

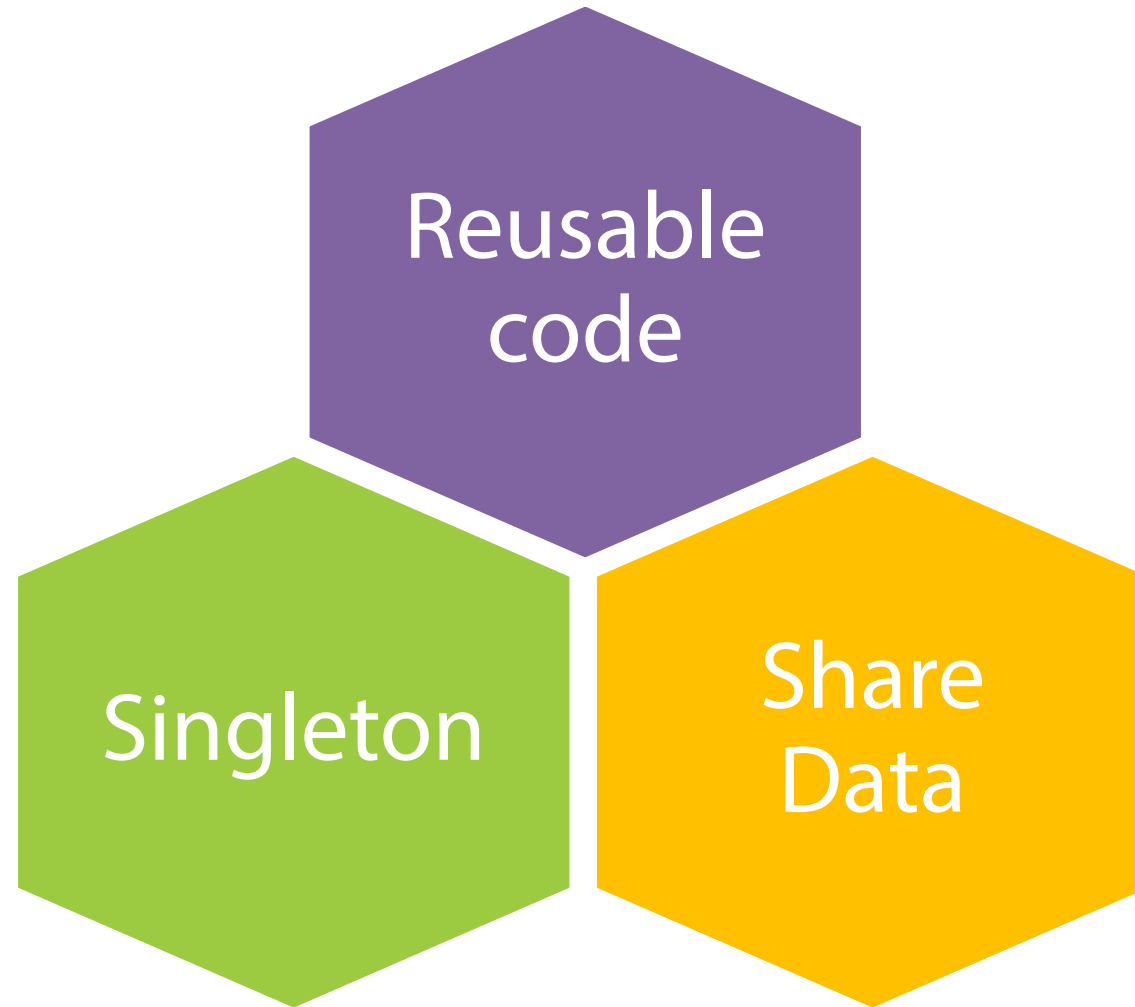
# Building Angular Services



Deborah Kurata

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# Benefits of Services



# Service vs. Entity Class

## Service

- Reusable processing
  - Data Access
  - Logging
- Angular Framework aware
- Injected
- Singleton

## Entity Class

- Reusable business logic
  - Products
  - Vendors
- Not Angular Framework aware
- Created using the **new** keyword
- Multiples instances

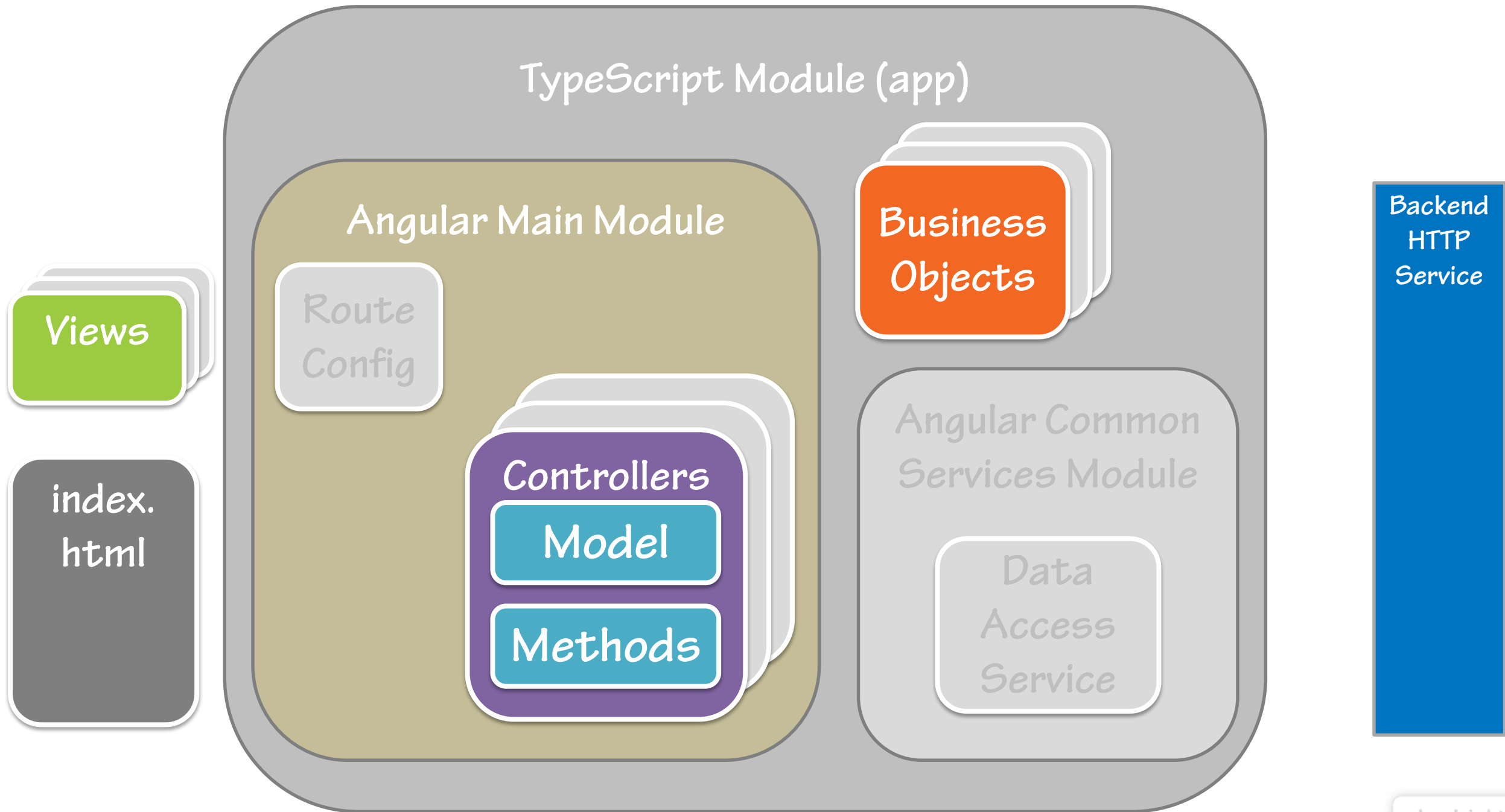
# Types of Services

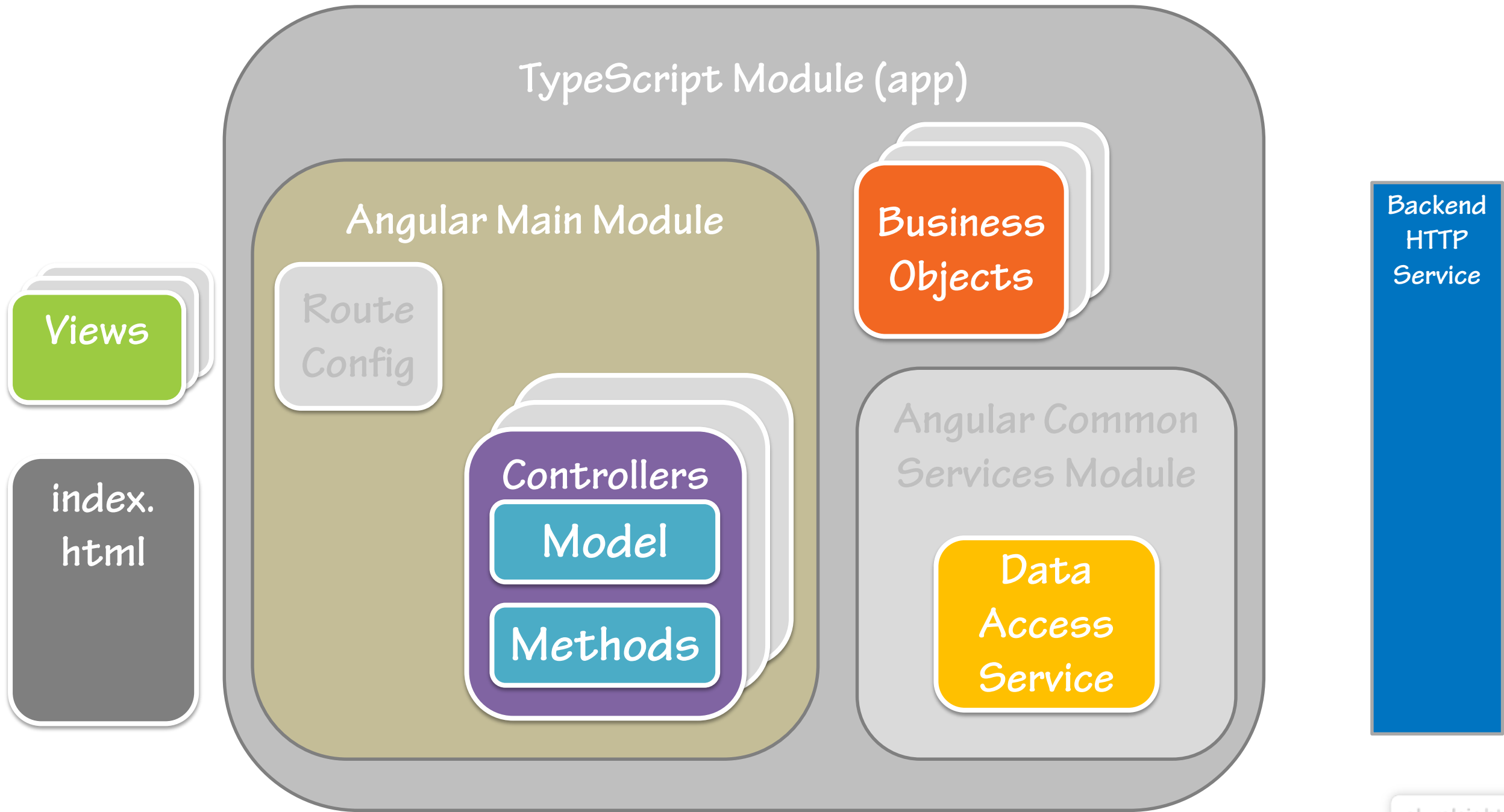
Factory

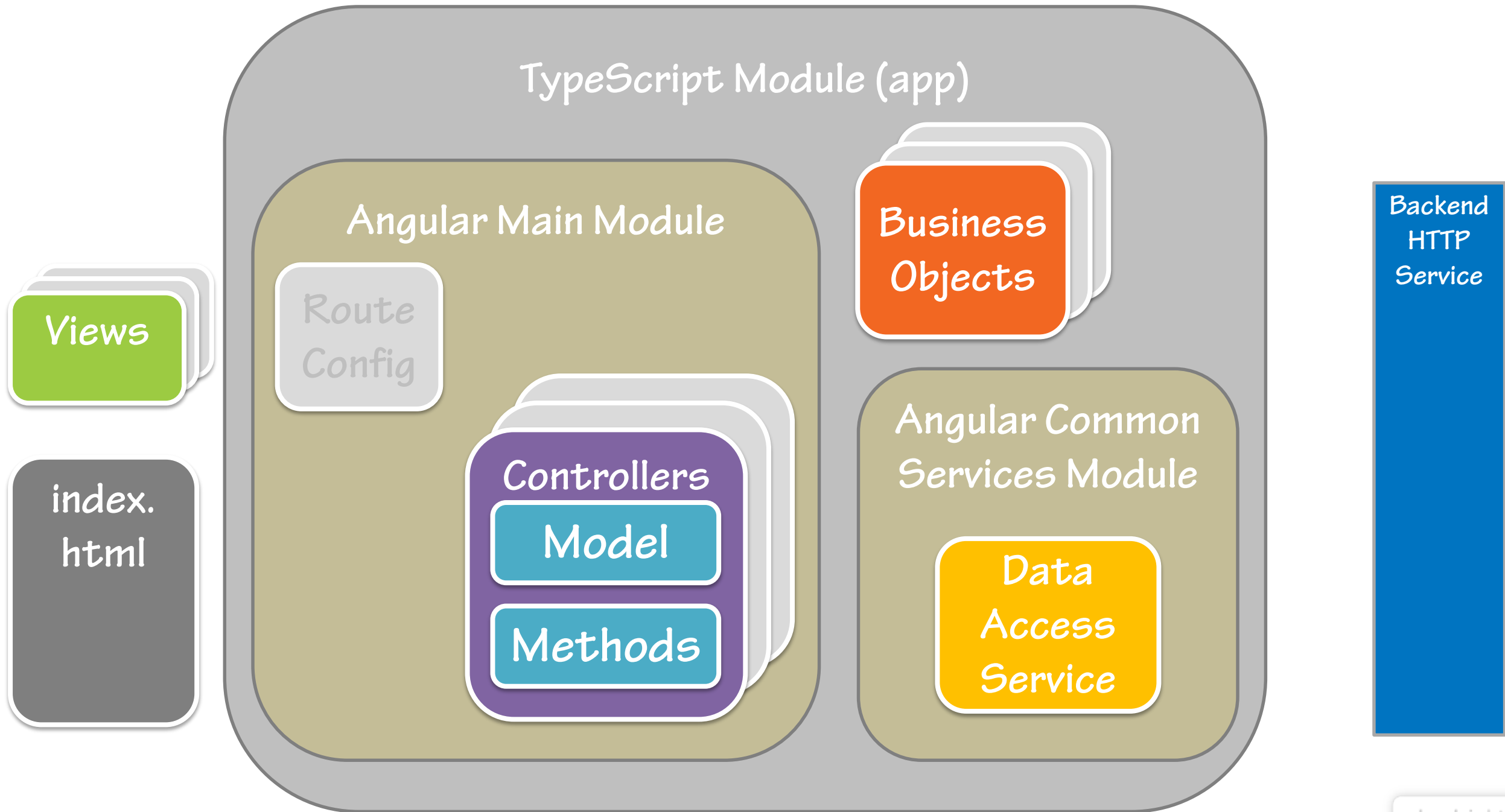
```
app.factory('helloService', function() {  
  return {  
    sayHello: function(text) {  
      return "Hello " + text;  
    },  
    sayGoodbye: function(text) {  
      return "Goodbye " + text;  
    }  
  }  
});
```

Service

```
app.service('helloService', function() {  
  this.sayHello = function(text) {  
    return "Hello " + text;  
  };  
  this.sayGoodbye = function(text) {  
    return "Goodbye " + text;  
  };  
});
```







# Module Overview

Access an  
HTTP Service

Create an Angular  
Module for  
Common Services

Build a Custom  
Angular Service for  
Data Access



# Accessing a Backend HTTP Service

\$http

\$resource

```
(function () {  
    angular  
        .module("common.services")  
        .factory("productResource",  
            ["$resource", productResource])  
    function productResource($resource) {  
        return $resource("/api/products/:productId");  
    }  
})();
```

## \$resource

Abstraction on top of \$http for calling RESTful HTTP services

```
productResource.query(function(data) {  
    vm.products = data;  
});
```

## \$resource Methods

query: **GET** a **set** of data from the HTTP service and return it as an array

get: **GET** a **single** item from the HTTP service

save: **POST** data back to the HTTP Service to be saved

# For More Information (\$resource)

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## AngularJS Line of Business Applications

This course takes you step by step through the process of building line of business Web applications using Angular.

by **Deborah Kurata**


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## Angular Front to Back with Web API

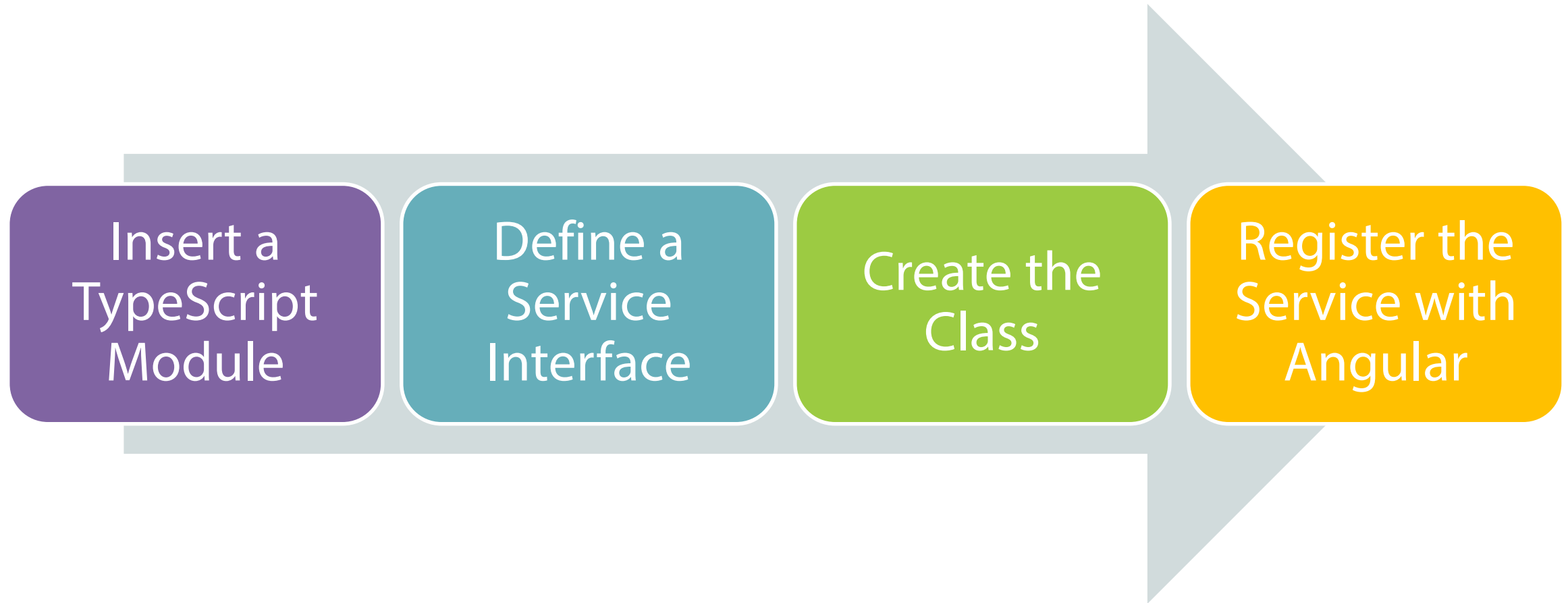
This course focuses on the touch points between an Angular front-end client application and a back-end service built with ASP.NET Web API.

by **Deborah Kurata**

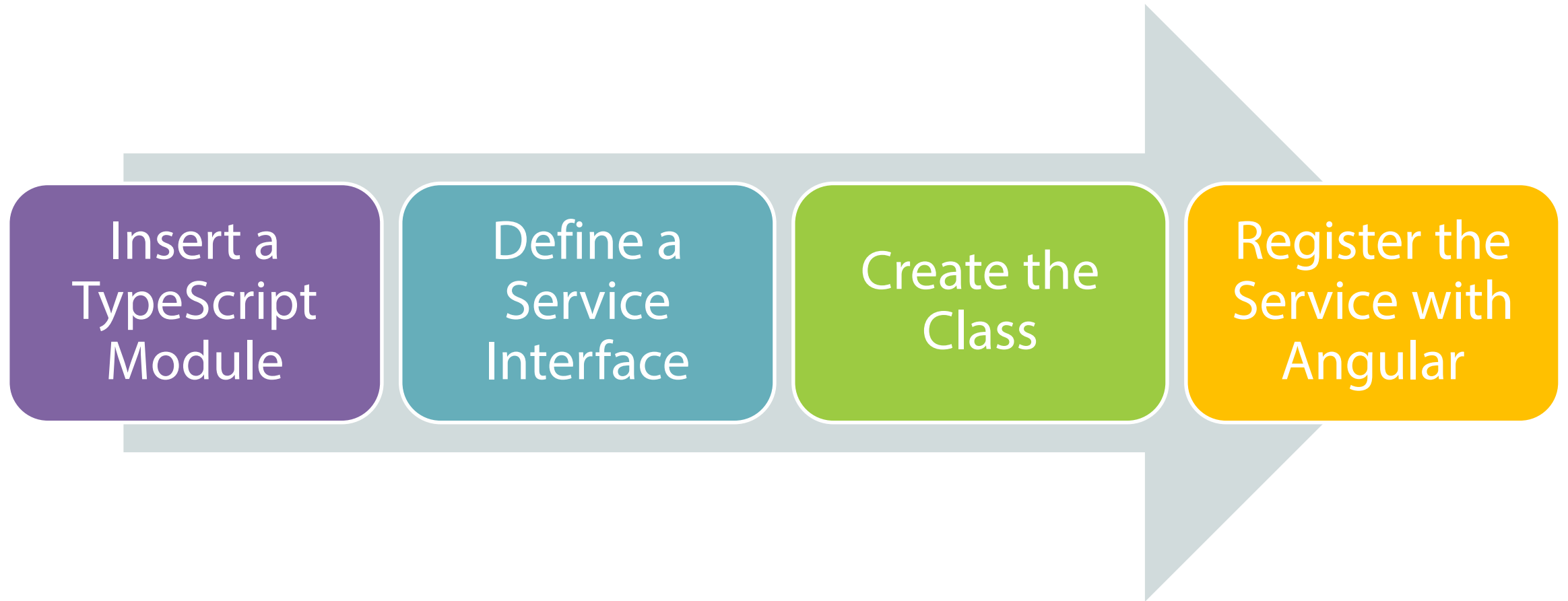
# Creating a Common Services Module

```
angular.module("common.services",  
    ["ngResource"]);
```

# Building a Service with TypeScript: Overview



# Building a Service with TypeScript



```
angular
  .module("common.services")
  .factory("productResource",
    ["$resource",productResource])
```

## Registering the Service

Factory or Service?



# Angular Service Patterns

Factory

```
app.factory('helloService', function() {  
  return {  
    sayHello: function(text) {  
      return "Hello " + text;  
    },  
    sayGoodbye: function(text) {  
      return "Goodbye " + text;  
    }  
  }  
});
```

Service

```
app.service('helloService', function() {  
  this.sayHello = function(text) {  
    return "Hello " + text;  
  };  
  this.sayGoodbye = function(text) {  
    return "Goodbye " + text;  
  };  
});
```

# For More Information (Services)


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## Using TypeScript for Large AngularJS Applications

This course examines how to use TypeScript with a large AngularJS application and uncovers the positives and negatives along the way.

by **Justin Schwartzenberger**

# This Module Covered



Creating an Angular module

Building a custom Angular service

TypeScript module

Interface

Service class

Registered as a service

