Passing Parameters



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Touch Points



- Michelangelo Buonarroti via Wikimedia Commons https://www.flickr.com/photos/34409164@N06/4277702120



Filtering, Shaping, Querying Data

Saving Data

Error Handling

User Authentication

User Authorization

Passing Parameters

Query Strings

URL Path

```
http://stackoverflow.com/questions/26372408/angular-time-
validation-not-working
http://localhost:52293/api/products/GDN
```

Module Objectives

Defining
Query Strings

Extending the URL Path

Query Strings or URL Path A query string is the part of a URL containing data that does not fit conveniently into a hierarchical path structure.

Wikipedia

api/products/5/transactions?search=returns

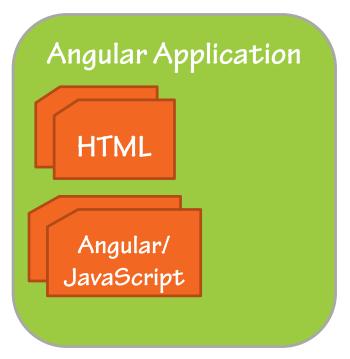
```
http://www.amazon.com/gp/product?pf_rd_m=ATV&

pf_rd_s=desktop-1&pf_rd_r=0R&pf_rd_t=36701&pf_rd_p=19705
```

http://localhost:52293/api/products?search=GDN

Query Strings

http://localhost:52293/api/products?search=GDN



Web API Service

```
public class ProductsController : ApiController
   public IEnumerable<Product> Get()
   public IEnumerable<Product> Get(string search)
```

```
function productResource($resource, appSettings) {
   return $resource(appSettings.serverPath + "/api/products")
productResource.query(function (data) {
   vm.products = data;
```

Angular Client

```
function productResource($resource, appSettings) {
  return $resource(appSettings.serverPath + "/api/products")
productResource.query({search: 'GDN'}, function (data) {
  vm.products = data;
```

Angular Client

Add parameters as first argument of the \$resource method

```
http://localhost:52293/api/products?search=GDN

public IEnumerable<Product> Get(string search)

{
  var productRepository = new ProductRepository();
  var products = productRepository.Retrieve();
  return products.Where(p => p.ProductCode.Contains(search));
}
```

Web API Service

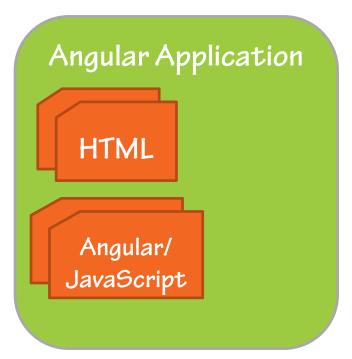
Define an overload with a parameter name that exactly matches the query string parameter

http://stackoverflow.com/questions/26372408/angular-timevalidation-not-working

http://localhost:52293/api/products/GDN

URL Path

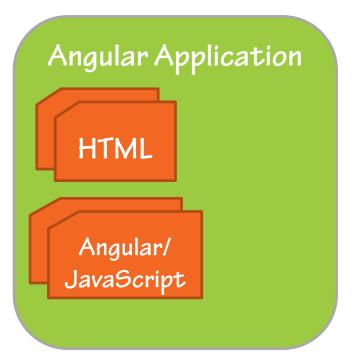
http://localhost:52293/api/products/GDN



Web API Service

```
config.Routes.MapHttpRoute(
   name: "DefaultApi",
   routeTemplate: "api/{controller}/{id}",
   defaults: new
   {
     id = RouteParameter.Optional
   }
);
```

http://localhost:52293/api/products/GDN



Web API Service

```
config.Routes.MapHttpRoute(
   name: "DefaultApi",
   routeTemplate: "api/{controller}/{search}",
   defaults: new
   {
     search = RouteParameter.Optional
   }
);
```

```
function productResource($resource, appSettings) {
  return $resource(appSettings.serverPath +
                                 "/api/products/:search ")
productResource.query({search: 'GDN'}, function (data) {
   vm.products = data;
```

Angular Client

Add the parameter to the \$resource path

Add parameters as first argument of the \$resource method

```
http://localhost:52293/api/products/GDN

config.Routes.MapHttpRoute(
   name: "DefaultApi",
   routeTemplate: "api/{controller}/{search}",
   defaults: new
   { search = RouteParameter.Optional }
);
```

Web API Service

Modify the route template parameters

```
http://localhost:52293/api/products/GDN "api/{controller}/{search}"

public IEnumerable<Product> Get(string search)

{
  var productRepository = new ProductRepository();
  var products = productRepository.Retrieve();
  return products.Where(p => p.ProductCode.Contains(search));
}
```

Web API Service

Modify the route template parameters

Define an overload with parameters that match the route

Query Strings or URL Path?

Angular Code

Query Strings

http://localhost:52293/api/products?search=GDN

URL Path

http://localhost:52293/api/products/GDN

Web API Code

Query Strings

http://localhost:52293/api/products?search=GDN

URL Path

http://localhost:52293/api/products/GDN

Query Strings or URL Path

Query Strings

- Filters
- api/products?search=GDN

URL Path

- Locators
- api/products/5
- api/products/5/sizes

api/products/5/transactions?search=returns

This Module Covered



Defining Query Strings

Extending the URL Path

Query Strings or URL Path?

Touch Points



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- Retrieving Data
- Filtering, Shaping, Querying Data

Saving Data

Error Handling

User Authentication

User Authorization