On Sale - WEB Parte II

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Administración de Usuarios

1. Adicionar este método al MVC **AccountController**:

```
[Authorize(Roles = "Admin")]
public async Task<IActionResult> Index()
{
    return View(await _context.Users
        .Include(u => u.City)
        .ToListAsync());
}
```

2. Adicionar la vista **Index**:

```
@model IEnumerable<OnSale.Web.Data.Entities.User>

@{
    ViewData["Title"] = "Index";
}

<link rel="stylesheet" href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.min.css" />
<br />

<p>
    <a asp-action="Create" class="btn btn-primary"><i class="glyphicon glyphicon-plus"></i>
New Admin</a>
</p>

<div class="row">
    <div class="col-md-12">
        <div class="panel panel-default">
            <div class="panel-heading">
                <h3 class="panel-title">Users</h3>
            </div>
            <div class="panel-body">
                <table class="table table-hover table-responsive table-striped" id="MyTable">
                    <thead>
                        <tr>
                            <th>
                                @Html.DisplayNameFor(model => model.FullName)
                            </th>
```

```
                    <th>
                        @Html.DisplayNameFor(model => model.UserType)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model => model.Email)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model => model.City.Name)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model => model.Address)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model => model.PhoneNumber)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model => model.ImageFullPath)
                    </th>
                </tr>
            </thead>
            <tbody>
                @foreach (var item in Model)
                {
                <tr>
                    <td>
                        @Html.DisplayFor(modelItem => item.FullName)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.UserType)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Email)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.City.Name)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Address)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.PhoneNumber)
                    </td>
                    <td>
```

```
                            <img src="@item.ImageFullPath"
style="width:80px;height:80px;border-radius:50%" />
                        </td>
                    </tr>
                }
            </tbody>
        </table>
    </div>
</div>
</div>

@section Scripts {
    @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
    <script src="//cdn.datatables.net/1.10.19/js/jquery.dataTables.min.js"></script>
    <script src="/js/deleteDialog.js"></script>

    <script type="text/javascript">
        $(document).ready(function () {
            $('#MyTable').DataTable();
        });
    </script>
}
```

3. Adicionar estos métodos al MVC **AccountController**:

```
[Authorize(Roles = "Admin")]
[HttpGet]
public IActionResult Create()
{
    AddUserViewModel model = new AddUserViewModel
    {
        Countries = _combosHelper.GetComboCountries(),
        Departments = _combosHelper.GetComboDepartments(0),
        Cities = _combosHelper.GetComboCities(0),
    };

    return View(model);
}

[HttpPost]
[ValidateAntiForgeryToken]
public async Task<IActionResult> Create(AddUserViewModel model)
```

```
{
    if (ModelState.IsValid)
    {
        Guid imageId = Guid.Empty;

        if (model.ImageFile != null)
        {
            imageId = await _blobHelper.UploadBlobAsync(model.ImageFile, "users");
        }

        User user = await _userHelper.AddUserAsync(model, imageId, UserType.Admin);
        if (user == null)
        {
            ModelState.AddModelError(string.Empty, "This email is already used.");
            model.Countries = _combosHelper.GetComboCountries();
            model.Departments = _combosHelper.GetComboDepartments(model.CountryId);
            model.Cities = _combosHelper.GetComboCities(model.DepartmentId);
            return View(model);
        }

        string myToken = await _userHelper.GenerateEmailConfirmationTokenAsync(user);
        string tokenLink = Url.Action("ConfirmEmail", "Account", new
        {
            userid = user.Id,
            token = myToken
        }, protocol: HttpContext.Request.Scheme);

        Response response = _mailHelper.SendMail(model.Username, "Email confirmation",
$"<h1>Email Confirmation</h1>" +
            $"To allow the user, " +
            $"plase click in this link:</br></br><a href = \"{tokenLink}\">Confirm Email</a>");
        if (response.IsSuccess)
        {
            ViewBag.Message = "The instructions to allow your user has been sent to email.";
            return View(model);
        }

        ModelState.AddModelError(string.Empty, response.Message);
    }

    model.Countries = _combosHelper.GetComboCountries();
    model.Departments = _combosHelper.GetComboDepartments(model.CountryId);
    model.Cities = _combosHelper.GetComboCities(model.DepartmentId);
```

```
    return View(model);
}
```

4. Adicionar la vista **Create**:

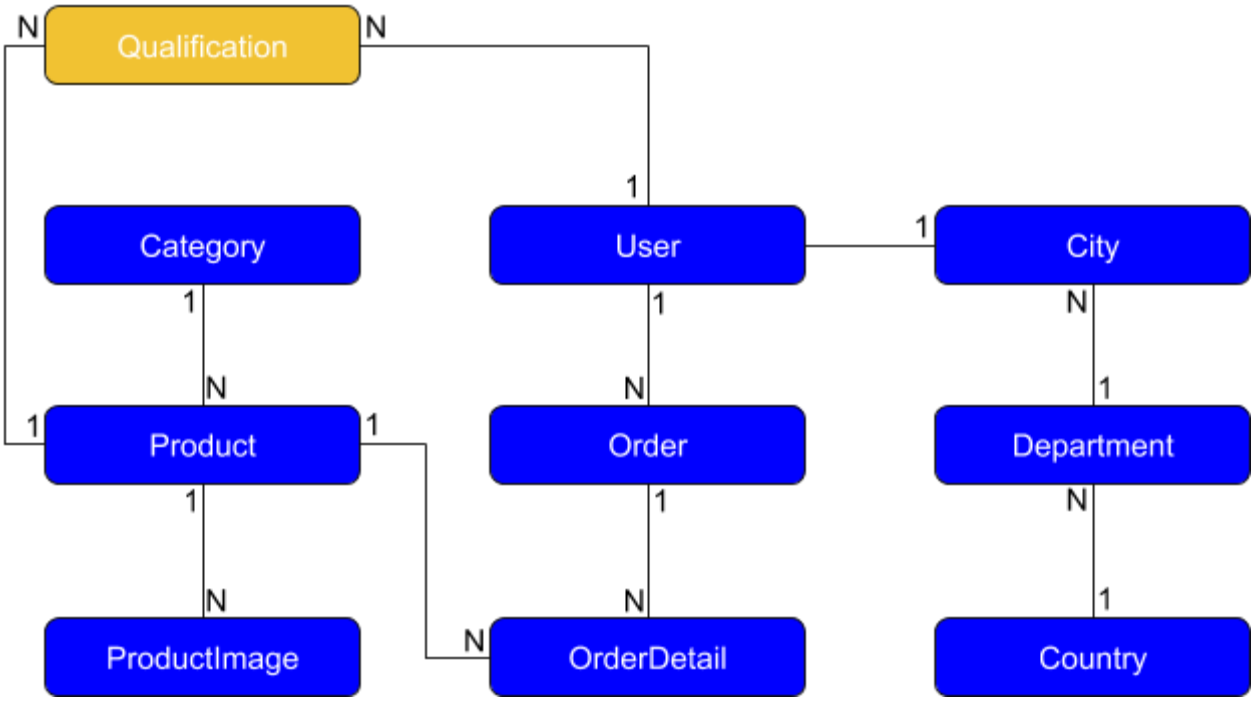
```
@model OnSale.Web.Models.AddUserViewModel

@{
    ViewData["Title"] = "Register";
}

<h2>Add</h2>

<h4>Admin</h4>
<hr />
<div class="row">
    <div class="col-md-4">
        <form asp-action="Create" enctype="multipart/form-data">
            <div asp-validation-summary="ModelOnly" class="text-danger"></div>

            <div class="form-group">
                <label asp-for="Username" class="control-label"></label>
                <input asp-for="Username" class="form-control" />
                <span asp-validation-for="Username" class="text-danger"></span>
            </div>

            <partial name="_User" />

            <div class="form-group">
                <label asp-for="Password" class="control-label"></label>
                <input asp-for="Password" class="form-control" />
                <span asp-validation-for="Password" class="text-danger"></span>
            </div>

            <div class="form-group">
                <label asp-for="PasswordConfirm" class="control-label"></label>
                <input asp-for="PasswordConfirm" class="form-control" />
                <span asp-validation-for="PasswordConfirm" class="text-danger"></span>
            </div>

            <div class="form-group">
                <input type="submit" value="Register" class="btn btn-primary" />
            </div>
```

```
        </form>
    </div>
</div>

<div class="text-success">
    <p>
        @ViewBag.Message
    </p>
</div>

@section Scripts {
    @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
    <script type="text/javascript">
        $(document).ready(function () {
            $("#CountryId").change(function () {
                $("#DepartmentId").empty();
                $("#DepartmentId").append('<option value="0">[Select a department...]</option>');
                $("#CityId").empty();
                $("#CityId").append('<option value="0">[Select a city...]</option>');
                $.ajax({
                    type: 'POST',
                    url: '@Url.Action("GetDepartments")',
                    dataType: 'json',
                    data: { countryId: $("#CountryId").val() },
                    success: function (subcategories) {
                        $.each(subcategories, function (i, department) {
                            debugger;
                            $("#DepartmentId").append('<option value="'
                                + department.id + '">'
                                + department.name + '</option>');
                        });
                    },
                    error: function (ex) {
                        alert('Failed to retrieve departments.' + ex);
                    }
                });
                return false;
            })

            $("#DepartmentId").change(function () {
                $("#CityId").empty();
                $("#CityId").append('<option value="0">[Select a city...]</option>');
                $.ajax({
```

```
                type: 'POST',
                url: '@Url.Action("GetCities")',
                dataType: 'json',
                data: { departmentId: $("#DepartmentId").val() },
                success: function (cities) {
                    $.each(cities, function (i, city) {
                        debugger;
                        $("#CityId").append('<option value="'
                            + city.id + '">'
                            + city.name + '</option>');
                    });
                },
                error: function (ex) {
                    alert('Failed to retrieve cities.' + ex);
                }
            });
            return false;
        })
    });
</script>
}
```

5. Probamos.

API para calificaciones



1. Vamos a agregar la entidad **Qualification** dentro de **Web.Data.Entities**:

```
public class Qualification
{
    public int Id { get; set; }

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    public DateTime Date { get; set; }

    [Display(Name = "Date")]
    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    public DateTime DateLocal => Date.ToLocalTime();

    [JsonIgnore]
    public Product Product { get; set; }

    public User User { get; set; }

    [DisplayFormat(DataFormatString = "{0:N2}")]
    public float Score { get; set; }
```

```
    [DataType(DataType.MultilineText)]
    public string Remarks { get; set; }
}
```

2. Movemos las entidades **Product**, **OrderDetail** dentro de **Web.Data.Entities**.

3. Agregamos estos atributos a **Product**:

```
public ICollection<Qualification> Qualifications { get; set; }

[DisplayName("Product Qualifications")]
public int ProductQualifications => Qualifications == null ? 0 : Qualifications.Count;

[DisplayFormat(DataFormatString = "{0:N2}")]
public float Qualification => Qualifications == null || Qualifications.Count == 0 ? 0 :
Qualifications.Average(q => q.Score);
```

4. Dentro de **Common.Responses** agregamos **QualificationResponse**:

```
public class QualificationResponse
{
    public int Id { get; set; }

    public DateTime Date { get; set; }

    public float Score { get; set; }

    public string Remarks { get; set; }
}
```

5. Dentro de **Common.Responses** agregamos **ProductResponse**:

```
public class ProductResponse
{
    public int Id { get; set; }

    public string Name { get; set; }

    public string Description { get; set; }

    public decimal Price { get; set; }

    public bool IsActive { get; set; }
```

```
    public bool IsStarred { get; set; }

    public Category Category { get; set; }

    public ICollection<ProductImage> ProductImages { get; set; }

    public int ProductImagesNumber => ProductImages == null ? 0 : ProductImages.Count;

    public string ImageFullPath => ProductImages == null || ProductImages.Count == 0
        ? $"https://onsaleprepweb.azurewebsites.net/images/noimage.png"
        : ProductImages.FirstOrDefault().ImageFullPath;

    public ICollection<QualificationResponse> Qualifications { get; set; }

    public int ProductQualifications => Qualifications == null ? 0 : Qualifications.Count;

    public float Qualification => Qualifications == null || Qualifications.Count == 0 ? 0 :
Qualifications.Average(q => q.Score);
}
```

6. Arreglamos el “desmadre” que le hicimos al proyecto.

7. Adicionamos la nueva entidad en el **DataContext**:

```
public DbSet<Qualification> Qualifications { get; set; }
```

8. Corremos los comandos para agregar la nueva migración y actualizar la base de datos.

9. Adicionamos el request **QualificationRequest**:

```
public class QualificationRequest
{
    [Required]
    public int ProductId { get; set; }

    [Range(0, 5)]
    [Required]
    public float Score { get; set; }

    public string Remarks { get; set; }
}
```

10. Creamos el controlador API para Qualifications, el **QualificationsController**:

```
[ApiController]
[Authorize(AuthenticationSchemes = JwtBearerDefaults.AuthenticationScheme)]
[Route("api/[controller]")]
public class QualificationsController : ControllerBase
{
    private readonly DataContext _context;
    private readonly IUserHelper _userHelper;

    public QualificationsController(DataContext context, IUserHelper userHelper)
    {
        _context = context;
        _userHelper = userHelper;
    }

    [HttpPost]
    public async Task<IActionResult> PostQualification([FromBody] QualificationRequest
request)
    {
        if (!ModelState.IsValid)
        {
            return BadRequest();
        }

        string email = User.Claims.FirstOrDefault(c => c.Type ==
ClaimTypes.NameIdentifier).Value;
        User user = await _userHelper.GetUserAsync(email);
        if (user == null)
        {
            return NotFound("Error001");
        }

        Product product = await _context.Products
            .Include(p => p.Qualifications)
            .FirstOrDefaultAsync(p => p.Id == request.ProductId);
        if (product == null)
        {
            return NotFound("Error002");
        }

        if (product.Qualifications == null)
        {
```

```
            product.Qualifications = new List<Qualification>();
        }

        product.Qualifications.Add(new Qualification
        {
            Date = DateTime.UtcNow,
            Product = product,
            Remarks = request.Remarks,
            Score = request.Score,
            User = user
        });

        _context.Products.Update(product);
        await _context.SaveChangesAsync();
        return Ok(product);
    }
}
```

11. Modificamos el API de productos:

```
[HttpGet]
public async Task<IActionResult> GetProducts()
{
    List<Product> products = await _context.Products
        .Include(p => p.Category)
        .Include(p => p.ProductImages)
        .Include(p => p.Qualifications)
        .Where(p => p.IsActive)
        .ToListAsync();
    return Ok(products);
}
```

12. Probamos.

13. Solucionamos el problema de seguridad que tenemos con este Endpoint:

```
[Authorize(AuthenticationSchemes = JwtBearerDefaults.AuthenticationScheme)]
[HttpPost]
public async Task<IActionResult> GetUser()
{
    if (!ModelState.IsValid)
    {
        return BadRequest();
```

```
    }

    string email = User.Claims.FirstOrDefault(c => c.Type == ClaimTypes.NameIdentifier).Value;
    User user = await _userHelper.GetUserAsync(email);
    if (user == null)
    {
        return NotFound("Error001");
    }

    return Ok(user);
}
```

14. Modificamos el **ProductsController** MVC:

```
public async Task<IActionResult> Index()
{
    return View(await _context.Products
        .Include(p => p.Category)
        .Include(p => p.ProductImages)
        .Include(p => p.Qualifications)
        .ToListAsync());
}
…
public async Task<IActionResult> Details(int? id)
{
    if (id == null)
    {
        return NotFound();
    }

    Product product = await _context.Products
        .Include(c => c.Category)
        .Include(c => c.ProductImages)
        .Include(c => c.Qualifications)
        .ThenInclude(q => q.User)
        .FirstOrDefaultAsync(m => m.Id == id);
    if (product == null)
    {
        return NotFound();
    }

    return View(product);
}
```

15. Modificamos la vista **Index**:

```
...
<th>
    @Html.DisplayNameFor(model => model.IsStarred)
</th>
<th>
    @Html.DisplayNameFor(model => model.Qualification)
</th>
<th>
    Category
</th>
<th>
    @Html.DisplayNameFor(model => model.ProductImagesNumber)
</th>
<th>
    @Html.DisplayNameFor(model => model.ProductQualifications)
</th>
<th width="120px"></th>
…
<td>
    @Html.DisplayFor(modelItem => item.Qualification)
</td>
<td>
    @Html.DisplayFor(modelItem => item.Category.Name)
</td>
<td>
    @Html.DisplayFor(modelItem => item.ProductImagesNumber)
</td>
<td>
    @Html.DisplayFor(modelItem => item.ProductQualifications)
</td>
...
```

16. Modificamos la vista **Details**:

```
@model OnSale.Web.Data.Entities.Product

@{
    ViewData["Title"] = "Details";
}

<link rel="stylesheet" href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.min.css" />
```

```
<h2>Details</h2>

<div>
    <h4>Product</h4>
    <hr />
    <dl class="dl-horizontal">
        <dt>
            @Html.DisplayNameFor(model => model.Name)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Name)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Description)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Description)
        </dd>
        <dt>
            Category
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Category.Name)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Price)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Price)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.IsActive)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.IsActive)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.IsStarred)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.IsStarred)
        </dd>
        <dt>
```

```
            @Html.DisplayNameFor(model => model.Qualification)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Qualification)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.ProductImagesNumber)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.ProductImagesNumber)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.ProductQualifications)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.ProductQualifications)
        </dd>
    </dl>
</div>
<div>
    <a asp-action="AddImage" asp-route-id="@Model.Id" class="btn btn-primary"><i
class="glyphicon glyphicon-plus"></i> Image</a>
    <a asp-action="Edit" asp-route-id="@Model.Id" class="btn btn-warning">Edit</a>
    <a asp-action="Index" class="btn btn-success">Back to List</a>
</div>
<br />

<div class="row">
    <div class="col-md-5">
        <div class="panel panel-default">
            <div class="panel-heading">
                <h3 class="panel-title">Product Images</h3>
            </div>
            <div class="panel-body">
                <table class="table table-hover table-responsive table-striped" id="MyTableImages">
                    <thead>
                        <tr>
                            <th>
                                @Html.DisplayNameFor(model =>
model.ProductImages.FirstOrDefault().ImageFullPath)
                            </th>
                            <th></th>
                        </tr>
```

```
                </thead>
                <tbody>
                    @foreach (var item in Model.ProductImages)
                    {
                        <tr>
                            <td>
                                <img src="@item.ImageFullPath"
style="width:200px;height:200px;max-width: 100%; height: auto;" />
                            </td>
                            <td>
                                <button data-id="@item.Id" class="btn btn-danger deleteItem"
data-toggle="modal" data-target="#deleteDialog"><i class="glyphicon
glyphicon-trash"></i></button>
                            </td>
                        </tr>
                    }
                </tbody>
            </table>
        </div>
    </div>
</div>
<div class="col-md-7">
    <div class="panel panel-default">
        <div class="panel-heading">
            <h3 class="panel-title">Qualifications</h3>
        </div>
        <div class="panel-body">
            <table class="table table-hover table-responsive table-striped"
id="MyTableQualifications">
                <thead>
                    <tr>
                        <th>
                            @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().DateLocal)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().User.Email)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().Score)
                        </th>
```

```
                    <th>
                        @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().Remarks)
                    </th>
                </tr>
            </thead>
            <tbody>
                @foreach (var item in Model.Qualifications)
                {
                <tr>
                    <td>
                        @Html.DisplayFor(modelItem => item.DateLocal)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.User.Email)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Score)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Remarks)
                    </td>
                </tr>
                }
            </tbody>
        </table>
    </div>
  </div>
</div>

<partial name="_DeleteDialog" />

@section Scripts {
  @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
  <script src="//cdn.datatables.net/1.10.19/js/jquery.dataTables.min.js"></script>
  <script src="/js/deleteDialog.js"></script>

  <script type="text/javascript">
    $(document).ready(function () {
        $('#MyTableImages').DataTable();
        $('#MyTableQualifications').DataTable();
```

```
            // Delete item
            sc_deleteDialog.openModal('deleteItem', true, 'btnYesDelete', '/Products/DeleteImage/',
false);
        });
    </script>
}
```

17. Probamos.

18. Borramos BD y publicamos de nuevo en Azure.

Mejorar el seeder

1. Adicionar las imágenes que el Seeder va a utilizar.

2. Modificamos el **SeedDb**:

```
public class SeedDb
{
    private readonly DataContext _context;
    private readonly IUserHelper _userHelper;
    private readonly IBlobHelper _blobHelper;
    private readonly Random _random;

    public SeedDb(DataContext context, IUserHelper userHelper, IBlobHelper blobHelper)
    {
        _context = context;
        _userHelper = userHelper;
        _blobHelper = blobHelper;
        _random = new Random();
    }

    public async Task SeedAsync()
    {
        await _context.Database.EnsureCreatedAsync();
        await CheckCountriesAsync();
        await CheckRolesAsync();
        await CheckUserAsync("1010", "Juan", "Zuluaga", "jzuluaga55@hotmail.com", "322 311
4620", "Calle Luna Calle Sol", UserType.Admin);
        await CheckCategoriesAsync();
        await CheckProductsAsync();
    }
```

```
    private async Task CheckProductsAsync()
    {
        if (!_context.Products.Any())
        {
            User user = await _userHelper.GetUserAsync("jzuluaga55@hotmail.com");
            Category mascotas = await _context.Categories.FirstOrDefaultAsync(c => c.Name ==
"Mascotas");
            Category ropa = await _context.Categories.FirstOrDefaultAsync(c => c.Name ==
"Ropa");
            Category tecnologia = await _context.Categories.FirstOrDefaultAsync(c => c.Name ==
"Tecnología");
            string lorem = "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris gravida,
nunc vel tristique cursus, velit nibh pulvinar enim, non pulvinar lorem leo eget felis. Proin
suscipit dignissim nisl, at elementum justo laoreet sed. In tortor nibh, auctor quis est gravida,
blandit elementum nulla. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per
inceptos himenaeos. Integer placerat nisi dui, id rutrum nisi viverra at. Interdum et malesuada
fames ac ante ipsum primis in faucibus. Pellentesque sodales sollicitudin tempor. Fusce
volutpat, purus sit amet placerat gravida, est magna gravida risus, a ultricies augue magna vel
dolor. Fusce egestas venenatis velit, a ultrices purus aliquet sed. Morbi lacinia purus sit amet
nisi vulputate mollis. Praesent in volutpat tortor. Etiam ac enim id ligula rutrum semper. Sed
mattis erat sed condimentum congue. Vestibulum consequat tristique consectetur. Nunc in
lorem in sapien vestibulum aliquet a vel leo.";
            await AddProductAsync(mascotas, lorem, "Bulldog Frances", 2500000M, new string[] {
"Bulldog1", "Bulldog2", "Bulldog3", "Bulldog4" }, user);
            await AddProductAsync(ropa, lorem, "Buso GAP Hombre", 85000M, new string[] {
"BusoGAP1", "BusoGAP2" }, user);
            await AddProductAsync(tecnologia, lorem, "iPhone 11", 3500000M, new string[] {
"iPhone1", "iPhone2", "iPhone3", "iPhone4", "iPhone5" }, user);
            await AddProductAsync(tecnologia, lorem, "iWatch \"42", 2100000M, new string[] {
"iWatch" }, user);
            await AddProductAsync(ropa, lorem, "Tennis Adidas", 250000M, new string[] { "Adidas"
}, user);
            await AddProductAsync(mascotas, lorem, "Collie", 350000M, new string[] { "Collie1",
"Collie2", "Collie3", "Collie4", "Collie5" }, user);
            await AddProductAsync(tecnologia, lorem, "MacBook Pro 16\" 1TB", 12000000M, new
string[] { "MacBookPro1", "MacBookPro2", "MacBookPro3", "MacBookPro4" }, user);
            await AddProductAsync(ropa, lorem, "Sudadera Mujer", 95000M, new string[] {
"Sudadera1", "Sudadera2", "Sudadera3", "Sudadera4", "Sudadera5" }, user);
            await _context.SaveChangesAsync();
        }
    }
```

```
    private async Task AddProductAsync(Category category, string description, string name,
decimal price, string[] images, User user)
    {
        Product product = new Product
        {
            Category = category,
            Description = description,
            IsActive = true,
            Name = name,
            Price = price,
            ProductImages = new List<ProductImage>(),
            Qualifications = GetRandomQualifications(description, user)
        };

        foreach (string image in images)
        {
            string path = Path.Combine(Directory.GetCurrentDirectory(), $"wwwroot\\images",
$"{image}.png");
            Guid imageId = await _blobHelper.UploadBlobAsync(path, "products");
            product.ProductImages.Add(new ProductImage { ImageId = imageId });
        }

        _context.Products.Add(product);
    }

    private ICollection<Qualification> GetRandomQualifications(string description, User user)
    {
        List<Qualification> qualifications = new List<Qualification>();
        for (int i = 0; i < 10; i++)
        {
            qualifications.Add(new Qualification
            {
                Date = DateTime.UtcNow,
                Remarks = description,
                Score = _random.Next(1, 5),
                User = user
            });
        }

        return qualifications;
    }

    private async Task CheckCategoriesAsync()
```

```
    {
        if (!_context.Categories.Any())
        {
            await AddCategoryAsync("Ropa");
            await AddCategoryAsync("Tecnología");
            await AddCategoryAsync("Mascotas");
            await _context.SaveChangesAsync();
        }
    }

    private async Task AddCategoryAsync(string name)
    {
        string path = Path.Combine(Directory.GetCurrentDirectory(), $"wwwroot\\images",
$"{name}.png");
        Guid imageId = await _blobHelper.UploadBlobAsync(path, "categories");
        _context.Categories.Add(new Category { Name = name, ImageId = imageId });
    }

    private async Task CheckRolesAsync()
    {
        await _userHelper.CheckRoleAsync(UserType.Admin.ToString());
        await _userHelper.CheckRoleAsync(UserType.User.ToString());
    }

    private async Task<User> CheckUserAsync(
        string document,
        string firstName,
        string lastName,
        string email,
        string phone,
        string address,
        UserType userType)
    {
        User user = await _userHelper.GetUserAsync(email);
        if (user == null)
        {
            user = new User
            {
                FirstName = firstName,
                LastName = lastName,
                Email = email,
                UserName = email,
                PhoneNumber = phone,
```

```
            Address = address,
            Document = document,
            City = _context.Cities.FirstOrDefault(),
            UserType = userType
        };

        await _userHelper.AddUserAsync(user, "123456");
        await _userHelper.AddUserToRoleAsync(user, userType.ToString());

        string token = await _userHelper.GenerateEmailConfirmationTokenAsync(user);
        await _userHelper.ConfirmEmailAsync(user, token);
    }

    return user;
}

private async Task CheckCountriesAsync()
{
    if (!_context.Countries.Any())
    {
        _context.Countries.Add(new Country
        {
            Name = "Colombia",
            Departments = new List<Department>
            {
                new Department
                {
                    Name = "Antioquia",
                    Cities = new List<City>
                    {
                        new City { Name = "Medellín" },
                        new City { Name = "Envigado" },
                        new City { Name = "Itagüí" }
                    }
                },
                new Department
                {
                    Name = "Bogotá",
                    Cities = new List<City>
                    {
                        new City { Name = "Bogotá" }
                    }
                },
```

```
                new Department
                {
                    Name = "Valle del Cauca",
                    Cities = new List<City>
                    {
                        new City { Name = "Cali" },
                        new City { Name = "Buenaventura" },
                        new City { Name = "Palmira" }
                    }
                }
            }
        });
        _context.Countries.Add(new Country
        {
            Name = "USA",
            Departments = new List<Department>
            {
                new Department
                {
                    Name = "California",
                    Cities = new List<City>
                    {
                        new City { Name = "Los Angeles" },
                        new City { Name = "San Diego" },
                        new City { Name = "San Francisco" }
                    }
                },
                new Department
                {
                    Name = "Illinois",
                    Cities = new List<City>
                    {
                        new City { Name = "Chicago" },
                        new City { Name = "Springfield" }
                    }
                }
            }
        });
        await _context.SaveChangesAsync();
    }
  }
}
```

3. Probamos.

Colocar mensajes tipo Toast

Gracias a Hugo Rivera Dijeres que me paso el tip.

1. Instalamos el siguiente paquete:

```
PM> Install-Package Vereyon.Web.FlashMessage
```

2. Lo registramos en el **StartUp**:

```
services.AddFlashMessage();
```

3. Lo registramos en el **_ViewImports**:

```
@addTagHelper *, Vereyon.Web.FlashMessage
```

4. Lo inyectamos en el controlador donde queramos el mensaje, para el ejemplo en el **CategoriesController**:

```
IFlashMessage flashMessage
```

5. Se usa de la siguiente forma, ejemplo en el **Delete** de **Categories**:

```
try
{
    _context.Categories.Remove(category);
    await _context.SaveChangesAsync();
    _flashMessage.Confirmation("The category was deleted.");
}
catch (Exception ex)
{
    _flashMessage.Danger("The category can't be deleted because it has related records.");
}
```

6. En la vista donde se mostrará el toast, en este caso la Index de Categories, adicionamos lo siguiente:

```
<flash dismissable="true" />
```

7. Probamos

Tomado de: https://github.com/Vereyon/FlashMessage

API para registro de usuarios

8. Adicionar la **UserRequest**:

```
public class UserRequest
{
    [Required]
    public string Document { get; set; }

    [Required]
    public string FirstName { get; set; }

    [Required]
    public string LastName { get; set; }

    [Required]
    public string Address { get; set; }

    [Required]
    public string Email { get; set; }

    [Required]
    public string Phone { get; set; }

    [Required]
    [StringLength(20, MinimumLength = 6)]
    public string Password { get; set; }

    [Required]
    public int CityId { get; set; }

    public byte[] ImageArray { get; set; }
}
```

9. Modificar el API **AccountController**:

```
private readonly IUserHelper _userHelper;
private readonly IConfiguration _configuration;
```

```
private readonly IBlobHelper _blobHelper;
private readonly IMailHelper _mailHelper;
private readonly DataContext _context;

public AccountController(
    IUserHelper userHelper,
    IConfiguration configuration,
    IBlobHelper blobHelper,
    IMailHelper mailHelper,
    DataContext context)
{
    _userHelper = userHelper;
    _configuration = configuration;
    _blobHelper = blobHelper;
    _mailHelper = mailHelper;
    _context = context;
}
...
[HttpPost]
[Route("Register")]
public async Task<IActionResult> PostUser([FromBody] UserRequest request)
{
    if (!ModelState.IsValid)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Bad request",
            Result = ModelState
        });
    }

    User user = await _userHelper.GetUserAsync(request.Email);
    if (user != null)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Error003"
        });
    }

    //TODO: Translate ErrorXXX literals
```

```
    City city = await _context.Cities.FindAsync(request.CityId);
    if (city == null)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Error004"
        });
    }

    Guid imageId = Guid.Empty;

    if (request.ImageArray != null)
    {
        imageId = await _blobHelper.UploadBlobAsync(request.ImageArray, "users");
    }

    user = new User
    {
        Address = request.Address,
        Document = request.Document,
        Email = request.Email,
        FirstName = request.FirstName,
        LastName = request.LastName,
        PhoneNumber = request.Phone,
        UserName = request.Email,
        ImageId = imageId,
        UserType = UserType.User,
        City = city
    };

    IdentityResult result = await _userHelper.AddUserAsync(user, request.Password);
    if (result != IdentityResult.Success)
    {
        return BadRequest(result.Errors.FirstOrDefault().Description);
    }

    User userNew = await _userHelper.GetUserAsync(request.Email);
    await _userHelper.AddUserToRoleAsync(userNew, user.UserType.ToString());

    string myToken = await _userHelper.GenerateEmailConfirmationTokenAsync(user);
    string tokenLink = Url.Action("ConfirmEmail", "Account", new
    {
```

```
        userid = user.Id,
        token = myToken
    }, protocol: HttpContext.Request.Scheme);

    _mailHelper.SendMail(request.Email, "Email Confirmation", $"<h1>Email Confirmation</h1>"
+
        $"To confirm your email please click on the link<p><a href = \"{tokenLink}\">Confirm
Email</a></p>");

    return Ok(new Response { IsSuccess = true });
}
```

10. Probar en Postman.

API para recuperación de contraseña

1. Adicionar este método al API **AccountController**:

```
[HttpPost]
[Route("RecoverPassword")]
public async Task<IActionResult> RecoverPassword([FromBody] EmailRequest request)
{
    if (!ModelState.IsValid)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Bad request"
        });
    }

    User user = await _userHelper.GetUserAsync(request.Email);
    if (user == null)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Error001"
        });
    }

    string myToken = await _userHelper.GeneratePasswordResetTokenAsync(user);
```

```
    string link = Url.Action("ResetPassword", "Account", new { token = myToken }, protocol:
HttpContext.Request.Scheme);
    _mailHelper.SendMail(request.Email, "Password Recover", $"<h1>Password Recover</h1>"
+
        $"Click on the following link to change your password:<p>" +
        $"<a href = \"{link}\">Change Password</a></p>");

    return Ok(new Response { IsSuccess = true});
}
```

2. En el MVC **AccountController** renombrar el método **RecoverPassword** a **RecoverPasswordMVC** para evitar que entre en conflicto en el controlador API.

3. Probamos en Postman.

4. Publicamos de nuevo en Azure.

API para modificar usuario

1. Adicionar este método al API **AccountController**:

```
[Authorize(AuthenticationSchemes = JwtBearerDefaults.AuthenticationScheme)]
[HttpPut]
public async Task<IActionResult> PutUser([FromBody] UserRequest request)
{
    if (!ModelState.IsValid)
    {
        return BadRequest(ModelState);
    }

    string email = User.Claims.FirstOrDefault(c => c.Type == ClaimTypes.NameIdentifier).Value;
    User user = await _userHelper.GetUserAsync(email);
    if (user == null)
    {
        return NotFound("Error001");
    }

    City city = await _context.Cities.FindAsync(request.CityId);
    if (city == null)
    {
        return BadRequest(new Response
        {
```

```
            IsSuccess = false,
            Message = "Error004"
        });
    }

    Guid imageId = user.ImageId;

    if (request.ImageArray != null)
    {
        imageId = await _blobHelper.UploadBlobAsync(request.ImageArray, "users");
    }

    user.FirstName = request.FirstName;
    user.LastName = request.LastName;
    user.Address = request.Address;
    user.PhoneNumber = request.Phone;
    user.Document = request.Phone;
    user.City = city;
    user.ImageId = imageId;

    IdentityResult respose = await _userHelper.UpdateUserAsync(user);
    if (!respose.Succeeded)
    {
        return BadRequest(respose.Errors.FirstOrDefault().Description);
    }

    User updatedUser = await _userHelper.GetUserAsync(email);
    return Ok(updatedUser);
}
```

2. Probamos en Postman.

3. Publicamos de nuevo en Azure.

API para cambiar contraseña

1. Adicionar el **ChangePasswordRequest**:

```
public class ChangePasswordRequest
{
    [Required]
    [StringLength(20, MinimumLength = 6)]
```

```
    public string OldPassword { get; set; }

    [Required]
    [StringLength(20, MinimumLength = 6)]
    public string NewPassword { get; set; }
}
```

2. Adicionar este método al API **AccountController**:

```
[Authorize(AuthenticationSchemes = JwtBearerDefaults.AuthenticationScheme)]
[HttpPost]
[Route("ChangePassword")]
public async Task<IActionResult> ChangePassword([FromBody] ChangePasswordRequest
request)
{
    if (!ModelState.IsValid)
    {
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Bad request",
            Result = ModelState
        });
    }

    string email = User.Claims.FirstOrDefault(c => c.Type == ClaimTypes.NameIdentifier).Value;
    User user = await _userHelper.GetUserAsync(email);
    if (user == null)
    {
        return NotFound("Error001");
    }

    IdentityResult result = await _userHelper.ChangePasswordAsync(user,
request.OldPassword, request.NewPassword);
    if (!result.Succeeded)
    {
        var message = result.Errors.FirstOrDefault().Description;
        return BadRequest(new Response
        {
            IsSuccess = false,
            Message = "Error005"
        });
    }
```

```
    return Ok(new Response { IsSuccess = true });
}
```

3. Probamos en Postman.

4. En el MVC **AccountController** renombrar **ChangePassword** por **ChangePasswordMVC** para evitar que entre en conflicto con el controlador API.

5. Publicamos de nuevo en Azure.

API crear órdenes

1. Crear la enumeración **PaymentMethod**:

```
public enum PaymentMethod
{
    Cash,
    CreditCard
}
```

2. Crear la clase **OrderDetailResponse**:

```
public class OrderDetailResponse
{
    public int Id { get; set; }

    public ProductResponse Product { get; set; }

    public float Quantity { get; set; }

    public string Remarks { get; set; }

    public decimal? Value => (decimal)Quantity * Product?.Price;
}
```

3. Crear la clase **OrderResponse**:

```
public class OrderResponse
{
    public int Id { get; set; }
```

```
    public DateTime Date { get; set; }

    public DateTime DateLocal => Date.ToLocalTime();

    public UserResponse User { get; set; }

    public OrderStatus OrderStatus { get; set; }

    public DateTime? DateSent { get; set; }

    public DateTime? DateSentLocal => DateSent?.ToLocalTime();

    public DateTime? DateConfirmed { get; set; }

    public DateTime? DateConfirmedLocal => DateSent?.ToLocalTime();

    public string Remarks { get; set; }

    public PaymentMethod PaymentMethod { get; set; }

    public ICollection<OrderDetailResponse> OrderDetails { get; set; }

    public int Lines => OrderDetails == null ? 0 : OrderDetails.Count;

    public float Quantity => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Quantity);

    public decimal Value => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Value).Value;
}
```

4. Modificamos la entidad **Order**:

```
public class Order
{
    public int Id { get; set; }

    public DateTime Date { get; set; }

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    [Display(Name = "Date")]
    public DateTime DateLocal => Date.ToLocalTime();

    public User User { get; set; }
```

```
    public OrderStatus OrderStatus { get; set; }

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    [Display(Name = "Date Sent")]
    public DateTime? DateSent { get; set; }

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    [Display(Name = "Date Sent")]
    public DateTime? DateSentLocal => DateSent?.ToLocalTime();

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    [Display(Name = "Date Confirmed")]
    public DateTime? DateConfirmed { get; set; }

    [DisplayFormat(DataFormatString = "{0:yyyy/MM/dd hh:mm}")]
    [Display(Name = "Date Confirmed")]
    public DateTime? DateConfirmedLocal => DateSent?.ToLocalTime();

    [DataType(DataType.MultilineText)]
    public string Remarks { get; set; }

    [Display(Name = "Payment Method")]
    public PaymentMethod PaymentMethod { get; set; }

    public ICollection<OrderDetail> OrderDetails { get; set; }

    public int Lines => OrderDetails == null ? 0 : OrderDetails.Count;

    public float Quantity => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Quantity);

    public decimal Value => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Value);
}
```

5. Correr los comandos para actualizar la BD.

6. Crear el API **OrdersController**:

```
[ApiController]
[Authorize(AuthenticationSchemes = JwtBearerDefaults.AuthenticationScheme)]
[Route("api/[controller]")]
public class OrdersController : ControllerBase
{
    private readonly DataContext _context;
```

```
    private readonly IUserHelper _userHelper;

    public OrdersController(DataContext context, IUserHelper userHelper)
    {
        _context = context;
        _userHelper = userHelper;
    }

    [HttpPost]
    public async Task<IActionResult> PostOrder([FromBody] OrderResponse request)
    {
        if (!ModelState.IsValid)
        {
            return BadRequest();
        }

        string email = User.Claims.FirstOrDefault(c => c.Type ==
ClaimTypes.NameIdentifier).Value;
        User user = await _userHelper.GetUserAsync(email);
        if (user == null)
        {
            return NotFound("Error001");
        }

        Order order = new Order
        {
            Date = DateTime.UtcNow,
            OrderDetails = new List<OrderDetail>(),
            OrderStatus = OrderStatus.Pending,
            PaymentMethod = request.PaymentMethod,
            Remarks = request.Remarks,
            User = user
        };

        foreach (OrderDetailResponse item in request.OrderDetails)
        {
            Product product = await _context.Products.FindAsync(item.Product.Id);
            if (product == null)
            {
                return NotFound("Error002");
            }

            order.OrderDetails.Add(new OrderDetail
```

```
            {
                Price = product.Price,
                Product = product,
                Quantity = item.Quantity,
                Remarks = item.Remarks
            });
        }

        _context.Orders.Add(order);
        await _context.SaveChangesAsync();
        return Ok(order);
    }
}
```

7. Cómo es complejo armar el request, queda pendiente probarlo en Postman.

8. Borrar la BD en Azure y publicar nuevamente.

Mejorar la forma como se ven los comentarios

Gracias a **Jimmy Dávila** que me compartió este código:

1. Adicionar este estado a **OrderStatus**:

```
<div class="col-md-7">
    <div class="panel panel-default">
        <div class="panel-heading">
            <h3 class="panel-title">Qualifications</h3>
        </div>
        <div class="panel-body">
            <table class="table table-hover table-responsive table-striped"
id="MyTableQualifications">
                <colgroup>
                    <col span="1" />
                    <col span="1" />
                    <col span="1" />
                    <col span="1" width="400" />
                </colgroup>
                <thead>
                    <tr>
                        <th>
```

```
                    @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().DateLocal)
                </th>
                <th>
                    @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().User.Email)
                </th>
                <th>
                    @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().Score)
                </th>
                <th>
                    @Html.DisplayNameFor(model =>
model.Qualifications.FirstOrDefault().Remarks)
                </th>
            </tr>
        </thead>
        <tbody>
            @foreach (var item in Model.Qualifications)
            {
                <tr>
                    <td>
                        @Html.DisplayFor(modelItem => item.DateLocal)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.User.Email)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Score)
                    </td>
                    <td>
                        @{
                            string[] noteWords = item.Remarks.Split(' ');
                            if (noteWords.Count() > 7)
                            {
                                <a class="" role="button" data-toggle="collapse"
href="#collapseSum@(item.Id)" aria-expanded="false" aria-controls="collapseSum@(item.Id)">
                                    @(string.Join(" ", noteWords.Take(7)) + "...")
                                </a>
                                <div class="collapse" id="collapseSum@(item.Id)">
                                    <div class="well">
                                        @(string.Join(" ", noteWords.Skip(7)))
                                    </div>
```

```
                                </div>
                            }
                            else
                            {
                                @item.Remarks
                            }
                        }
                    </td>
                </tr>
            }
        </tbody>
    </table>
  </div>
 </div>
</div>
```

2. Probamos.

Administrar pedidos

1. Modificar la vista **Details** de **ProductsController**:

```
public enum OrderStatus
{
    Pending,
    Spreading,
    Sent,
    Confirmed,
    Cancelled
}
```

2. Adicionar estas anotaciones a **Order**:

```
[Display(Name = "Order Status")]
public OrderStatus OrderStatus { get; set; }
...
[DisplayFormat(DataFormatString = "{0:N0}")]
public int Lines => OrderDetails == null ? 0 : OrderDetails.Count;

[DisplayFormat(DataFormatString = "{0:N2}")]
public float Quantity => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Quantity);
```

```
[DisplayFormat(DataFormatString = "{0:C2}")]
public decimal Value => OrderDetails == null ? 0 : OrderDetails.Sum(od => od.Value);
```

3. Crear el **OrdersController**:

```
    [Authorize(Roles = "Admin")]
    public class OrdersController : Controller
    {
        private readonly DataContext _context;

        public OrdersController(DataContext context)
        {
            _context = context;
        }

        public async Task<IActionResult> Index()
        {
            return View(await _context.Orders
                .Include(p => p.User)
                .Include(p => p.OrderDetails)
                .ToListAsync());
        }
    }
```

4. Adicionar la vista **Index**:

```
@model IEnumerable<OnSale.Web.Data.Entities.Order>

@{
    ViewData["Title"] = "Index";
}

<link rel="stylesheet" href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.min.css" />
<br />

<div class="row">
    <div class="col-md-12">
        <div class="panel panel-default">
            <div class="panel-heading">
                <h3 class="panel-title">Orders</h3>
            </div>
            <div class="panel-body">
```

```
            <table class="table table-hover table-responsive table-striped" id="MyTable">
                <thead>
                    <tr>
                        <th>
                            @Html.DisplayNameFor(model => model.Date)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.User.FullName)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.OrderStatus)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.DateSent)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.DateConfirmed)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.PaymentMethod)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.Lines)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.Quantity)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model => model.Value)
                        </th>
                        <th width="70px"></th>
                    </tr>
                </thead>
                <tbody>
                    @foreach (var item in Model)
                    {
                    <tr>
                        <td>
                            @Html.DisplayFor(modelItem => item.DateLocal)
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.User.FullName)
                        </td>
```

```
                    <td>
                        @Html.DisplayFor(modelItem => item.OrderStatus)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.DateSentLocal)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.DateConfirmedLocal)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.PaymentMethod)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Lines)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Quantity)
                    </td>
                    <td>
                        @Html.DisplayFor(modelItem => item.Value)
                    </td>
                    <td>
                        <a asp-action="Edit" asp-route-id="@item.Id" class="btn btn-warning"><i
class="glyphicon glyphicon-pencil"></i></a>
                        <a asp-action="Details" asp-route-id="@item.Id" class="btn btn-info"><i
class="glyphicon glyphicon-align-justify"></i></a>
                    </td>
                </tr>
                }
            </tbody>
        </table>
    </div>
  </div>
</div>

@section Scripts {
  @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
  <script src="//cdn.datatables.net/1.10.19/js/jquery.dataTables.min.js"></script>

  <script type="text/javascript">
    $(document).ready(function () {
        $('#MyTable').DataTable();
```

```
        });
    </script>
}
```

5. Agregar el llamado en el menú:

```
@if (User.Identity.IsAuthenticated && User.IsInRole("Admin"))
{
    <li><a asp-area="" asp-controller="Countries" asp-action="Index">Countries</a></li>
    <li><a asp-area="" asp-controller="Categories" asp-action="Index">Categories</a></li>
    <li><a asp-area="" asp-controller="Orders" asp-action="Index">Orders</a></li>
    <li><a asp-area="" asp-controller="Products" asp-action="Index">Products</a></li>
    <li><a asp-area="" asp-controller="Account" asp-action="Index">Users</a></li>
}
```

6. Probemos lo que llevamos hasta el momento.

7. Adicionar esta anotación a **Country**:

```
[MaxLength(50)]
[Required]
[Display(Name = "Country")]
public string Name { get; set; }
```

8. Adicionar esta anotación a **Department**:

```
[MaxLength(50)]
[Required]
[Display(Name = "Department")]
public string Name { get; set; }
```

9. Adicionar esta anotación a **City**:

```
[MaxLength(50)]
[Required]
[Display(Name = "City")]
public string Name { get; set; }
```

10. Cambiar el formato **"{0:yyyy/MM/dd hh:mm}"** por **"{0:yyyy/MM/dd hh:mm tt}"** en todo el proyecto.

11. Adicionar estas anotaciones a **OrderDetail**:

```
[DisplayFormat(DataFormatString = "{0:N2}")]
public float Quantity { get; set; }

[DisplayFormat(DataFormatString = "{0:C2}")]
public decimal Price { get; set; }

[DataType(DataType.MultilineText)]
public string Remarks { get; set; }

[DisplayFormat(DataFormatString = "{0:C2}")]
public decimal Value => (decimal)Quantity * Price;
```

12. Adicionar este método al **OrdersController**:

```
public async Task<IActionResult> Details(int? id)
{
    if (id == null)
    {
        return NotFound();
    }

    Order order = await _context.Orders
        .Include(o => o.User)
        .ThenInclude(u => u.City)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.Category)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.ProductImages)
        .FirstOrDefaultAsync(o => o.Id == id);
    if (order == null)
    {
        return NotFound();
    }

    return View(order);
}
```

13. Adicionar la vista **Details**:

```
@model OnSale.Web.Data.Entities.Order
```

```
@{
    ViewData["Title"] = "Details";
}

<link rel="stylesheet" href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.min.css" />
<h2>Details</h2>
<h4>Order</h4>
<hr />

<div class="row">
    <div class="col-md-4">
        <dl class="dl-horizontal">
            <dt>
                @Html.DisplayNameFor(model => model.Date)
            </dt>
            <dd>
                @Html.DisplayFor(model => model.DateLocal)
            </dd>
            <dt>
                @Html.DisplayNameFor(model => model.User.Document)
            </dt>
            <dd>
                @Html.DisplayFor(model => model.User.Document)
            </dd>
            <dt>
                @Html.DisplayNameFor(model => model.User.FullName)
            </dt>
            <dd>
                @Html.DisplayFor(model => model.User.FullName)
            </dd>
            <dt>
                @Html.DisplayNameFor(model => model.User.PhoneNumber)
            </dt>
            <dd>
                @Html.DisplayFor(model => model.User.PhoneNumber)
            </dd>
            <dt>
                @Html.DisplayNameFor(model => model.User.City.Name)
            </dt>
            <dd>
                @Html.DisplayFor(model => model.User.City.Name)
            </dd>
            <dt>
```

```
            @Html.DisplayNameFor(model => model.User.Email)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.User.Email)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.OrderStatus)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.OrderStatus)
        </dd>
    </dl>
</div>
<div class="col-md-6">
    <dl class="dl-horizontal">
        <dt>
            @Html.DisplayNameFor(model => model.DateSent)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.DateSentLocal)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.DateConfirmed)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.DateConfirmedLocal)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.PaymentMethod)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.PaymentMethod)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Lines)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Lines)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Quantity)
        </dt>
        <dd>
```

```
            @Html.DisplayFor(model => model.Quantity)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Value)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Value)
        </dd>
        <dt>
            @Html.DisplayNameFor(model => model.Remarks)
        </dt>
        <dd>
            @Html.DisplayFor(model => model.Remarks)
        </dd>
    </dl>
  </div>
</div>

<div>
  <a asp-action="Edit" asp-route-id="@Model.Id" class="btn btn-warning">Change Status</a>
  <a asp-action="Index" class="btn btn-success">Back to List</a>
</div>
<br />

<div class="row">
  <div class="col-md-12">
    <div class="panel panel-default">
        <div class="panel-heading">
            <h3 class="panel-title">Details</h3>
        </div>
        <div class="panel-body">
            <table class="table table-hover table-responsive table-striped" id="MyTable">
                <thead>
                    <tr>
                        <th>
                            @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Product.Name)
                        </th>
                        <th>
                            @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Product.ImageFullPath)
                        </th>
                        <th>
```

```
                        @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Product.Category.Name)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Remarks)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Price)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Quantity)
                    </th>
                    <th>
                        @Html.DisplayNameFor(model =>
model.OrderDetails.FirstOrDefault().Value)
                    </th>
                </tr>
            </thead>
            <tbody>
                @foreach (var item in Model.OrderDetails)
                {
                    <tr>
                        <td>
                            @Html.DisplayFor(modelItem => item.Product.Name)
                        </td>
                        <td>
                            <img src="@item.Product.ImageFullPath"
style="width:100px;height:100px;max-width: 100%; height: auto;" />
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.Product.Category.Name)
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.Remarks)
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.Price)
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.Quantity)
```

```
                        </td>
                        <td>
                            @Html.DisplayFor(modelItem => item.Value)
                        </td>
                    </tr>
                }
            </tbody>
        </table>
    </div>
  </div>
</div>

@section Scripts {
  @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
  <script src="//cdn.datatables.net/1.10.19/js/jquery.dataTables.min.js"></script>

  <script type="text/javascript">
    $(document).ready(function () {
        $('#MyTable').DataTable();
    });
  </script>
}
```

14. Adicionamos este método al **ICombosHelper**:

```
IEnumerable<SelectListItem> GetOrderStatuses();
```

15. Adicionamos este método al **CombosHelper**:

```
public IEnumerable<SelectListItem> GetOrderStatuses()
{
  return new List<SelectListItem>
  {
    new SelectListItem { Value = "0", Text = OrderStatus.Pending.ToString() },
    new SelectListItem { Value = "1", Text = OrderStatus.Spreading.ToString() },
    new SelectListItem { Value = "2", Text = OrderStatus.Sent.ToString() },
    new SelectListItem { Value = "3", Text = OrderStatus.Confirmed.ToString() },
    new SelectListItem { Value = "4", Text = OrderStatus.Cancelled.ToString() }
  };
}
```

16. Creamos la **ChangeOrderStatusViewModel**:

```
public class ChangeOrderStatusViewModel
{
    public int Id { get; set; }

    public int OrderStatusId { get; set; }

    public IEnumerable<SelectListItem> OrderStatuses { get; set; }

    [DataType(DataType.DateTime)]
    public DateTime Date { get; set; }
}
```

17. Adicionar estos métodos al **OrdersController**, primero inyectamos el **ICombosHelper**:

```
public async Task<IActionResult> Edit(int? id)
{
    if (id == null)
    {
        return NotFound();
    }

    Order order = await _context.Orders.FindAsync(id);
    if (order == null)
    {
        return NotFound();
    }

    ChangeOrderStatusViewModel model = new ChangeOrderStatusViewModel
    {
        Date = DateTime.Now,
        Id = order.Id,
        OrderStatuses = _combosHelper.GetOrderStatuses(),
        OrderStatusId = (int)order.OrderStatus
    };

    return View(model);
}

[HttpPost]
[ValidateAntiForgeryToken]
public async Task<IActionResult> Edit(ChangeOrderStatusViewModel model)
{
```

```
    if (ModelState.IsValid)
    {
        Order order = await _context.Orders.FindAsync(model.Id);
        order.OrderStatus = ToOrderStatus(model.OrderStatusId);
        if (model.OrderStatusId == 2) // sent
        {
            order.DateSent = model.Date.ToUniversalTime();
        }
        else if(model.OrderStatusId == 3) // confirmed
        {
            order.DateConfirmed = model.Date.ToUniversalTime();
        }

        _context.Update(order);
        await _context.SaveChangesAsync();
        return RedirectToAction($"{nameof(Details)}/{model.Id}");
    }

    model.OrderStatuses = _combosHelper.GetOrderStatuses();
    return View(model);
}

private OrderStatus ToOrderStatus(int orderStatusId)
{
    switch (orderStatusId)
    {
        case 0: return OrderStatus.Pending;
        case 1: return OrderStatus.Spreading;
        case 2: return OrderStatus.Sent;
        case 3: return OrderStatus.Confirmed;
        default: return OrderStatus.Cancelled;
    }
}
```

18. Adicionar la vista **Edit**:

```
@model OnSale.Web.Models.ChangeOrderStatusViewModel

@{
    ViewData["Title"] = "Edit";
}

<h2>Change</h2>
```

```
<h4>Order Status</h4>
<hr />
<div class="row">
    <div class="col-md-4">
        <form asp-action="Edit">
            <div asp-validation-summary="ModelOnly" class="text-danger"></div>
            <input type="hidden" asp-for="Id" />

            <div class="form-group">
                <label asp-for="OrderStatusId" class="control-label"></label>
                <select asp-for="OrderStatusId" asp-items="Model.OrderStatuses"
class="form-control"></select>
                <span asp-validation-for="OrderStatusId" class="text-danger"></span>
            </div>

            <div class="form-group">
                <label asp-for="Date" class="control-label"></label>
                <input asp-for="Date" type="datetime-local" class="form-control" />
                <span asp-validation-for="Date" class="text-danger"></span>
            </div>

            <div class="form-group">
                <input type="submit" value="Save" class="btn btn-primary" />
                <a asp-action="Details" asp-route-id="@Model.Id" class="btn btn-success">Back to
Order</a>
            </div>
        </form>
    </div>
</div>

@section Scripts {
    @{await Html.RenderPartialAsync("_ValidationScriptsPartial");}
}
```

19. Probamos.

API para obtener historia de órdenes

1. Adicionar este método al API **OrdersController**:

```
[HttpGet]
```

```
public async Task<IActionResult> GetOrders()
{
    string email = User.Claims.FirstOrDefault(c => c.Type == ClaimTypes.NameIdentifier).Value;
    User user = await _userHelper.GetUserAsync(email);
    if (user == null)
    {
        return NotFound("Error001");
    }

    List<Order> orders = await _context.Orders
        .Include(o => o.User)
        .ThenInclude(u => u.City)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.Category)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.ProductImages)
        .Where(o => o.User.Id == user.Id)
        .OrderByDescending(o => o.Date)
        .ToListAsync();
    return Ok(orders);
}
```

2. Probamos.

3. Publicamos de nuevo en Azure.

API para modificar orden (cancelar orden)

1. Adicionar este método al API **OrdersController**:

```
[HttpPut]
public async Task<IActionResult> PutOrders([FromBody] Order order)
{
    if (!ModelState.IsValid)
    {
        return BadRequest(ModelState);
    }

    string email = User.Claims.FirstOrDefault(c => c.Type == ClaimTypes.NameIdentifier).Value;
    User user = await _userHelper.GetUserAsync(email);
```

```
    if (user == null)
    {
        return NotFound("Error001");
    }

    Order currentOrder = await _context.Orders
        .Include(o => o.User)
        .ThenInclude(u => u.City)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.Category)
        .Include(o => o.OrderDetails)
        .ThenInclude(od => od.Product)
        .ThenInclude(od => od.ProductImages)
        .FirstOrDefaultAsync(o => o.Id == order.Id && o.User.Id == user.Id);
    if (currentOrder == null)
    {
        return NotFound();
    }

    currentOrder.OrderStatus = order.OrderStatus;
    currentOrder.Remarks = order.Remarks;
    _context.Orders.Update(currentOrder);
    await _context.SaveChangesAsync();
    return Ok(currentOrder);
}
```

2. Probamos.

3. Volvemos a publicar en Azure.

Fin