Keeping Data Fresh

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Overview

Caching

Polling the product API

Changing the API to support caching

Avoiding common problems
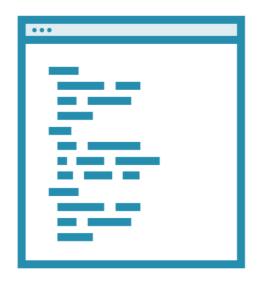
Exploring Caching

Caching Options

Redis Cache
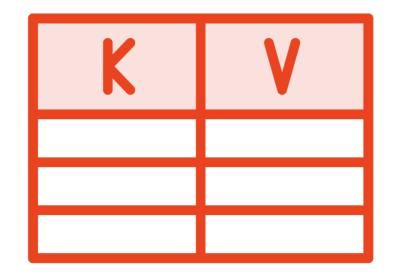
Custom Solution

Local Storage

Caching

Data stored by key

Expiration policy

Determining Expiration Times

How volatile is the data?

How large is the data?

How long do you need to retain the data?
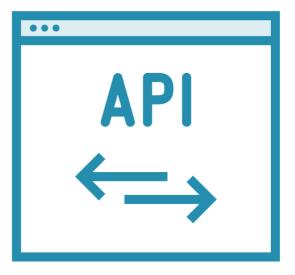
Is it critical that the data is fresh?

Modifying Your Solution

Regular polling

Modify API

Demo

What's wrong with our code?

Keeping things up to date
- Polling
- Keeping track of updates

Product API

```json
{

"ProductsList": [

    {

    "Id": 1,

    "Name": "Columbian Black",

    "Description": "Rich dark and aromatic coffee",

    "UnitPrice": 4.95

    }

}
```
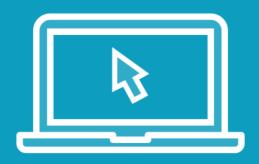
# What Changes Can We Make to the API?

Product API

```json
{

 "LastUpdatedDate":"2020-09-21T16:31:14.241Z",

 "ProductsList": [

    {

    "Id": 1,

    "Name": "Columbian Black",

    "Description": "Rich dark and aromatic coffee",

    "UnitPrice": 4.95

    }

}
```

Demo

Modify the API to support local caching

Things to Remember

Ø Allow for null values

🌍 Remember the time zones

☁ Sync issues

Summary

Explored the limitations of our solution

Caching

- Expiration policies

Options for improving our solution

- Polling
- Modifying the API

Things to watch out for