

Saving Data



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Touch Points



- Michelangelo Buonarroti via Wikimedia Commons

<https://www.flickr.com/photos/34409164@N06/4277702120>

- ✓ Retrieving Data
- ✓ Filtering, Shaping, Querying Data
- Saving Data
- Error Handling
- User Authentication
- User Authorization

Updating an Item

Acme Product Management

Basic Product Information

Product Name Product name is required.

Product Code Product Code is required

Availability

Description

GET Request

api /products/5

API

```
{
  "Description": "Curved claw steel hammer",
  "Price": 8.99,
  "ProductCode": "TBX-0048",
  "ProductId": 5,
  "ProductName": "Hammer",
  "ReleaseDate": "2013-05-21T00:00:00-07:00"
}
```

Updating an Item

Acme Product Management

Basic Product Information

Product Name

Product Code

Availability

Description

PUT Request
api /products/5

API

```
{  
  "Description": "Curved claw steel hammer",  
  "Price": 8.99,  
  "ProductCode": "TBX-0048",  
  "ProductId": 5,  
  "ProductName": "Hammer-Steel",  
  "ReleaseDate": "2013-05-21T00:00:00-07:00"  
}
```

Creating an Item

Acme Product Management

Basic Product Information

Product Name	<input type="text" value="Product Name (required)"/>	Product name is required.
Product Code	<input type="text" value="Product Code (required)"/>	Product Code is required
Availability	<input type="text" value="Mar 10, 2015"/>	
Description	<input type="text" value="Description"/>	

GET Request

api /products/0

API

```
{  
  "Description": null,  
  "Price": 0.0,  
  "ProductCode": null,  
  "ProductId": 0,  
  "ProductName": null,  
  "ReleaseDate": "2015-03-10T16:39:53.8325775-07:00"  
}
```

Creating an Item

Acme Product Management

Basic Product Information

Product Name

Product Code

Availability

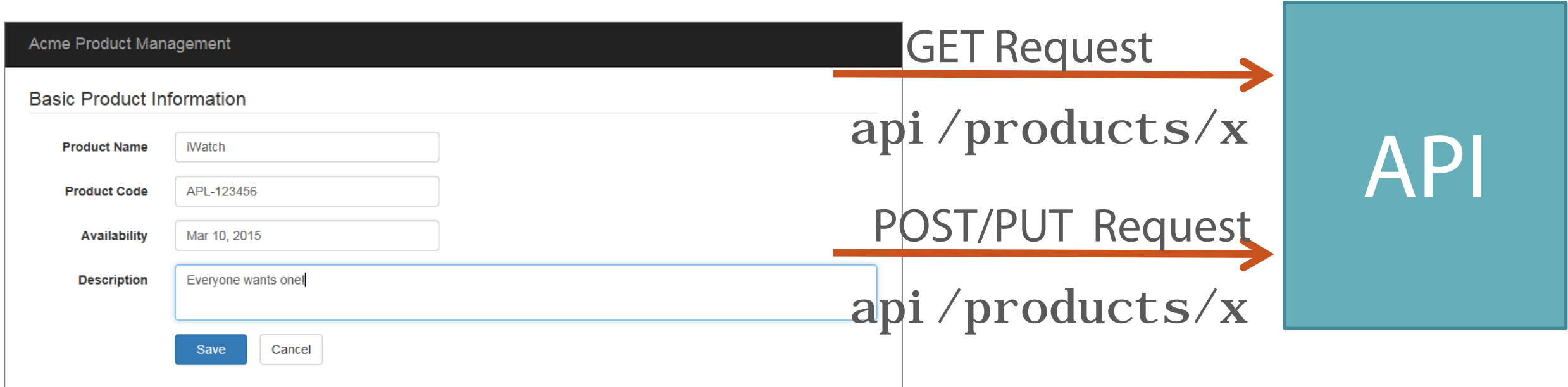
Description

POST Request
api /products

API

```
{  
  "Description": "Everyone wants one!",  
  "Price": 0.0,  
  "ProductCode": "APL-123456",  
  "ProductId": 11,  
  "ProductName": "iWatch",  
  "ReleaseDate": "2015-03-10T16:55:08.535279-07:00"  
}
```

Creating or Updating an Item



Module Objectives

Building the Web
API Service
Methods

Building an
Angular Edit Page

Calling the Web API
to Save the Data

Web API Service Methods for a Save



GET

POST

PUT

Web API Save Methods

POST (api/products)

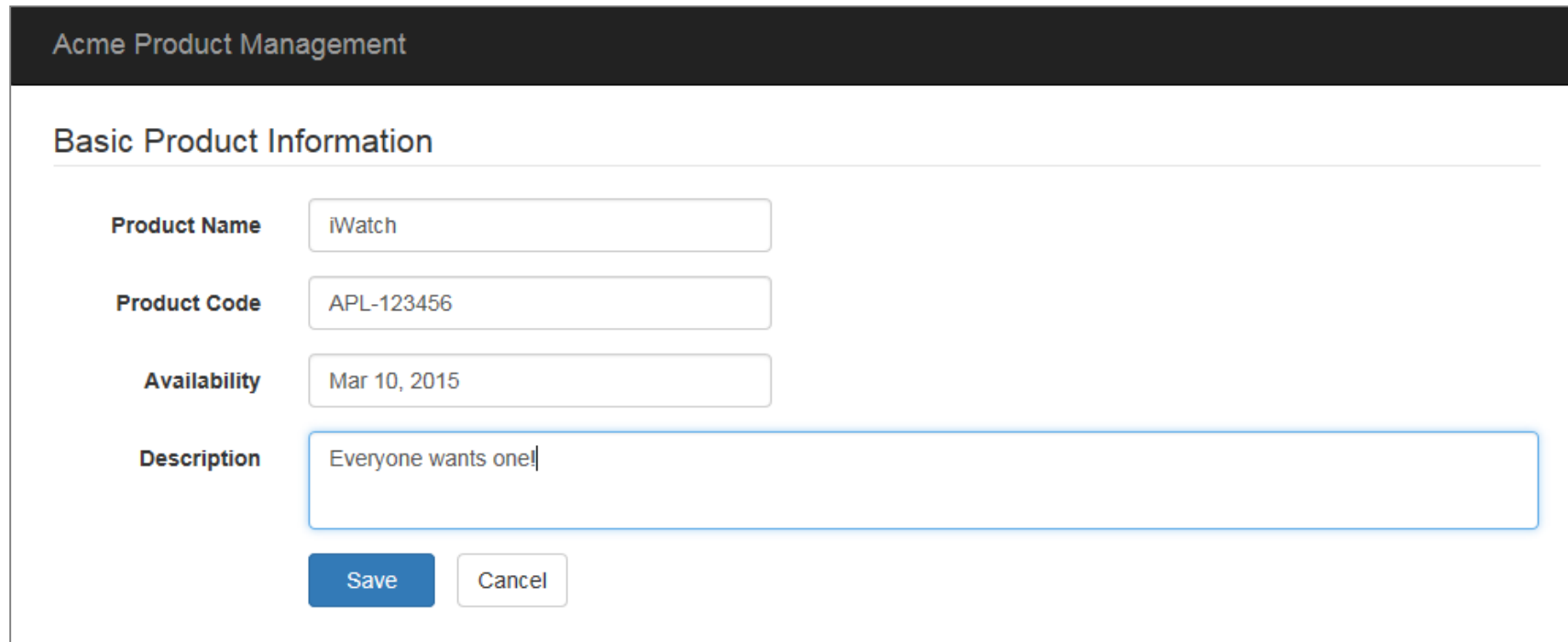
- Posts data for a resource or set of resources
- Used to:
 - Create a new resource when the server assigns the Id
 - Update a set of resources
- Not idempotent

PUT (api/products/5)

- Puts data for a specific resource with an Id
- Used to:
 - Create a new resource when the client assigns the Id
 - Update the resource with the Id
- Idempotent

Building a (Simple) Angular Edit Page

- Create a new HTML template
- Build the associated controller
- Modify index.html



The screenshot shows a web application titled "Acme Product Management" in a dark header. Below the header, there's a section titled "Basic Product Information" with a horizontal line underneath. The form contains four fields: "Product Name" with the value "iWatch", "Product Code" with the value "APL-123456", "Availability" with the value "Mar 10, 2015", and "Description" with the value "Everyone wants one!". At the bottom of the form are two buttons: a blue "Save" button and a white "Cancel" button with a grey border.

Acme Product Management	
Basic Product Information	
Product Name	<input type="text" value="iWatch"/>
Product Code	<input type="text" value="APL-123456"/>
Availability	<input type="text" value="Mar 10, 2015"/>
Description	<input type="text" value="Everyone wants one!"/>
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Calling the Web API to Save the Data

Acme Product Management

Basic Product Information

Product Name

iWatch

Product Code

APL-123456

Availability

Mar 10, 2015

Description

Everyone wants one!

Save

Cancel

Calling a Web API to Save Data

Angular module
(productManagement)

View
(productEdit
View)

Angular controller
(productEditCtrl)

Model

Methods

Acme Product Management

Basic Product Information

Product Name:

Product Code:

Availability:

Description:

Angular module
(common.services)

Custom Angular
service
(productResource)

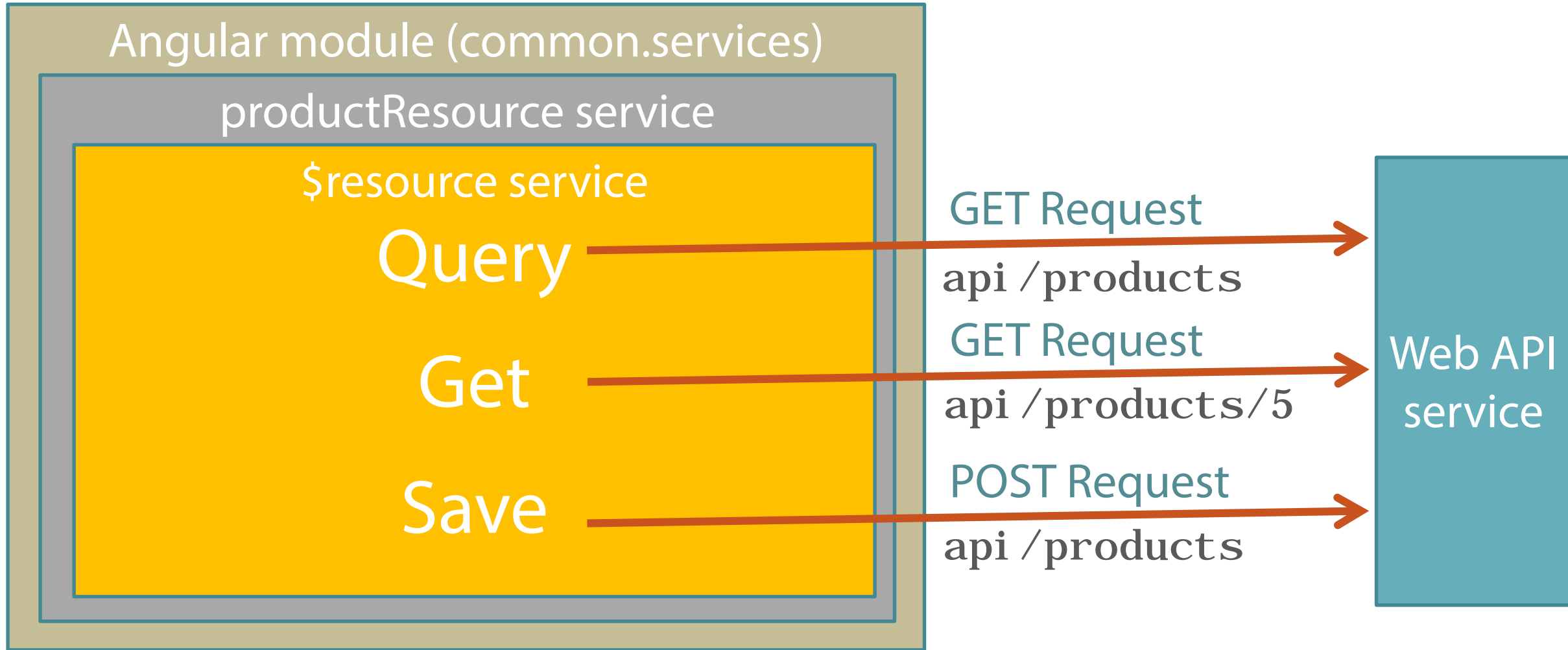
Built in
\$resource
service

Web API
service

```
<button  
  ng-click="vm.submit()">  
  Save  
</button>
```

```
vm.submit = function () {  
  
}
```

Built-In \$resource Methods



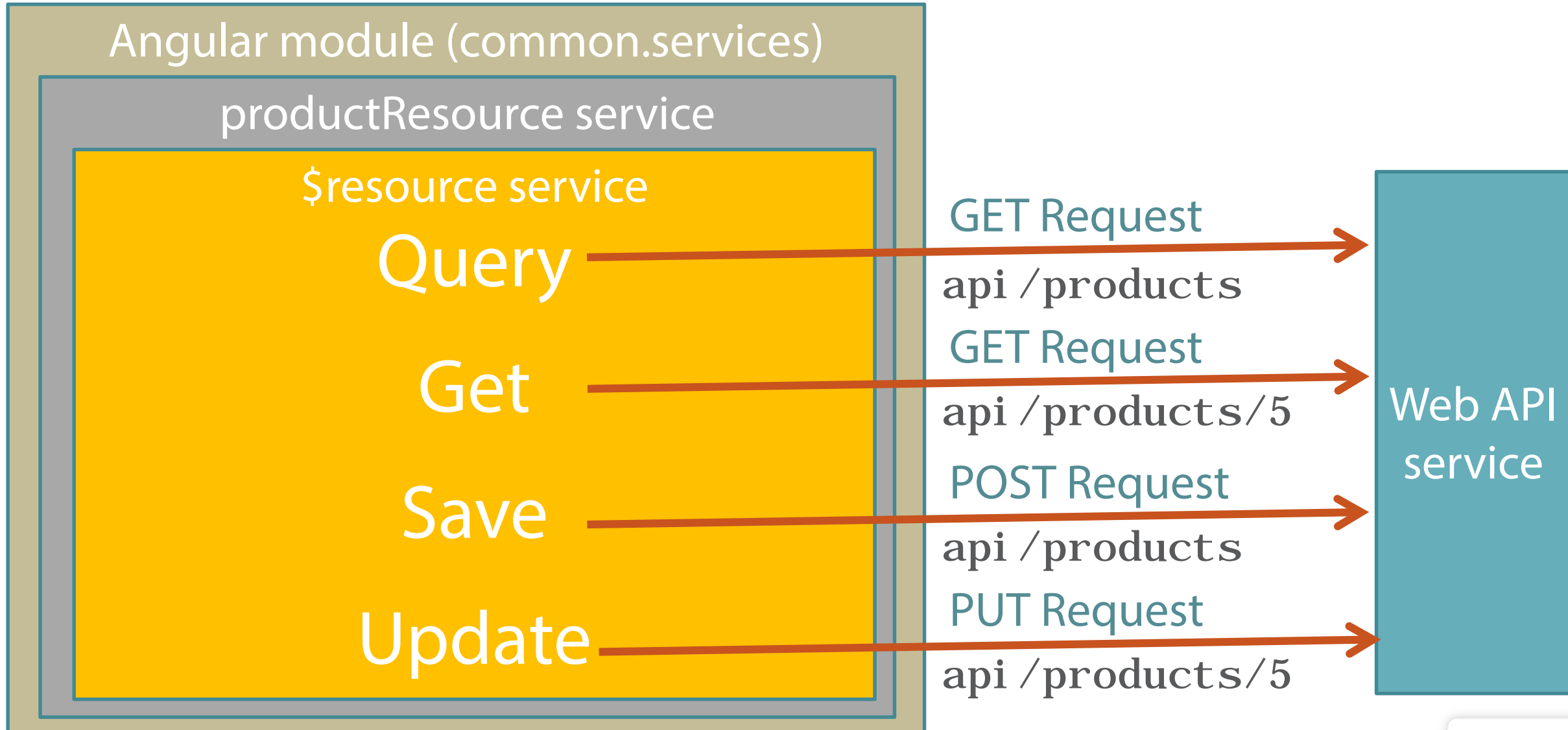
```
return $resource(appSettings.serverPath +  
                "/api/products/:id");
```

Creating a Custom \$resource Method

```
return $resource(appSettings.serverPath +  
                "/api/products/:id", null,  
                {  
                    'update': {method: 'PUT'}  
                }  
            );
```

Creating a Custom \$resource Method

\$resource Methods



This Module Covered



Building the Web API Service

- GET, POST, PUT

Building an Angular Edit Page

Calling the Web API to Save the Data

- Query, Get, Save, Update

Touch Points



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