

ASP.NET Core MVC 3.1

Tahaluf Training Center 2021



Chapter 10

1 Search

2 DataTables

3 Reports



Search

Create **Search** Action in Home Controller

```
[HttpGet]
0 references
public IActionResult Search()
{
    var modelContext = _context.ProductCustomers.Include(p => p.Customer).Include(p => p.Product).ToList();
    return View(modelContext);
}
```



Search

[HttpPost]

0 references

```
public async Task<IActionResult> Search(DateTime? stratDate, DateTime? endDate)
{
    var modelContext = _context.ProductCustomers.Include(p => p.Customer).Include(p => p.Product);

    if (stratDate == null && endDate == null)
    {
        return View(modelContext);
    }
    else if (stratDate == null && endDate != null)
    {
        var result = await modelContext.Where(x => x.DateFrom.Value.Date == endDate).ToListAsync();
        return View(result);
    }
}
```



Search

```
else if (stratDate != null && endDate == null)
{
    var result = await modelContext.Where(x => x.DateFrom.Value.Date == stratDate).ToListAsync();
    return View(result);
}
else
{
    var result = await modelContext.Where(x => x.DateFrom >= stratDate && x.DateFrom <= endDate).ToListAsync();
    return View(result);
}
}
```



Search

Create a **Search** view in the Home view and create a form that searches between two dates

```
<div class="row">
  <div class="col-6">
    <form action="Search" method="post">
      <input type="date" class="form-control" name="stratDate" placeholder="Start Date">
      <input type="date" class="form-control" name="endDate" placeholder="End Date">

      <button type="submit" class="btn btn-dark">Search</button>
    </form>
  </div>
</div>
```



```
<div class="row">
  <div class="col-10">
    <table class="table example">
      <thead>
        <tr>
          <th>Customer First Name </th>
          <th>Customer Last Name </th>
          <th>Product Name</th>
          <th>Quantity</th>
          <th>Price</th>
          <th>Date From</th>
          <th>Date To</th>
        </tr>
      </thead>
```



Search

```
<tbody>
  @foreach (var item in Model)
  {
    <tr>
      <td> @Html.DisplayFor(modelItem => item.Customer.Fname)
      </td>
      <td> @Html.DisplayFor(modelItem => item.Customer.Lname)
      </td>
      <td> @Html.DisplayFor(modelItem => item.Product.Nameee)
      </td>
      <td> @Html.DisplayFor(modelItem => item.Quantity)
      </td>
      <td> @(item.Quantity * item.Product.Price)
      </td>
      <td> @Html.DisplayFor(modelItem => item.DateFrom)
      </td>
      <td> @Html.DisplayFor(modelItem => item.DateTo)
      </td>
    </tr>
  }
</tbody>
</table>
</div>
</div>
```



Search

The Result

SEARCH

Customer First Name	Customer Last Name	Product Name	Quantity	Price	Date From	Date To
Ghaith	Hasan	Yougert	5.00	1170	4/22/2022 12:17:00 AM	4/24/2022 12:17:06 AM
heba	ahmad	Rice	7.00	140	3/11/2022 12:17:29 AM	3/18/2022 12:17:39 AM
dana	ahmad	chicken	10.00	150	3/1/2022 12:18:00 AM	3/3/2022 12:18:08 AM
aya	moh	Yougert	20.00	4680	2/10/2022 12:18:25 AM	2/18/2022 12:18:32 AM



Chapter 10

1 Search

2 **DataTables**

3 Reports



DataTables

DataTables is a plug-in for the jQuery Javascript library. It's a powerful tool that adds a lot of advanced features to any HTML table such as Pagination, Instant search, and Multi-column ordering



Data Tables

In **JoinTable** view add the attribute Id = “example” in the start tag of the table

```
@model IEnumerable<JoinTable>
<table class="table" id="example">
  <thead>
    <tr>
      <th>Customer Name</th>
      <th>Product Name</th>
      <th>Category Name</th>
      <th>Product Price</th>
    </tr>
  </thead>
  <tbody>
    @foreach (var item in Model)
    {
      <tr>
        <td>@item.Customer.Fname</td>
        <td>@item.Product.Proname</td>
        <td>@item.Categorey.Catname</td>
        <td>@item.Product.Proprice</td>
      </tr>
    }
  </tbody>
</table>
```



Data Tables

Add the following Scripts to the top of the Join Table view

```
<script
src="//ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.
js"></script>
<link href="/Content/bootstrap.css" rel="stylesheet" />

<link
href="https://cdn.datatables.net/1.10.15/css/dataTables.bootstrap.min.css" rel="stylesheet" />
<link
href="https://cdn.datatables.net/responsive/2.1.1/css/responsive.bootstrap.min.css" rel="stylesheet" />

<script
src="https://cdn.datatables.net/1.10.15/js/jquery.dataTables.min.js"></script>
<script
src="https://cdn.datatables.net/1.10.15/js/dataTables.bootstrap4.min.js "></script>
```



Data Tables

Add the following Scripts to the end of the JoinTable view

```
<script src="https://code.jquery.com/jquery-3.5.1.js"></script>
```

```
<script  
src="https://cdn.datatables.net/1.11.1/js/jquery.dataTables.  
min.js" defer></script>
```

```
<script  
src="https://cdn.datatables.net/buttons/2.0.0/js/dataTables.  
buttons.min.js" defer></script>
```



Data Tables

```
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/jsczip/3.1.3/jsc  
ip.min.js"></script>
```

```
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/  
pdfmake.min.js"></script>
```

```
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/  
vfs_fonts.js"></script>
```

```
<script  
src="https://cdn.datatables.net/buttons/2.0.0/js/buttons.ht  
ml5.min.js" defer></script>
```



Data Tables

```
<script>
    $(document).ready(function () {
        $('#example').DataTable({
            dom: 'Bfrtip',
            buttons: [
                'copyHtml5',
                'excelHtml5',
                'csvHtml5',
                'pdfHtml5'
            ]
        });
    });
</script>
```



DataTables

```
JoinTables.cshtml Search.cshtml Index.cshtml Report.cshtml JoinTable.cs Procustomer.cs appsettings.json Product.cs
31
32 <script src="https://code.jquery.com/jquery-3.5.1.js"></script>
33
34 <script src="https://cdn.datatables.net/1.11.1/js/jquery.dataTables.min.js"></script>
35
36 <script src="https://cdn.datatables.net/buttons/2.0.0/js/dataTables.buttons.min.js"></script>
37
38 <script src="https://cdnjs.cloudflare.com/ajax/libs/jszip/3.1.3/jszip.min.js"></script>
39
40 <script src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/pdfmake.min.js"></script>
41 <script src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/vfs_fonts.js"></script>
42 <script src="https://cdn.datatables.net/buttons/2.0.0/js/buttons.html5.min.js"></script>
43
44 <script>
45     $(document).ready(function () {
46         $('#example').DataTable({
47             dom: 'Bfrtip',
48             buttons: [
49                 'copyHtml5',
50                 'excelHtml5',
51                 'csvHtml5',
52                 'pdfHtml5'
53             ]
54         });
55     });
56 </script>
57
```



Data Tables

COPYEXCELCSVPDF

Search:

Customer Name	↑↓ Product Name	↑↓ Category Name	↑↓ Product Price
Aseel	item 3	category2	10
Bayan	item 6	category3	30
Bayan	item 5	category3	30
lilas	item2	category1	10
mohammad	item2	category1	10
mohammad	item 3	category2	10

Showing 1 to 6 of 6 entries

PREV1NEXT



Chapter 10

- 1 Search
- 2 Data Tables
- 3 Reports



Exercise

Create a View called Report that Contains what you learned in the previous two lectures.

Hint: Search, Tuple, DataTable, Join



Reports

Create **Report** action in the Home controller.

```
[HttpGet]
0 references
public IActionResult Report()
{
    var customer = _context.Customers.ToList();
    var procustomers = _context.ProductCustomers.ToList();
    var products = _context.Products.ToList();
    var categorieys = _context.Categories.ToList();
    var multiTable = from c in customer
                     join pc in procustomers on c.Id equals pc.CustomerId
                     join p in products on pc.ProductId equals p.Id
                     join cat in categorieys on p.CategoryId equals cat.Id
                     select new JoinTable { Product = p, Customer = c, ProductCustomer = pc, category = cat };
    var modelContext = _context.ProductCustomers.Include(p => p.Customer).Include(p => p.Product).ToList();
    ViewBag.TotalQuantity = modelContext.Sum(x => x.Quantity);
    ViewBag.TotalPrice = modelContext.Sum(x => x.Product.Price * x.Quantity);
    var model3 = Tuple.Create<IEnumerable<JoinTable>, IEnumerable<ProductCustomer>>(multiTable, modelContext);
    return View(model3);
}
```



Reports

```
[HttpPost]
0 references
public async Task<IActionResult> Report(DateTime? stratDate, DateTime? endDate)
{
    var customer = _context.Customers.ToList();
    var procustomers = _context.ProductCustomers.ToList();
    var products = _context.Products.ToList();
    var catgoreys = _context.Categories.ToList();

    var multiTable = from c in customer
                     join pc in procustomers on c.Id equals pc.CustomerId
                     join p in products on pc.ProductId equals p.Id
                     join cat in catgoreys on p.CategoryId equals cat.Id
                     select new JoinTable { Product = p, Customer = c, ProductCustomer = pc, category = cat };

    var modelContext = _context.ProductCustomers.Include(p => p.Customer).Include(p => p.Product);

    if (stratDate == null && endDate == null)
    {
        ViewBag.TotalQuantity = modelContext.Sum(x => x.Quantity);
        ViewBag.TotalPrice = modelContext.Sum(x => x.Product.Price * x.Quantity);
        var model3 = Tuple.Create<IEnumerable<JoinTable>, IEnumerable<ProductCustomer>>(multiTable, await modelContext.ToListAsync());
        return View(model3);
    }
}
```



Reports

```
else if (stratDate == null && endDate != null)
{
    ViewBag.TotalQuantity = modelContext.Where(x => x.DateFrom.Value.Date == endDate).Sum(x => x.Quantity);
    ViewBag.TotalPrice = modelContext.Where(x => x.DateFrom.Value.Date == endDate).Sum(x => x.Product.Price * x.Quantity);

    var model3 = Tuple.Create<IEnumerable<JoinTable>, IEnumerable<ProductCustomer>>(multiTable, await modelContext.Where(x => x.DateFrom.Value.
    return View(model3);
}
else if (stratDate != null && endDate == null)
{
    ViewBag.TotalQuantity = modelContext.Where(x => x.DateFrom.Value.Date == stratDate).Sum(x => x.Quantity);
    ViewBag.TotalPrice = modelContext.Where(x => x.DateFrom.Value.Date == stratDate).Sum(x => x.Product.Price * x.Quantity);

    var model3 = Tuple.Create<IEnumerable<JoinTable>, IEnumerable<ProductCustomer>>(multiTable, await modelContext.Where(x => x.DateFrom.Value.
    return View(model3);
}
else
{
    ViewBag.TotalQuantity = modelContext.Where(x => x.DateFrom >= stratDate && x.DateFrom <= endDate).Sum(x => x.Quantity);
    ViewBag.TotalPrice = modelContext.Where(x => x.DateFrom >= stratDate && x.DateFrom <= endDate).Sum(x => x.Product.Price * x.Quantity);
    var model3 = Tuple.Create<IEnumerable<JoinTable>, IEnumerable<ProductCustomer>>(multiTable, await modelContext.Where(x => x.DateFrom >= str
    return View(model3);
}
```



Reports

Create **Report** View in the Home Views.

```
@model Tuple<IEnumerable<WebApplication51.Models.JoinTable>, IEnumerable<WebApplication51.Models.Procustomer>>
@{
    ViewData["Title"] = "Index";
}
<link href="https://cdn.datatables.net/1.11.1/css/jquery.dataTables.min.css" rel="stylesheet" />
<link href="https://cdn.datatables.net/buttons/2.0.0/css/buttons.dataTables.min.css" rel="stylesheet" />
<div class="container">

    <div class="p-3 mb-2 bg-dark text-white text-center font-weight-bold">Report 1</div>

    <div class="row">
        <div class="col-6">
            <form action="Report" method="post">
                <input type="date" class="form-control" name="stratDate" placeholder="Start Date">
                <input type="date" class="form-control" name="endDate" placeholder="End Date">

                <button type="submit" class="btn btn-dark">Search</button>
            </form>
        </div>
    </div>
</div>
```



Reports

```
<div class="row">
  <div class="col-10">
    <table class="table example">
      <thead>
        <tr>
          <th> Customer First Name</th>
          <th> Customer Last Name</th>
          <th> Product Name</th>
          <th> Quantity</th>
          <th> Price</th>
          <th> Date From</th>
          <th> Date To</th>
        </tr>
      </thead>
```



Reports

```
<tbody>
  @foreach (var item in Model.Item2)
  {
    <tr>
      <td> @Html.DisplayFor(modelItem => item.Customer.Fname)</td>
      <td> @Html.DisplayFor(modelItem => item.Customer.Lname)</td>
      <td> @Html.DisplayFor(modelItem => item.Product.Nameee)</td>
      <td> @Html.DisplayFor(modelItem => item.Quantity)</td>
      <td> @(item.Quantity * item.Product.Price)</td>
      <td> @Html.DisplayFor(modelItem => item.DateFrom)</td>
      <td> @Html.DisplayFor(modelItem => item.DateTo)</td>
    </tr>
  }
</tbody>
```



Reports

```
        <tfoot>
            <tr>
                <td>Total Quantity</td>
                <td>@ViewBag.TotalQuantity</td>
                <td></td>
                <td></td>
                <td></td>
            </tr>
            <tr>
                <td>Total Price</td>
                <td>@ViewBag.TotalPrice</td>
                <td></td>
                <td></td>
                <td></td>
            </tr>
        </tfoot>
    </table>

</div>
</div>
```



Reports

```
<div class="p-3 mb-2 bg-dark text-white text-center font-weight-bold">Report 2</div>
<div class="row">
  <div class="col-10">
    <table class="table example">
      <thead>
        <tr>
          <th>Customer Name</th>
          <th>Product Name</th>
          <th>Category Name</th>
          <th>Product Price</th>
        </tr>
      </thead>
      <tbody>
        @foreach (var item in Model.Item1)
        {
          <tr>
            <td>@item.Customer.Fname</td>
            <td>@item.Product.Sale</td>
            <td>@item.category.CategoryName</td>
            <td>@item.Product.Price</td>
          </tr>
        }
      </tbody>
    </table>
  </div>
</div>
</div>
```



Reports

```
<script src="https://code.jquery.com/jquery-3.5.1.js"></script>

<script src="https://cdn.datatables.net/1.11.1/js/jquery.dataTables.min.js"></script>

<script src="https://cdn.datatables.net/buttons/2.0.0/js/dataTables.buttons.min.js"></script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/jszip/3.1.3/jszip.min.js"></script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/pdfmake.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.53/vfs_fonts.js"></script>
<script src="https://cdn.datatables.net/buttons/2.0.0/js/buttons.html5.min.js"></script>

<script>
    $(document).ready(function () {
        $('.example').DataTable({
            dom: 'Bfrtip',
            buttons: [
                'copyHtml5',
                'excelHtml5',
                'csvHtml5',
                'pdfHtml5'
            ]
        });
    });
</script>
```



Reports

Report 1

mm/dd/yyyy

mm/dd/yyyy

SEARCH

COPY

EXCEL

CSV

PDF

Search:

Customer First Name	Customer Last Name	Product Name	Quantity	Price	Date From	Date To
Aseel		item 3	60.00	600	2/3/2022 1:39:23 AM	3/30/2022 1:39:34 AM
Bayan		item 5	40.00	1200		
Bayan		item 6	20.00	600	3/26/2022 10:37:48 PM	4/13/2022 10:37:39 PM
lilas		item2	50.00	500	7/8/2022 1:38:53 AM	1/14/2022 1:39:08 AM
mohammad	ishaq	item2	555.00	5550	1/1/2022 4:41:00 PM	1/24/2022 4:42:00 PM
mohammad	ishaq	item 3	44.00	440	3/10/2022 10:37:17 PM	3/31/2022 10:37:25 PM
Total Quantity		769				
Total Price		8890				



Reports

Report 2				
COPY	EXCEL	CSV	PDF	Search: <input type="text"/>
Customer Name	Product Name	Category Name	Product Price	
Aseel	item 3	category2	10	
Bayan	item 6	category3	30	
Bayan	item 5	category3	30	
lilas	item2	category1	10	
mohammad	item2	category1	10	
mohammad	item 3	category2	10	
Showing 1 to 6 of 6 entries			PREV	1 NEXT

