Supporting Concurrency



Kevin Dockx ARCHITECT

@KevinDockx https://www.kevindockx.com

Coming Up



Supporting concurrency in a RESTful world

Using ETags to support concurrency



Supporting Concurrency in a RESTful World

Client 2 Client 1 **API** (Kevin) (Sven) GET api/authors/{id} GET api/authors/{id} PUT api/authors/{id} PUT api/authors/{id}



Concurrency Strategies

Pessimistic concurrency

Resource is locked

While it's locked, it cannot be modified by another client

This is not possible in REST

Optimistic concurrency

Token is returned together with the resource

The update can happen as long as the token is still valid

ETags are used as validation tokens

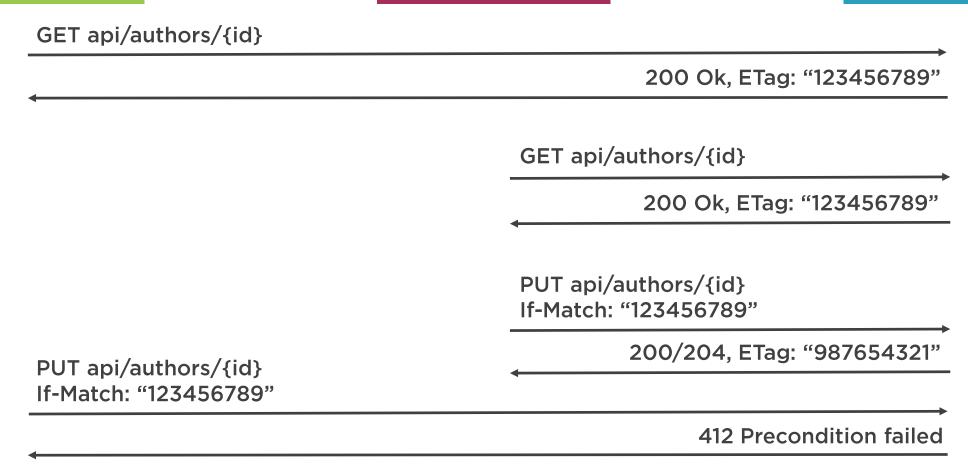


Supporting Concurrency in a RESTful World

Client 1 (Kevin)

Client 2 (Sven)

API





Demo



Supporting concurrency



Summary



Use ETags as tokens/validators for an optimistic concurrency strategy

- Send as If-Match header value
- On mismatch, 412 Precondition Failed will be returned





