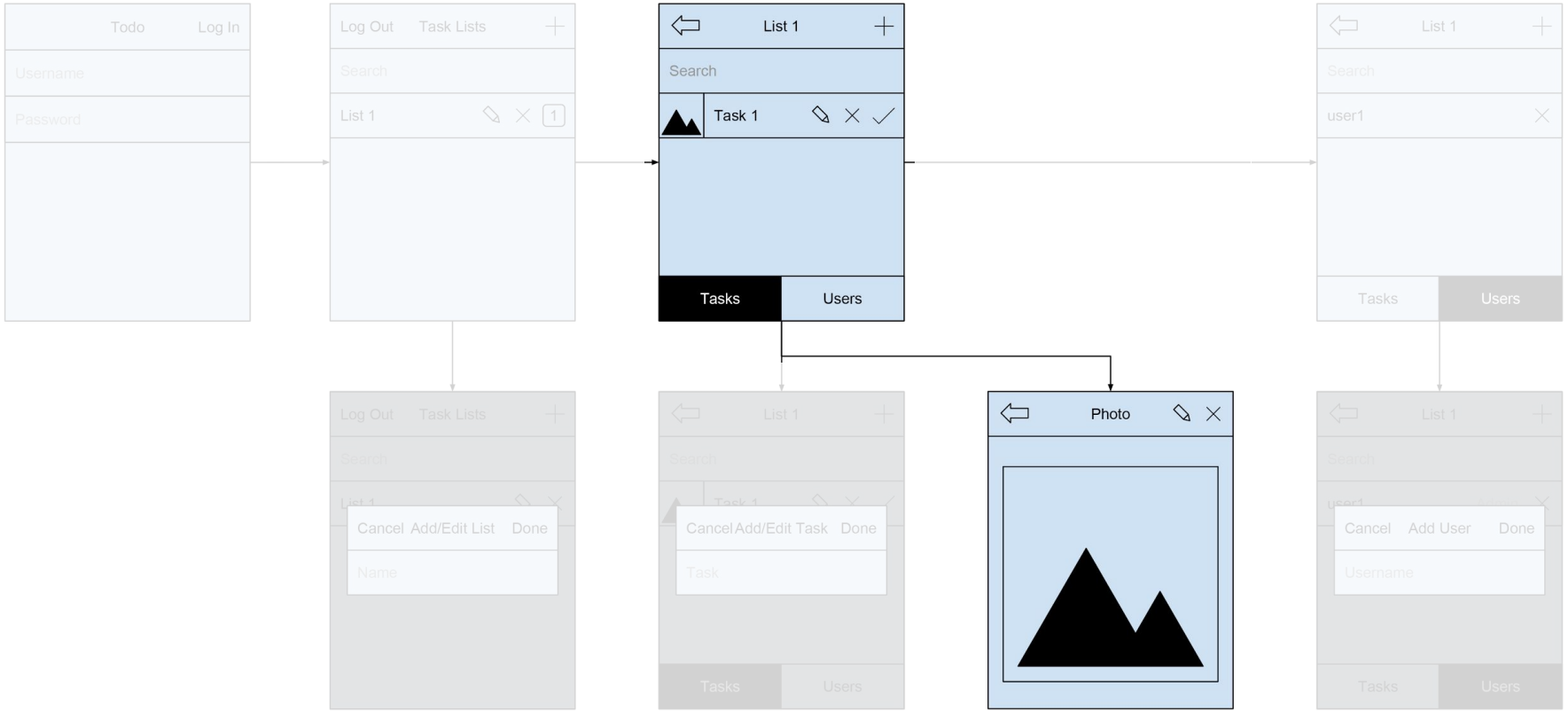
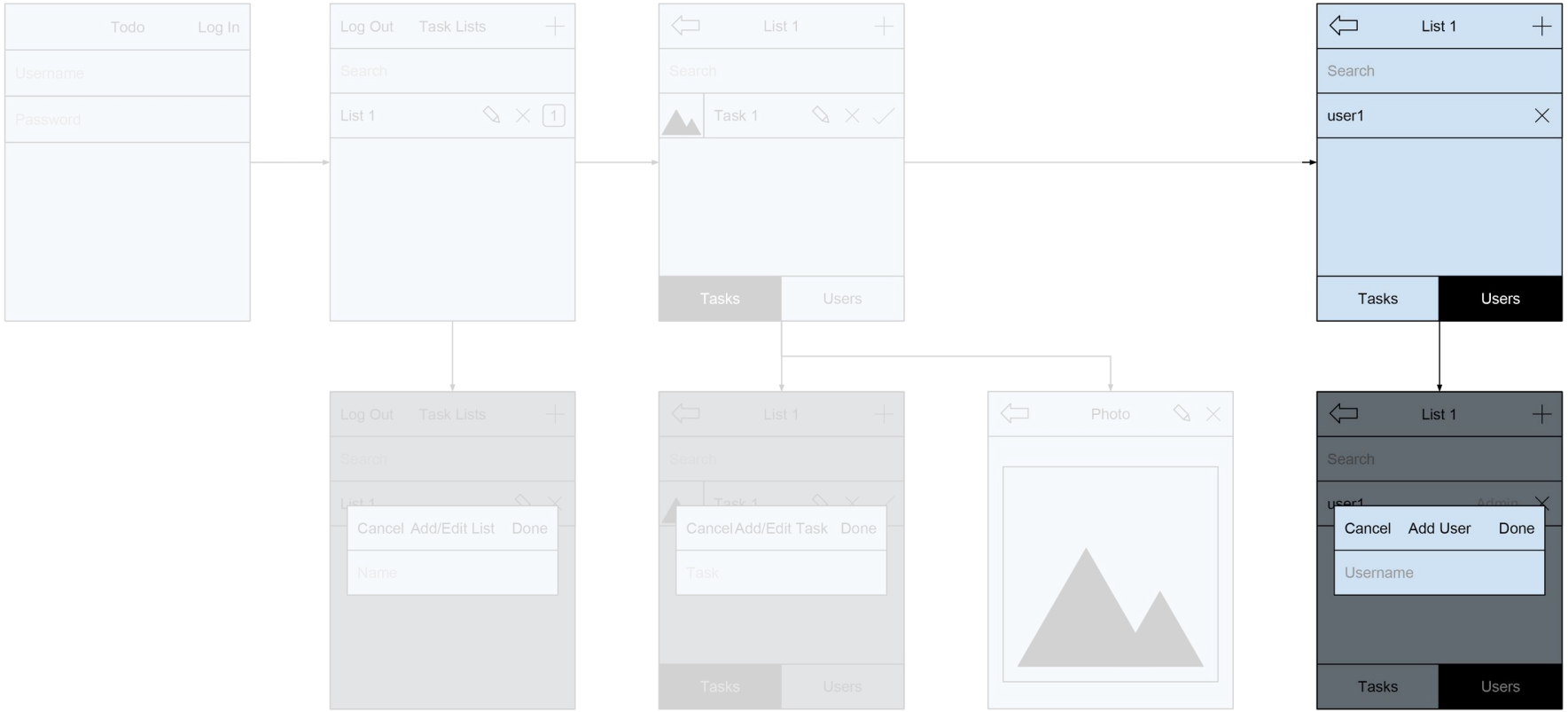
Cancel
Add User
Done
Username
Tasks
Users

Tasks: Photo Viewer

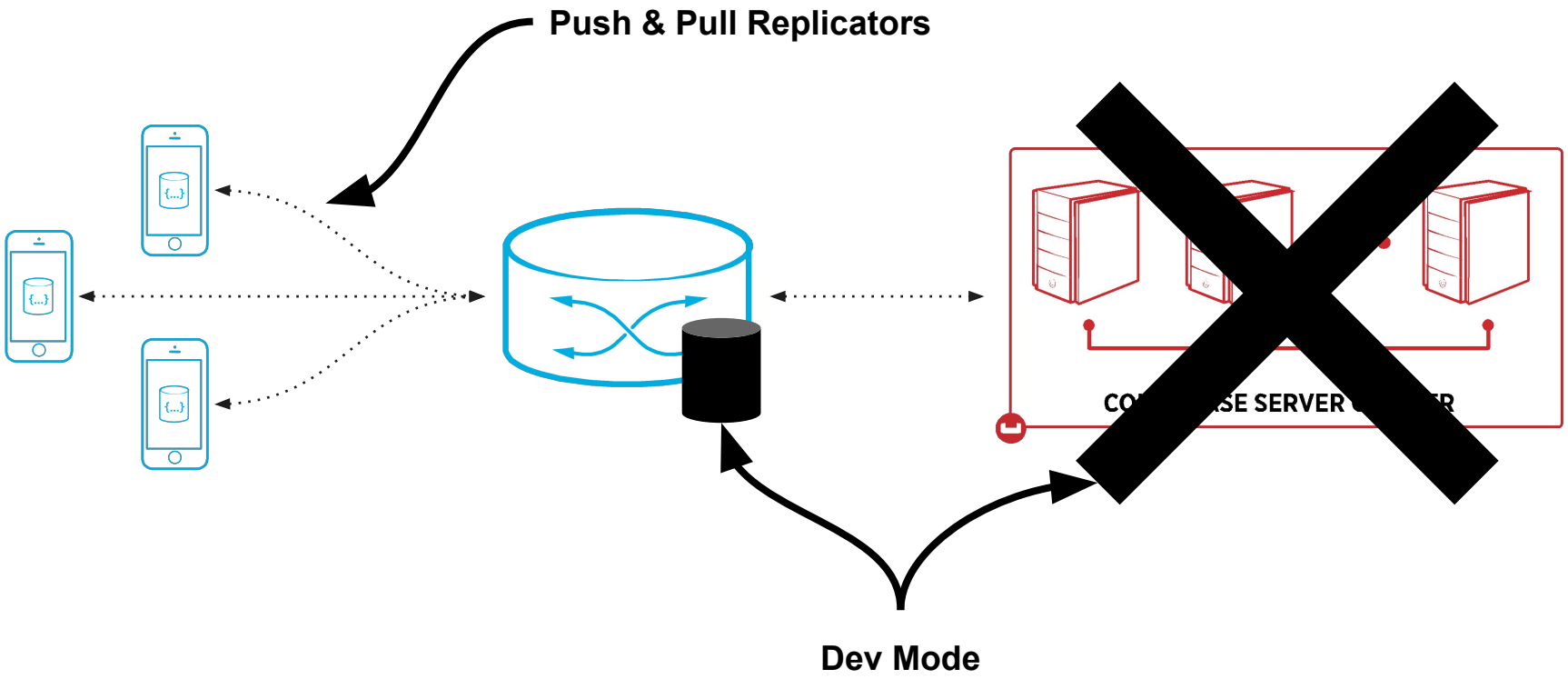


Task List Users

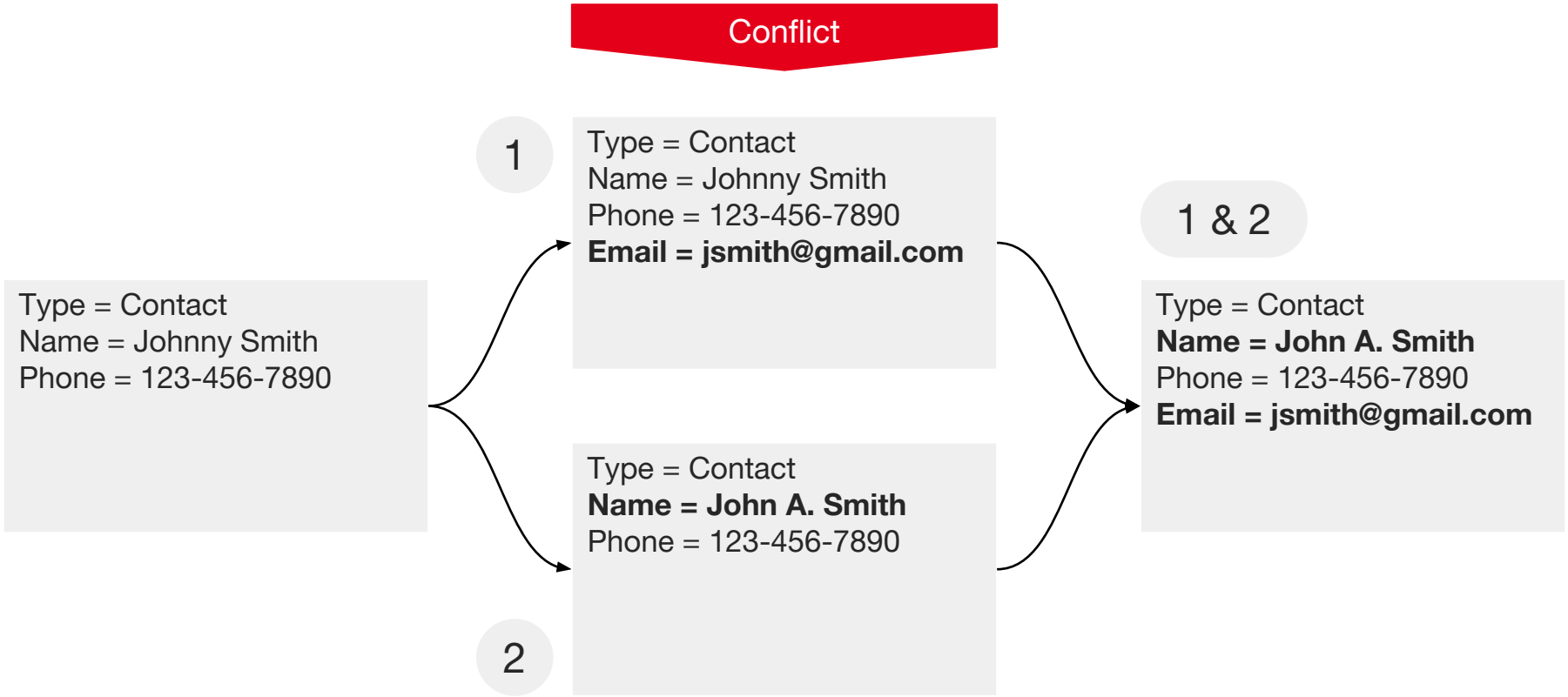


Add Replication

Replicators

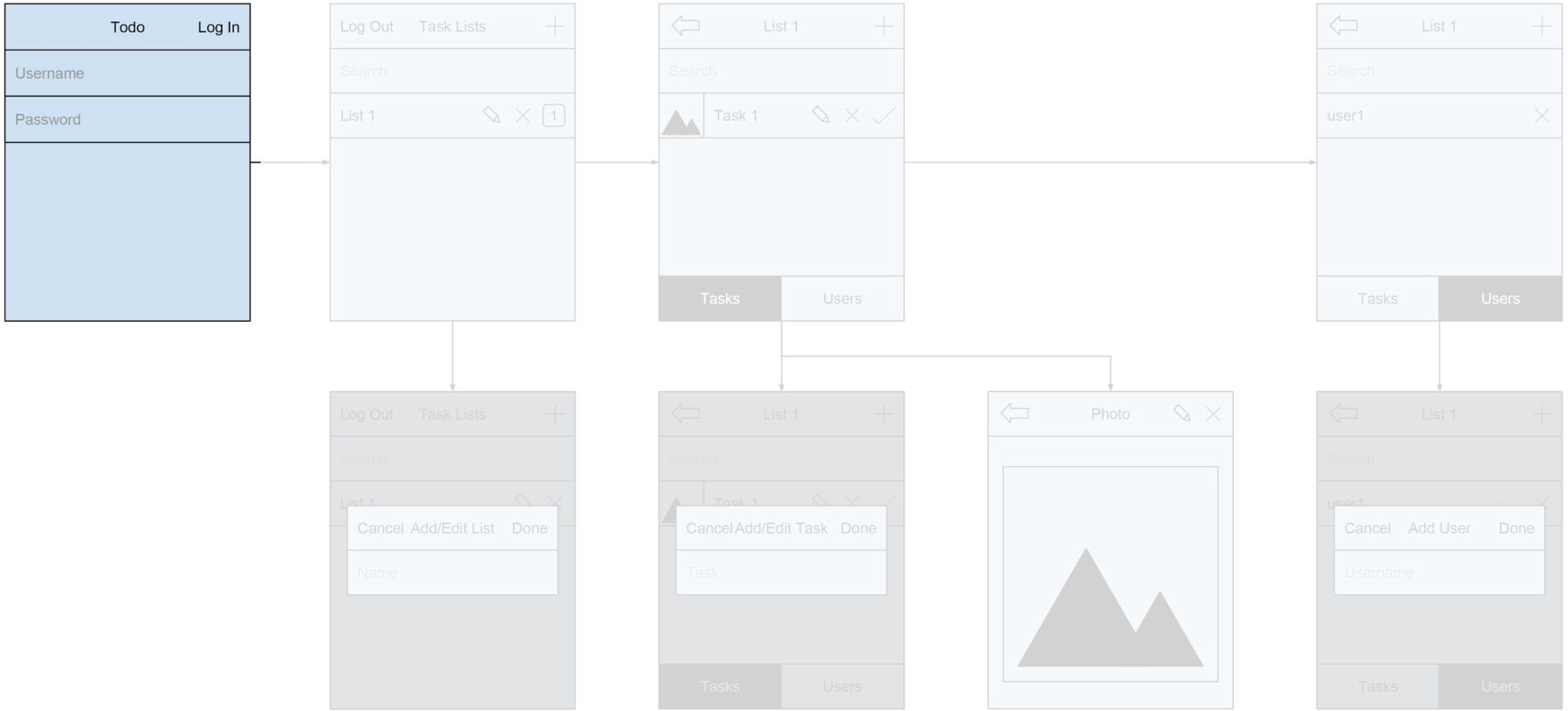


Conflict Resolution



Add Security

Login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user1
Tasks
Users
Log Out
Task Lists
Search
List 1
Cancel
Add/Edit List
Done
Name
List 1
Search
Task 1
Cancel
Add/Edit Task
Done
Task
Tasks
Users
Photo
List 1
Search
user1
Cancel
Add User
Done
Username
Tasks
Users

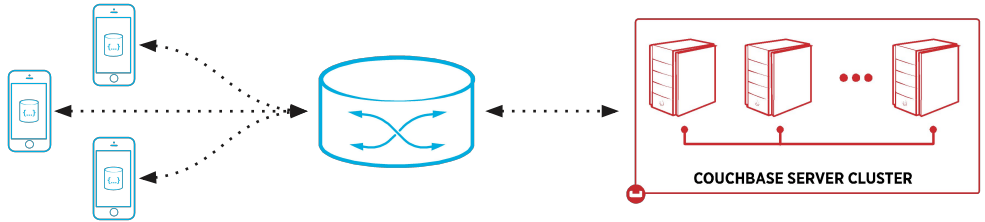
Advanced Security

- Database Encryption
- Offline Login
- Encryption Key Rotation

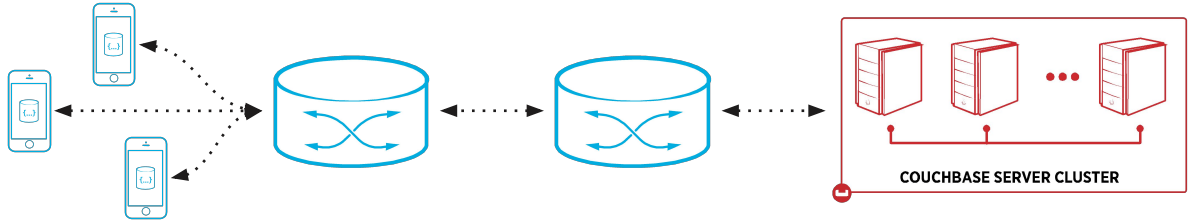
A few more cool things...

Deployment Topologies

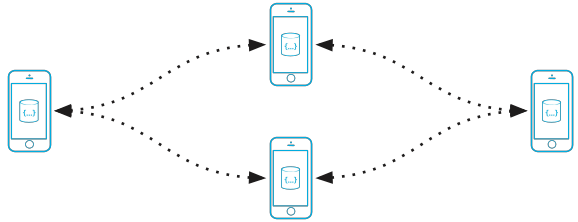
Star



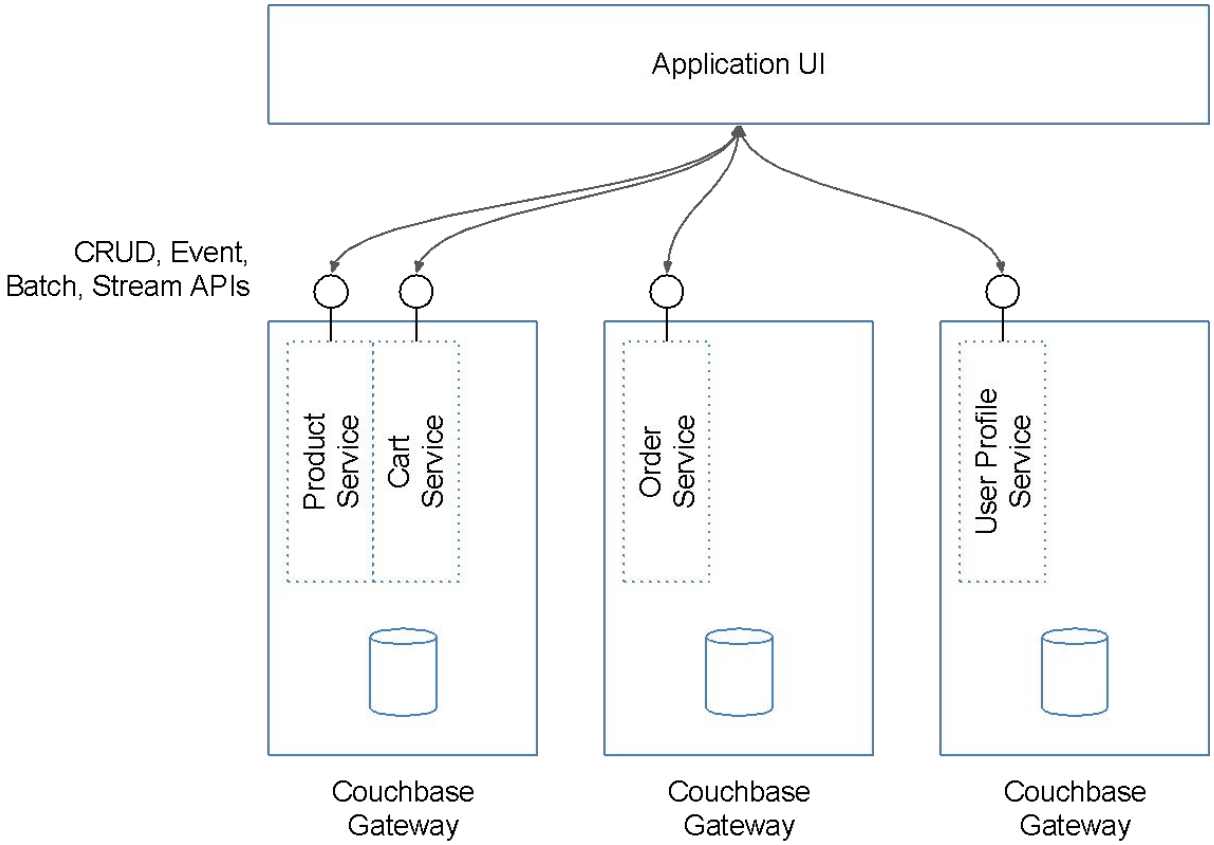
Tree



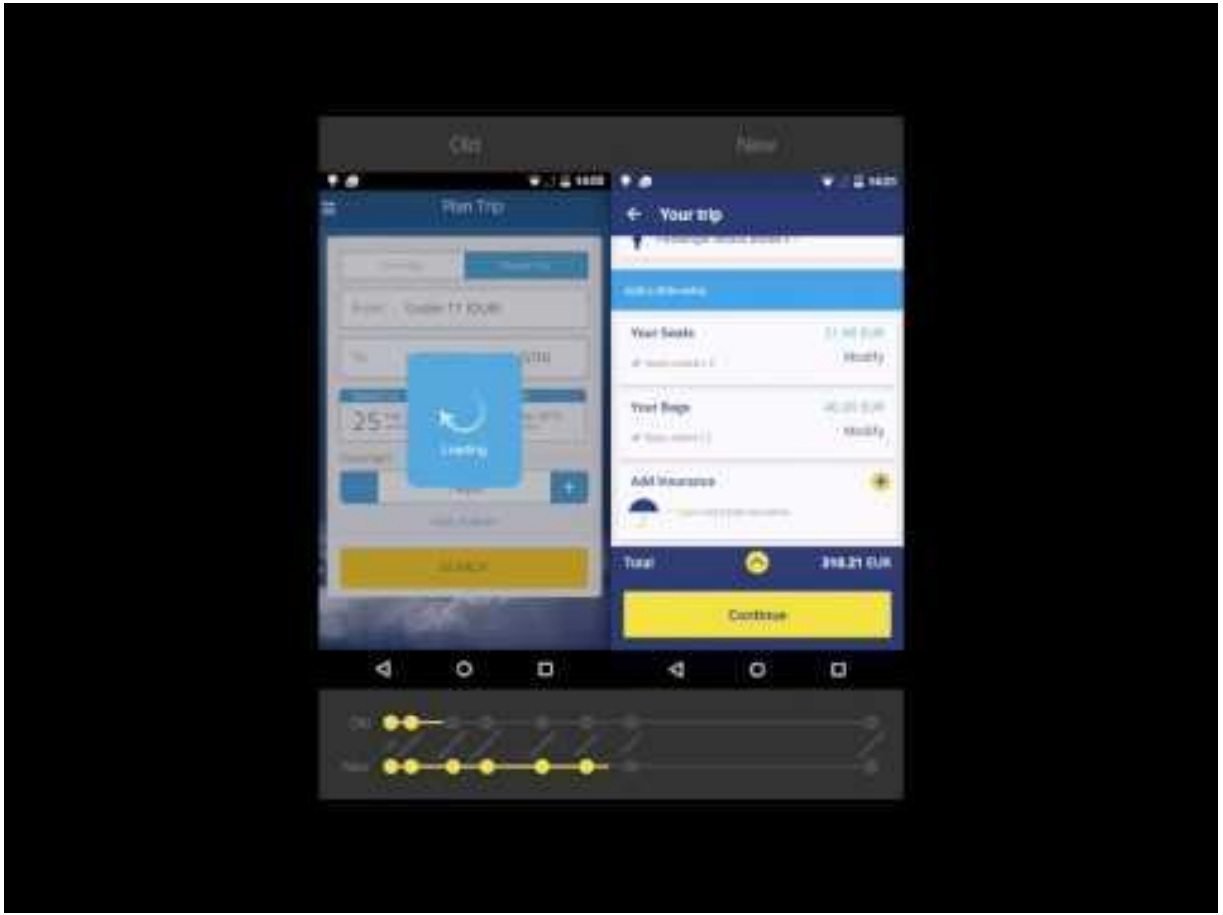
Mesh



Microservices Deployment



Meanwhile, over at Ryanair...



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1st 2 people to to come by our table and show us this demo working get an Ogio laptop bag.