Managing Concurrency

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Module Outline

Two users update the same Blob

The different ways to manage concurreny
- Last update wins
- Optimistic Concurrency
- Pessimistic Concurrency

Demo

Two users update the same Blob

Implement the logic to overwrite a Blob

Implement Optimistic Concurrency

Last update wins

"An update should fail if another user has updated the same Blob in the meantime."

Sara – software developer at Wired Brain Coffee

Implement Optimistic Concurrency

Last update wins

Optimistic Concurrency

Entity Tag (ETag)

Demo

Use a Blob's ETag to implement Optimistic Concurrency

Demo

Use a Lease to implement Pessimistic Concurrency

Break a Lease on a Blob

Acquire	**Renew**

Release	**Change**	**Break**

Break a Lease on a Blob

```
await cloudBlockBlob.BreakLeaseAsync(
    TimeSpan.FromSeconds(0));
```

Break a Lease on a Blob

```
TimeSpan timeUntilLeaseEnds =
    await cloudBlockBlob.BreakLeaseAsync(null);
```

Summary

Last upate wins

Use the ETag for Optimistic Concurrency

Use a Lease for Pessimistic Concurency