

13-3 JavaScript

資料模組設計



JavaScript物件

JavaScript Array

JSON陣列與物件模組

```
//JS物件
//產生一個員工物件
var employees={
  empid:1,
  empName:'張三豐',
  address:'台北市富新南路',
  phone:'02-12345678',
  country:countryValue, //使用Global變數內容
  information:function(){
    alert('姓名:'+this.empName+' 地址:'+this.address);
  }
}
```

```
//JS陣列
var names=[
  {
    id:1,
    name:'張無忌'
  },
  {
    id:2,
    name:'張三封'
  },
  {
    id:3,
    name:'張翠珊'
  }
]
```

```
//JSON Array
var jsonNames=[
  {
    "id":1,
    "name":'張無忌'
  },
  {
    "id":2,
    "name":'張三封'
  },
  {
    "id":3,
    "name":'張翠珊'
  }
]
```

採用JdbcTemplate進行國家別查詢結果集合物件

使用Thymeleaf th:指令遷入JsonString為前端JS Array

後端查詢產生前端JS資料模組架構

```
//注入底層封裝前端所有資訊的HttpServletRequest (DI-Dependency Injection-依賴注入)
@RequestMapping(path= {"/qry/country"},
    method= {RequestMethod.GET, RequestMethod.POST})
public String customersQry(String country,
    HttpServletRequest request, Model model) {
    //如何認定是第一次來 進行畫面調用 還是postback進行客戶查詢作業
    if(request.getMethod().equals("GET")) {
        //第一次來 調用畫面
        System.out.println("第一次來");
    } else if(request.getMethod().equals("POST")) {
        //進行查詢 使用JdbcTemplate (配合DataSource物件) 採用IoC注入控制反轉 直接反轉注入DataSource
        try {
            System.out.println(jdbcTemplate.getDataSource().getConnection());
        } catch (SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}
```

//採用注入的JdbcTemplate 進行查詢

String message=null;

//採用參數架構查詢

String sql="Select CustomerID,CompanyName,Address,Phone,Country "
+ "From Customers Where Country=?";

List<Customer> customers=jdbcTemplate.query(sql,
 BeanPropertyRowMapper.newInstance(Customer.class),
 new Object[] {country});

//將集合物件序列化Json String (借助third party-google Gson API)

Gson gson=new Gson();

String customersJson=gson.toJson(customers);

使用Thymeleaf指令

- `<script th:inline="javascript" ...`

```
var data=/*[[${data}]]*/ []
```

```
<script th:inline="javascript">  
    //global變數 嵌入thymeleaf 運算變數內容 變成JavaScript在網頁中的敘述  
    var country=/*[[${country}]]*/ ''  
    var message=/*[[${message}]]*/ ''  
    //Json String raw data變成JavaScript array  
    var data=/*[[${data}]]*/ []
```

客戶查詢

UK

您輸入國家別:UK

客戶清單

查詢結果:
記錄數:6

操作	客戶編號	公司行號	聯絡地址	連絡電話	國家別
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	BSBEV	B's Beverages	Fauntleroy Circus	(171) 555-1212	UK
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	CONSH	Consolidated Holdings	Berkeley Gardens 12 Brewery	(171) 555-2282	UK
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	EASTC	Eastern Connection	35 King George	(171) 555-0297	UK
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	ISLAT	Island Trading	Garden House Crowther Way	(198) 555-8888	UK
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	NORTS	North/South	South House 300 Queensbridge	(171) 555-7733	UK
<input type="button" value="編輯"/> <input type="button" value="刪除"/>	SEVES	Seven Seas Imports	90 Wadhurst Rd.	(171) 555-1717	UK

```
<style>...</style>
<script>
    //global變數 嵌入thymeleaf 運算變數內容 變成JavaScript在網頁中的敘述
    var country="UK"
    var message=null
    //json String raw data變成JavaScript array
    var data="[{"customerId":"BSBEV","companyName":"B\\u0027s Beverages","address":"Fauntleroy Circus","phone":"(171) 555-1212","country":"UK"},
    {"customerId":"CONSH","companyName":"Consolidated Holdings","address":"Berkeley Gardens 12 Brewery","phone":"(171) 555-2282","country":"UK"},
    {"customerId":"EASTC","companyName":"Eastern Connection","address":"35 King George","phone":"(171) 555-0297","country":"UK"},
    {"customerId":"ISLAT","companyName":"Island Trading","address":"Garden House Crowther Way","phone":"(198) 555-8888","country":"UK"},
    {"customerId":"NORTS","companyName":"North/South","address":"South House 300 Queensbridge","phone":"(171) 555-7733","country":"UK"},
    {"customerId":"SEVES","companyName":"Seven Seas Imports","address":"Wadhurst Rd.","phone":"(171) 555-1717","country":"UK"}]"
    //更新客戶服務位址
    var
    updateService="http://localhost:8080/tibamecustomers/update/rawdata"
    //刪除客戶服務位址
    var
```



總結：13-3 JavaScript資料模組設計

瞭解瞭解後端產生前端JS 資料模組之後，下一個章節我們進入到前端MVVM軟體工程，看看如何快速渲染前端UI。

