Model ASP.NET MVC Core 3.1 Web App - Deel 7

1 Constanten en utility methoden toevoegen

Voeg aan de static SD class in de folder Utilities de volgende constanten en methoden toe

```
using PittigRestoMVC.Models;
using System;
namespace PittigRestoMVC.Utility
    public static class SD
        public const string DefaultFoodImage = "default food.png";
        public const string ManagerUser = "Manager";
        public const string KitchenUser = "Kitchen";
        public const string FrontDeskUser = "FrontDesk";
        public const string CustomerEndUser = "Customer";
        public const string ssShoppingCartCount = "ssCartCount";
       public const string ssCouponCode = "ssCouponCode";
        public const string StatusSubmitted = "Verstuurd";
        public const string StatusInProcess = "In bereiding";
        public const string StatusReady = "Klaar voor ophaling";
        public const string StatusCompleted = "Afgehandeld";
        public const string StatusCancelled = "Geannuleerd";
        public const string PaymentStatusPending = "In Behandeling";
        public const string PaymentStatusApproved = "Goedgekeurd";
        public const string PaymentStatusRejected = "Afgewezen";
        public static string ConvertToRawHtml(string source)
            char[] array = new char[source.Length];
            int arrayIndex = 0;
            bool inside = false;
            for (int i = 0; i < source.Length; i++)</pre>
                char let = source[i];
                if (let == '<')</pre>
                    inside = true;
                    continue;
                if (let == '>')
```

```
inside = false;
                    continue;
                   (!inside)
                    array[arrayIndex] = let;
                    arrayIndex++;
            return new string(array, 0, arrayIndex);
        public static double DiscountedPrice(Coupon couponFromDb, double
OriginalOrderTotal)
        {
            if (couponFromDb == null)
              return OriginalOrderTotal;
            else
                if (couponFromDb.MinimumAmount > OriginalOrderTotal)
                    return OriginalOrderTotal;
                else
                    //everything is valid
                    if (Convert.ToInt32(couponFromDb.CouponType) ==
(int)Coupon.ECouponType.Euro)
                        //10 van 100
                        return Math.Round(OriginalOrderTotal -
couponFromDb.Discount, 2);
                    if (Convert.ToInt32(couponFromDb.CouponType) ==
(int)Coupon.ECouponType.Percent)
                        //10% van 100
                        return Math.Round(OriginalOrderTotal - (OriginalOrderTotal
 couponFromDb.Discount / 100), 2);
            return OriginalOrderTotal;
    }
}
```

2 Emails Sturen

- 2.1 Email Service toevoegen en registreren als Singleton
 - 1. Maak een nieuwe folder 'Services' aan en maak hierin een class EmailOptions

```
namespace PittigRestoMVC.Service
{
    public class EmailOptions
    {
        public string SendGridKey { get; set; }
    }
}
```

2. Maak onder de folder 'Services' een class EmailSender (afgeleide class van IEmailSender)

(Installeer de NuGet Package SendGrid)

```
using Microsoft.AspNetCore.Identity.UI.Services;
using Microsoft.Extensions.Options;
using SendGrid;
using SendGrid.Helpers.Mail;
using System.Threading.Tasks;
namespace PittigRestoMVC.Service
   public class EmailSender : IEmailSender
        public EmailOptions Options { get; set; }
        public EmailSender(IOptions<EmailOptions> emailOptions)
            Options = emailOptions.Value;
        public Task SendEmailAsync(string email, string subject, string message)
            return Execute(Options.SendGridKey, subject, message, email);
        }
        private Task Execute(string sendGridKey, string subject, string message,
string email)
        {
            var client = new SendGridClient(sendGridKey);
            var msg = new SendGridMessage()
            {
                From = new EmailAddress("admin@Pittig.com", "Pittig Restaurant"),
                Subject = subject,
                PlainTextContent = message,
                HtmlContent = message
            msg.AddTo(new EmailAddress(email));
            return client.SendEmailAsync(msg);
        }
    }
}
```

3. Installeer de laatste versie van NuGet Package SendGrid

```
1 reference
private Task Execute(string sendGridKey, string subject, string |
     var client = new SendGridClient(sendGridKey);
     var msg = new SendG % Message()
     {
                                 Generate class 'SendGridClient' in new file
          From = new Emai Generate class 'SendGridClient'
                                                                ", "Pittig Rest
          Subject = subje Generate nested class 'SendGridClient'
                                 Generate new type...
          PlainTextConten
HtmlContent = m Install package 'SendGrid'
                                                             Find and install latest version
                                                                Install with package manager...
     };
     msg.AddTo(new EmailAddress(email));
     return client.SendEmailAsync(msg);
```

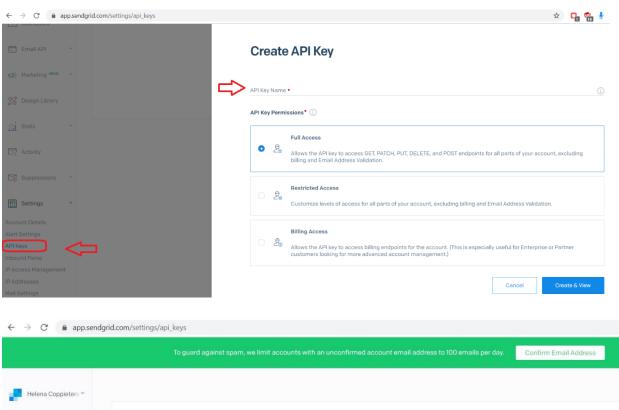
4. Open Startup.cs en registreer in de methode ConfigureServices de EmailSender als Singleton

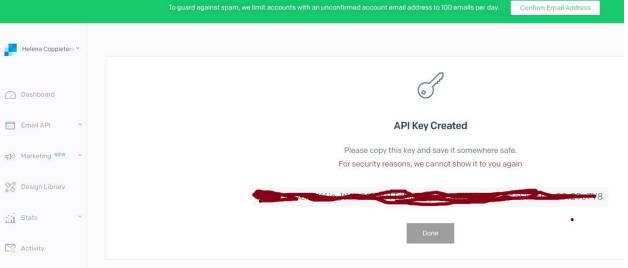
5. Creatie van API Key voor SendGrid

Maak een Account aan op https://sendgrid.com/

Klik onder Settings op API Keys

Vul een Naam in (bv Syntra-West), selecteer de nodige permissies en Creëer de API Waarde





6. Voeg deze API Key toe aan secrets.json (of appsettings.json)

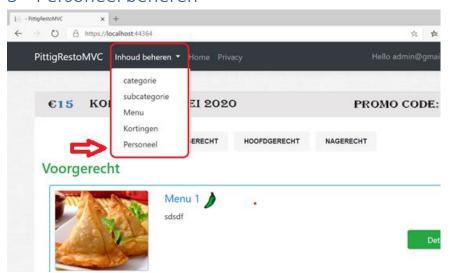


7. Open Areas/Identity/Pages/Register.cshtml.cs (code behind) van Razor page Register Pas de methode OnPostAsync aan :

```
public async Task<IActionResult> OnPostAsync(string returnUrl = null)
            string role = Request.Form["rdUserRole"].ToString();
            role = String.IsNullOrEmpty(role) ? SD.CustomerEndUser : role;
            returnUrl = returnUrl ?? Url.Content("~/");
            ExternalLogins = (await
signInManager.GetExternalAuthenticationSchemesAsync()).ToList();
            if (ModelState.IsValid)
                //var user = new IdentityUser { UserName = Input.Email, Email =
Input.Email };
                var user = new ApplicationUser
                    UserName = Input.Email,
                    Email = Input.Email,
                    Name = Input.Name,
                    City = Input.City,
                    StreetAddress = Input.StreetAddress,
                    State = Input.State,
                    PostalCode = Input.PostalCode,
                    PhoneNumber = Input.PhoneNumber
                };
                var result = await _userManager.CreateAsync(user, Input.Password);
                if (result.Succeeded)
                    logger.LogInformation("User created a new account with
password.");
                    await _userManager.AddToRoleAsync(user, role);
                    if (role == SD.CustomerEndUser)
                        await _signInManager.SignInAsync(user, isPersistent: false);
                        return RedirectToPage("RegisterConfirmation", new { email =
Input.Email, returnUrl = returnUrl });
                        //return RedirectToAction("Index", "Home", new { area =
"Customer" });
                    }
                    //return RedirectToAction("Index", "User", new { area = "Admin"
});
                    var code = await
_userManager.GenerateEmailConfirmationTokenAsync(user);
                    var callbackUrl = Url.Page(
                        "/Account/ConfirmEmail",
                        pageHandler: null,
                        values: new { userId = user.Id, code = code },
                        protocol: Request.Scheme);
```

```
await _emailSender.SendEmailAsync(Input.Email, "Confirm your
email",
                        $"Please confirm your account by <a</pre>
href='{HtmlEncoder.Default.Encode(callbackUrl)}'>clicking here</a>.");
                        //if ( userManager.Options.SignIn.RequireConfirmedAccount)
                        // return RedirectToPage("RegisterConfirmation", new {
email = Input.Email, returnUrl = returnUrl });
                        //}
                        //else
                            await signInManager.SignInAsync(user, isPersistent:
false);
                            return LocalRedirect(returnUrl);
                foreach (var error in result.Errors)
                    ModelState.AddModelError(string.Empty, error.Description);
                }
            }
            return Page();
        }
```

3 Personeel beheren



3.1 Aanmaken UserController

1. Maak onder de folder Areas/Admin/Controllers een nieuwe lege MVC Controller aan met naam 'UserController':

```
using System;
using System.Linq;
using System.Security.Claims;
using System.Threading.Tasks;
using Microsoft.AspNetCore.Authorization;
```

```
using Microsoft.AspNetCore.Mvc;
using Microsoft.EntityFrameworkCore;
using PittigRestoMVC.Data;
using PittigRestoMVC.Utility;
namespace PittigRestoMVC.Areas.Admin.Controllers
    [Area("Admin")]
    [Authorize(Roles = SD.ManagerUser)]
   public class UserController : Controller
        private readonly ApplicationDbContext _db;
        public UserController(ApplicationDbContext db)
            _{db} = db;
        public async Task<IActionResult> Index()
            var claimsIdentity = (ClaimsIdentity)this.User.Identity;
            var claim = claimsIdentity.FindFirst(ClaimTypes.NameIdentifier);
            return View(await _db.ApplicationUser.Where(u => u.Id != claim.Value).ToListAsync());
        }
        public async Task<IActionResult> Lock(string id)
            if (id == null)
            {
                return NotFound();
           }
            var applicationUser = await _db.ApplicationUser.FirstOrDefaultAsync(m => m.Id == id);
           if (applicationUser == null)
            {
                return NotFound();
            applicationUser.LockoutEnd = DateTime.Now.AddYears(100);
            await _db.SaveChangesAsync();
            return RedirectToAction(nameof(Index));
        public async Task<IActionResult> UnLock(string id)
            if (id == null)
            {
                return NotFound();
            var applicationUser = await _db.ApplicationUser.FirstOrDefaultAsync(m => m.Id == id);
            if (applicationUser == null)
            {
                return NotFound();
           }
            applicationUser.LockoutEnd = DateTime.Now;
            await _db.SaveChangesAsync();
            return RedirectToAction(nameof(Index));
   }
}
```

2. Maak onder de folder Areas/Admin/Views een nieuwe folder 'User' aan en daarin een Razor View 'Index.cshtml':

@model IEnumerable<ApplicationUser>

```
@{
   ViewData["Title"] = "Index";
   Layout = "~/Views/Shared/_Layout.cshtml";
}
<br /><br />
<div class="border backgroundWhite">
   <div class="row">
       <div class="col-6">
           <h2 class="text-info"> Gebruikerslijst</h2>
       </div>
       <div class="col-6 text-right">
           <a asp-area="Identity" asp-page="/Account/Register" class="btn btn-info"><i</pre>
class="fas fa-plus"></i> &nbsp; Nieuw Personeelslid</a>
       </div>
   </div>
   <br />
   <div>
       @if (Model.Count() > 0)
           @Html.DisplayNameFor(m => m.Name)
                  @Html.DisplayNameFor(m => m.Email)
                  @Html.DisplayNameFor(m => m.PhoneNumber)
                  @foreach (var item in Model)
                  <mark>@</mark>Html.DisplayFor(m => item.Name)

@Html.DisplayFor(m => item.Email)
                      @Html.DisplayFor(m => item.PhoneNumber)
                      >
                         @if (item.LockoutEnd == null || item.LockoutEnd <</pre>
DateTime.Now)
                         <a class="btn btn-success text-white" asp-action="Lock"</pre>
asp-route-id="@item.Id">
                             <i class="fas fa-lock-open"></i></i></op>
                         </a>
                         }
                         else
                         <a class="btn btn-danger text-white" asp-action="UnLock"</pre>
asp-route-id="@item.Id">
```

```
<i class="fas fa-lock"></i>
</a>
}

}

}

else
{

Er bestaan nog geen gebruikers...
}

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

- 4 Instellen van User Rollen toevoegen aan Register Razor pagina
 - 1. De Manager rol mag Users Registreren en een rol toekennen. Hiervoor wordt een radiobutton-list toegevoegd aan de Register.cshtml Razor page:

Voeg ook een using directive (bovenaan) toe naar PittigRestoMVC.Utility namespace(voor het gebruiken van de class SD):

```
@using PittigRestoMVC.Utility
@model RegisterModel
   ViewData["Title"] = "Registreer";
<h2 class="text-info">Een nieuwe account aanmaken</h2>
<form method="post" asp-route-returnUrl="@Model.ReturnUrl">
    <div class="border backgroundWhite">
        <div asp-validation-summary="ModelOnly" class="text-danger"></div>
        <div class="form-group row">
            <div class="col-2">
                <label asp-for="Input.Name" class="col-form-label"></label>
            </div>
            <div class="col-5">
                <input asp-for="Input.Name" class="form-control" />
            <span asp-validation-for="Input.Name" class="text-danger"></span>
        </div>
        <div class="form-group row">
            <div class="col-2">
                <label asp-for="Input.Email" class="col-form-label"></label>
            </div>
            <div class="col-5">
                <input asp-for="Input.Email" class="form-control" />
            <span asp-validation-for="Input.Email" class="text-danger"></span>
        </div>
        <div class="form-group row">
            <div class="col-2">
                <label asp-for="Input.PhoneNumber" class="col-form-label"></label>
            <div class="col-5">
```

```
</div>
   <span asp-validation-for="Input.PhoneNumber" class="text-danger"></span>
</div>
<div class="form-group row">
   <div class="col-2">
        <label asp-for="Input.StreetAddress" class="col-form-label"></label>
    <div class="col-5">
       <input asp-for="Input.StreetAddress" class="form-control" />
    </div>
   <span asp-validation-for="Input.StreetAddress" class="text-danger"></span>
</div>
<div class="form-group row">
    <div class="col-2">
        <label asp-for="Input.City" class="col-form-label"></label>
    </div>
    <div class="col-5">
       <input asp-for="Input.City" class="form-control" />
    </div>
   <span asp-validation-for="Input.City" class="text-danger"></span>
</div>
<div class="form-group row">
    <div class="col-2">
        <label asp-for="Input.State" class="col-form-label"></label>
    <div class="col-5">
       <input asp-for="Input.State" class="form-control" />
    </div>
   <span asp-validation-for="Input.State" class="text-danger"></span>
</div>
<div class="form-group row">
    <div class="col-2">
        <label asp-for="Input.PostalCode" class="col-form-label"></label>
    </div>
    <div class="col-5">
        <input asp-for="Input.PostalCode" class="form-control" />
    </div>
    <span asp-validation-for="Input.PostalCode" class="text-danger"></span>
</div>
<div class="form-group row">
   <div class="col-2">
        <label asp-for="Input.Password" class="col-form-label"></label>
   </div>
   <div class="col-5">
       <input asp-for="Input.Password" class="form-control" />
   <span asp-validation-for="Input.Password" class="text-danger"></span>
</div>
<div class="form-group row">
    <div class="col-2">
       <label asp-for="Input.ConfirmPassword" class="col-form-label"></label>
    </div>
   <div class="col-5">
        <input asp-for="Input.ConfirmPassword" class="form-control" />
    </div>
   <span asp-validation-for="Input.ConfirmPassword" class="text-danger"></span>
</div>
@if (User.IsInRole(SD.ManagerUser))
   <div class="form-group row">
       <div class="col-2">
       </div>
       <div class="col-5">
            <input type="radio" name="rdUserRole" value="@SD.KitchenUser" checked /> Keuken
            <input type="radio" name="rdUserRole" value="@SD.FrontDeskUser" checked /> Balie
            <input type="radio" name="rdUserRole" value="@SD.ManagerUser" checked /> Manager
```

<input asp-for="Input.PhoneNumber" class="form-control" />

- 4.1 Toevoegen van Rollen aan Razor code behind:
 - 1. Open Register.cshtml.cs, de code behind van de Register Razor page en pas de methode

OnPostAsync aan:

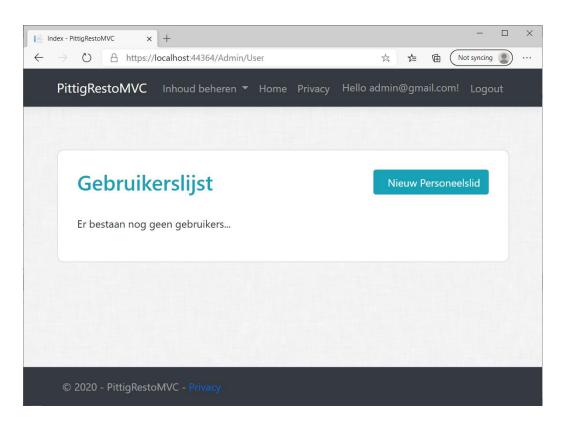
```
using System;
using System.Collections.Generic;
using System.ComponentModel.DataAnnotations;
using System.Text.Encodings.Web;
using System.Threading.Tasks;
using Microsoft.AspNetCore.Authorization;
using Microsoft.AspNetCore.Identity;
using Microsoft.AspNetCore.Identity.UI.Services;
using Microsoft.AspNetCore.Mvc;
using Microsoft.AspNetCore.Mvc.RazorPages;
using Microsoft.Extensions.Logging;
using PittigRestoMVC.Models;
using PittigRestoMVC.Utility;
namespace PittigRestoMVC.Areas.Identity.Pages.Account
    [AllowAnonymous]
    public class RegisterModel : PageModel
    {
        private readonly SignInManager<IdentityUser> _signInManager;
        private readonly UserManager<IdentityUser> _userManager;
        private readonly ILogger<RegisterModel> _logger;
        private readonly IEmailSender emailSender;
        private readonly RoleManager<IdentityRole> roleManager;
        public RegisterModel(
            UserManager<IdentityUser> userManager,
            SignInManager<IdentityUser> signInManager,
            ILogger<RegisterModel> logger,
            IEmailSender emailSender,
            RoleManager<IdentityRole> roleManager)
        {
            _userManager = userManager;
            _signInManager = signInManager;
            _logger = logger;
            _emailSender = emailSender;
            _roleManager = roleManager;
        }
        [BindProperty]
        public InputModel Input { get; set; }
```

```
public string ReturnUrl { get; set; }
        public class InputModel
            [Required]
            [EmailAddress]
            [Display(Name = "Email")]
            public string Email { get; set; }
            [Required]
            [StringLength(100, ErrorMessage = "Het {0} moet minstens {2} en
maximimaal {1} tekens bevatten.", MinimumLength = 6)]
            [DataType(DataType.Password)]
            [Display(Name = "Wachtwoord")]
            public string Password { get; set; }
            [DataType(DataType.Password)]
            [Display(Name = "Bevestig Wachtwoord")]
            [Compare("Password", ErrorMessage = "Het wachtwoord en bevestiging van
wachtwoord komen niet overeen")]
            public string ConfirmPassword { get; set; }
            [Required]
            [Display(Name = "Naam")]
            public string Name { get; set; }
            [Display(Name = "Straat")]
            public string StreetAddress { get; set; }
            [Display(Name = "TelNr")]
            public string PhoneNumber { get; set; }
            [Display(Name = "Gemeente")]
            public string City { get; set; }
            [Display(Name = "Provincie")]
            public string State { get; set; }
            [Display(Name = "Postcode")]
            public string PostalCode { get; set; }
        }
        public void OnGet(string returnUrl = null)
            ReturnUrl = returnUrl;
        }
        public async Task<IActionResult> OnPostAsync(string returnUrl = null)
            string role = Request.Form["rdUserRole"].ToString();
            role = String.IsNullOrEmpty(role) ? SD.CustomerEndUser : role;
            if (ModelState.IsValid)
                var user = new ApplicationUser
                    UserName = Input.Email,
                    Email = Input.Email,
                    Name = Input.Name,
                    City = Input.City,
                    StreetAddress = Input.StreetAddress,
                    State = Input.State,
```

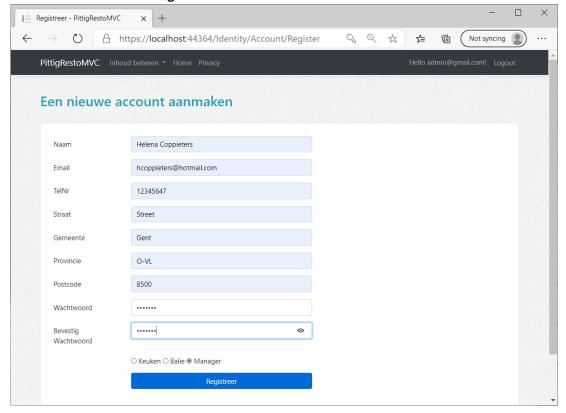
```
PostalCode = Input.PostalCode,
                    PhoneNumber = Input.PhoneNumber
                };
                var result = await userManager.CreateAsync(user, Input.Password);
                if (result.Succeeded)
                     logger.LogInformation("User created a new account with
             password.");
                    await _userManager.AddToRoleAsync(user, role);
                    if (role == SD.CustomerEndUser)
                        await signInManager.SignInAsync(user, isPersistent:
false);
                    return RedirectToAction("Index", "Home", new { area =
'Customer" });
         return RedirectToAction("Index", "User", new { area = "Admin"
});
                    //var code = await
_userManager.GenerateEmailConfirmationTokenAsync(user);
                    //var callbackUrl = Url.Page(
                         "/Account/ConfirmEmail",
                         pageHandler: null,
                         values: new { userId = user.Id, code = code },
                         protocol: Request.Scheme);
                   //await emailSender.SendEmailAsync(Input.Email, "Confirm your
email",
                         $"Please confirm your account by <a</pre>
href='{HtmlEncoder.Default.Encode(callbackUrl)}'>clicking here</a>.");
                foreach (var error in result.Errors)
                    ModelState.AddModelError(string.Empty, error.Description);
            }
            return Page();
        }
}
```

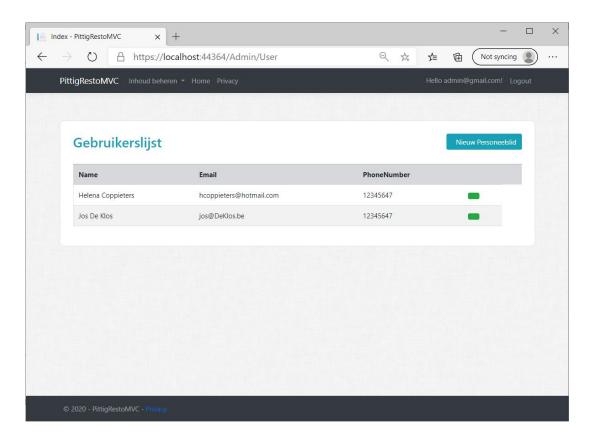
4.2 Test de app uit:

1.log in als admin@gmail.com en open de Personeels-pagina:

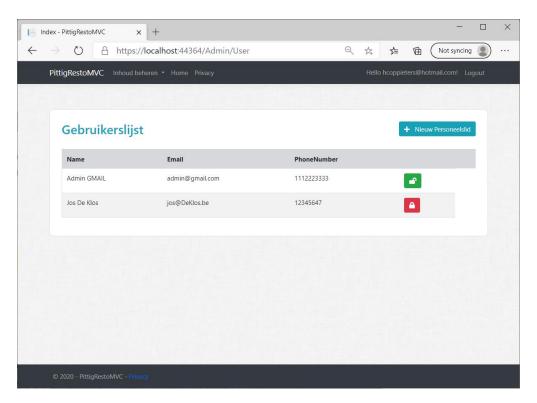


2. Klik op de button "Nieuw personeelslid" en voeg een paar gebruikers toe met verschillende rol bv een user met Manager-rol en user met Balie-rol:

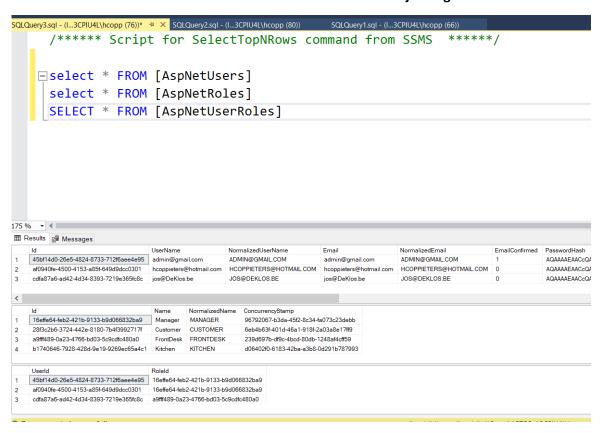




3. De lock-icoontjes, kunnen bv van de website font-awesome worden gehaald:
Open Views/Shared/_Layout.cshtml en voeg hiervoor de volgende lijn toe aan de head:



4. Controleer in de database of de users en hun rollen correct zijn aangemaakt:



5 Models toevoegen voor Bestellingen

1. Voeg onder de folder models een class voor OrderHeader toe

```
using PittigRestoMVC.Models;
using System;
using System.ComponentModel.DataAnnotations;
using System.ComponentModel.DataAnnotations.Schema;
namespace PittigRestoMVC.Models
{
    public class OrderHeader
        [Key]
        public int Id { get; set; }
        [Required]
        public string UserId { get; set; }
        [ForeignKey("UserId")]
        public virtual ApplicationUser ApplicationUser { get; set; }
        [Required]
        [Display(Name = "Datum bestelling")]
        public DateTime OrderDate { get; set; }
        [Required]
        public double OrderTotalOriginal { get; set; }
        [Required]
        [DisplayFormat(DataFormatString = "{0:00}")]
        [Display(Name = "Totaal bestelling")]
        public double OrderTotal { get; set; }
        [Required]
        [Display(Name = "Tijdstip ophaling")]
        public DateTime PickUpTime { get; set; }
        [Required]
        [NotMapped]
        [Display(Name = "Datum ophaling")]
        public DateTime PickUpDate { get; set; }
        [Display(Name = "Kortingscode")]
        public string CouponCode { get; set; }
        [Display(Name = "Korting")]
        public double CouponCodeDiscount { get; set; }
        public string Status { get; set; }
        [Display(Name = "Status betaling")]
        public string PaymentStatus { get; set; }
        [Display(Name = "Commentaar")]
        public string Comments { get; set; }
        [Display(Name = "Naam ophaler")]
        public string PickupName { get; set; }
```

```
[Display(Name = "TelNr")]
   public string PhoneNumber { get; set; }

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

2. Voeg onder de folder models eveneens een class voor OrderDetails toe

```
public class OrderDetails
{
    [Key]
    public int Id { get; set; }
    [Required]
    public int OrderId { get; set; }
    [ForeignKey("OrderId")]
    public virtual OrderHeader OrderHeader { get; set; }
    [Required]
    public int MenuItemId { get; set; }
    [ForeignKey("MenuItemId")]
    public virtual MenuItem MenuItem { get; set; }
    public int Count { get; set; }
    public string Name { get; set; }
    public string Description { get; set; }
    [Required]
    public double Price { get; set; }
}
```

3. Voeg aan ApplicationDbContext.cs een Properties toe voor de DbSet van OrderHeader en OrderDetails items

```
public DbSet<OrderHeader> OrderHeader { get; set; }
public DbSet<OrderDetails> OrderDetails { get; set; }
```

4. Voeg in Package manager console een Migration toe voor het aanmaken van de OrderHeader en OrderDetails tabellen in de database

```
PM> Add-Migration AddOrderTablesToDb PM> update-database
```

- 6 Winkelwagen toevoegen
- 6.1 Aanmaken model voor Winkelwagen
 - 5. Voeg onder de folder models een nieuwe class toe

```
public class ShoppingCart
{
    public ShoppingCart()
```

```
{
    Count = 1;
}

public int Id { get; set; }

public string ApplicationUserId { get; set; }

[NotMapped]
[ForeignKey("ApplicationUserId")]
public virtual ApplicationUser ApplicationUser { get; set; }

public int MenuItemId { get; set; }

[NotMapped]
[ForeignKey("MenuItemId")]
public virtual MenuItem MenuItem { get; set; }

[Range(1,int.MaxValue, ErrorMessage = "Geef een waarde van minstens {1} aub")]
public int Count { get; set; }
```

- 6. Voeg aan ApplicationDbContext.cs een Property toe voor de DbSet van ShoppingCart items public DbSet<ShoppingCart> ShoppingCart { get; set; }
- 7. Voeg in Package manager console een Migration toe voor het aanmaken van de ShoppingCart tabel in de database

```
PM> Add-Migration AddShoppingCartToDb PM> update-database
```

6.2 ViewModel toevoegen voor Winkelwagen razor page

Maak onder de folder Models/ViewModels een class OrderDetailsCart aan:

```
public class OrderDetailsCart
{
    public List<ShoppingCart> listCart { get; set; }
    public OrderHeader OrderHeader { get; set; }
}
```

6.3 Cart Controller toevoegen

Maak onder de folder Areas/Customer/Controllers een Lege MVC Controller toe met naam 'CartController'

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Security.Claims;
using System.Threading.Tasks;
using Microsoft.AspNetCore.Http;
using Microsoft.AspNetCore.Identity.UI.Services;
using Microsoft.AspNetCore.Mvc;
using Microsoft.EntityFrameworkCore;
using PittigRestoMVC.Data;
using PittigRestoMVC.Models;
```

```
using PittigRestoMVC.Models.ViewModels;
using PittigRestoMVC.Utility;
using Stripe;
namespace PittigRestoMVC.Areas.Customer.Controllers
    [Area("Customer")]
   public class CartController : Controller
        private readonly ApplicationDbContext _db;
        private readonly IEmailSender _emailSender;
        [BindProperty]
        public OrderDetailsCart detailCart { get; set; }
        public CartController(ApplicationDbContext db, IEmailSender emailSender)
            _{db} = db;
            emailSender = emailSender;
        public async Task<IActionResult> Index()
            detailCart = new OrderDetailsCart()
                OrderHeader = new Models.OrderHeader()
           };
           detailCart.OrderHeader.OrderTotal = 0;
           var claimsIdentity = (ClaimsIdentity)User.Identity;
            var claim = claimsIdentity.FindFirst(ClaimTypes.NameIdentifier);
            var cart = _db.ShoppingCart.Where(c => c.ApplicationUserId == claim.Value);
            if (cart != null)
            {
                detailCart.listCart = cart.ToList();
            }
            foreach (var list in detailCart.listCart)
                list.MenuItem = await _db.MenuItem.FirstOrDefaultAsync(m => m.Id == list.MenuItemId);
                detailCart.OrderHeader.OrderTotal = detailCart.OrderHeader.OrderTotal +
(list.MenuItem.Price * list.Count);
                list.MenuItem.Description = SD.ConvertToRawHtml(list.MenuItem.Description);
                if (list.MenuItem.Description.Length > 100)
                    list.MenuItem.Description = list.MenuItem.Description.Substring(0, 99) + "...";
                }
            detailCart.OrderHeader.OrderTotalOriginal = detailCart.OrderHeader.OrderTotal;
           if (HttpContext.Session.GetString(SD.ssCouponCode) != null)
                detailCart.OrderHeader.CouponCode = HttpContext.Session.GetString(SD.ssCouponCode);
                var couponFromDb = await _db.Coupon.Where(c => c.Name.ToLower() ==
detailCart.OrderHeader.CouponCode.ToLower()).FirstOrDefaultAsync();
                detailCart.OrderHeader.OrderTotal = SD.DiscountedPrice(couponFromDb,
detailCart.OrderHeader.OrderTotalOriginal);
           }
            return View(detailCart);
        public async Task<IActionResult> Summary()
```

```
{
            detailCart = new OrderDetailsCart()
                OrderHeader = new Models.OrderHeader()
            detailCart.OrderHeader.OrderTotal = 0;
            var claimsIdentity = (ClaimsIdentity)User.Identity;
            var claim = claimsIdentity.FindFirst(ClaimTypes.NameIdentifier);
            ApplicationUser applicationUser = await _db.ApplicationUser.Where(c => c.Id ==
claim.Value).FirstOrDefaultAsync();
            var cart = _db.ShoppingCart.Where(c => c.ApplicationUserId == claim.Value);
            if (cart != null)
            {
                detailCart.listCart = cart.ToList();
            foreach (var list in detailCart.listCart)
                list.MenuItem = await _db.MenuItem.FirstOrDefaultAsync(m => m.Id == list.MenuItemId);
                detailCart.OrderHeader.OrderTotal = detailCart.OrderHeader.OrderTotal +
(list.MenuItem.Price * list.Count);
           detailCart.OrderHeader.OrderTotalOriginal = detailCart.OrderHeader.OrderTotal;
            detailCart.OrderHeader.PickupName = applicationUser.Name;
            detailCart.OrderHeader.PhoneNumber = applicationUser.PhoneNumber;
            detailCart.OrderHeader.PickUpTime = DateTime.Now;
            if (HttpContext.Session.GetString(SD.ssCouponCode) != null)
            {
                detailCart.OrderHeader.CouponCode = HttpContext.Session.GetString(SD.ssCouponCode);
                var couponFromDb = await db.Coupon.Where(c => c.Name.ToLower() ==
detailCart.OrderHeader.CouponCode.ToLower()).FirstOrDefaultAsync();
                detailCart.OrderHeader.OrderTotal = SD.DiscountedPrice(couponFromDb,
detailCart.OrderHeader.OrderTotalOriginal);
            return View(detailCart);
        }
        [HttpPost]
        [ValidateAntiForgeryToken]
        [ActionName("Summary")]
        public async Task<IActionResult> SummaryPost(string stripeToken)
            var claimsIdentity = (ClaimsIdentity)User.Identity;
            var claim = claimsIdentity.FindFirst(ClaimTypes.NameIdentifier);
           detailCart.listCart = await _db.ShoppingCart.Where(c => c.ApplicationUserId ==
claim.Value).ToListAsync();
            detailCart.OrderHeader.PaymentStatus = SD.PaymentStatusPending;
            detailCart.OrderHeader.OrderDate = DateTime.Now;
            detailCart.OrderHeader.UserId = claim.Value;
            detailCart.OrderHeader.Status = SD.PaymentStatusPending;
            detailCart.OrderHeader.PickUpTime =
Convert.ToDateTime(detailCart.OrderHeader.PickUpDate.ToShortDateString() + " " +
detailCart.OrderHeader.PickUpTime.ToShortTimeString());
            List<OrderDetails> orderDetailsList = new List<OrderDetails>();
            _db.OrderHeader.Add(detailCart.OrderHeader);
            await _db.SaveChangesAsync();
```

```
detailCart.OrderHeader.OrderTotalOriginal = 0;
            foreach (var item in detailCart.listCart)
                item.MenuItem = await _db.MenuItem.FirstOrDefaultAsync(m => m.Id == item.MenuItemId);
                OrderDetails orderDetails = new OrderDetails
                    MenuItemId = item.MenuItemId,
                    OrderId = detailCart.OrderHeader.Id,
                    Description = item.MenuItem.Description,
                    Name = item.MenuItem.Name,
                    Price = item.MenuItem.Price,
                    Count = item.Count
                detailCart.OrderHeader.OrderTotalOriginal += orderDetails.Count * orderDetails.Price;
                _db.OrderDetails.Add(orderDetails);
            }
            if (HttpContext.Session.GetString(SD.ssCouponCode) != null)
                detailCart.OrderHeader.CouponCode = HttpContext.Session.GetString(SD.ssCouponCode);
                var couponFromDb = await _db.Coupon.Where(c => c.Name.ToLower() ==
detailCart.OrderHeader.CouponCode.ToLower()).FirstOrDefaultAsync();
                detailCart.OrderHeader.OrderTotal = SD.DiscountedPrice(couponFromDb,
detailCart.OrderHeader.OrderTotalOriginal);
           }
            else
            {
                detailCart.OrderHeader.OrderTotal = detailCart.OrderHeader.OrderTotalOriginal;
            detailCart.OrderHeader.CouponCodeDiscount = detailCart.OrderHeader.OrderTotalOriginal -
detailCart.OrderHeader.OrderTotal;
            db.ShoppingCart.RemoveRange(detailCart.listCart);
           HttpContext.Session.SetInt32(SD.ssShoppingCartCount, 0);
            await _db.SaveChangesAsync();
            var options = new ChargeCreateOptions
            {
                Amount = Convert.ToInt32(detailCart.OrderHeader.OrderTotal * 100),
                Currency = "eur",
                Description = "Order ID : " + detailCart.OrderHeader.Id,
                Source = stripeToken
            };
            var service = new ChargeService();
           Charge charge = service.Create(options);
            if (charge.BalanceTransactionId == null)
            {
                detailCart.OrderHeader.PaymentStatus = SD.PaymentStatusRejected;
            }
            else
            {
                detailCart.OrderHeader.TransactionId = charge.BalanceTransactionId;
            if (charge.Status.ToLower() == "succeeded")
            {
                detailCart.OrderHeader.PaymentStatus = SD.PaymentStatusApproved;
                detailCart.OrderHeader.Status = SD.StatusSubmitted;
            }
            else
            {
                detailCart.OrderHeader.PaymentStatus = SD.PaymentStatusRejected;
```

```
await _db.SaveChangesAsync();
            return RedirectToAction("Index", "Home");
        }
        public IActionResult AddCoupon()
            if (detailCart.OrderHeader.CouponCode == null)
            {
                detailCart.OrderHeader.CouponCode = "";
           HttpContext.Session.SetString(SD.ssCouponCode, detailCart.OrderHeader.CouponCode);
            return RedirectToAction(nameof(Index));
        }
        public IActionResult RemoveCoupon()
           HttpContext.Session.SetString(SD.ssCouponCode, string.Empty);
           return RedirectToAction(nameof(Index));
        }
        public async Task<IActionResult> Plus(int cartId)
           var cart = await _db.ShoppingCart.FirstOrDefaultAsync(c => c.Id == cartId);
           cart.Count += 1;
            await _db.SaveChangesAsync();
           return RedirectToAction(nameof(Index));
        public async Task<IActionResult> Minus(int cartId)
            var cart = await _db.ShoppingCart.FirstOrDefaultAsync(c => c.Id == cartId);
           if (cart.Count == 1)
           {
                _db.ShoppingCart.Remove(cart);
                await _db.SaveChangesAsync();
                var cnt = _db.ShoppingCart.Where(u => u.ApplicationUserId ==
cart.ApplicationUserId).ToList().Count;
                HttpContext.Session.SetInt32(SD.ssShoppingCartCount, cnt);
            }
           else
            {
                cart.Count -= 1;
                await _db.SaveChangesAsync();
            return RedirectToAction(nameof(Index));
        }
        public async Task<IActionResult> Remove(int cartId)
            var cart = await _db.ShoppingCart.FirstOrDefaultAsync(c => c.Id == cartId);
            _db.ShoppingCart.Remove(cart);
            await _db.SaveChangesAsync();
           var cnt = _db.ShoppingCart.Where(u => u.ApplicationUserId ==
cart.ApplicationUserId).ToList().Count;
           HttpContext.Session.SetInt32(SD.ssShoppingCartCount, cnt);
           return RedirectToAction(nameof(Index));
        }
```

```
}
```

6.4 NuGet Package voor Stripe Installeren

```
var options = new ChargeCreateOptions
             Amount = Convert.ToI
                                                                                            rderTotal
                                                  Generate class 'ChargeCreateOptions' in new file
             Currency = "eur",
                                                  Generate class 'ChargeCreateOptions'
                                                  Generate nested class 'ChargeCreateOptions'
             Description = "Order
                                                                                            der.Id,
                                                  Generate new type...
    ∜ ▼
                                               Install package 'Stripe.net'
                                                                                            Find and install Is
                                                                                            Install with packa
6.5 Toevoegen van stripe settings class in folder Utility
    public class StripeSettings
        public string SecretKey { get; set; }
        public string PublishableKey { get; set; }
6.6 Toevoegen Stripe API Key aan appsettings.json
  "ConnectionStrings": {
    "DefaultConnection":
"Server=(localdb)\\mssqllocaldb;Database=PittigDBMVC;Trusted Connection=True;MultipleActi
veResultSets=true"
  },
  "Logging": {
    "LogLevel": {
   "Default": "Information",
      "Microsoft": "Warning",
      "Microsoft.Hosting.Lifetime": "Information"
     Stripe": {
      "SecretKey": "sk test_kGzUGDqcDrmVHhktqZZUFyI7",
      "PublishableKey": "pk_test_DS6jsf1BPuhpojL8FqWXbBpT"
    "SendGridKey": "SG.rX1GLOk-SceT42UNLMt2Iw.2ipjqz34QBAc05-2 pvV2xDtRuFf-
yLTtCbc2cw28K8"
    In Startup.cs: Aanpassen session settings en configuratie voor Stripe
        public void ConfigureServices(IServiceCollection services)
            services.AddDbContext<ApplicationDbContext>(options =>
                options.UseSqlServer(
                    Configuration.GetConnectionString("DefaultConnection")));
            services.AddIdentity<IdentityUser,IdentityRole>()
```

```
.AddDefaultTokenProviders()
                .AddEntityFrameworkStores<ApplicationDbContext>();// options =>
options.SignIn.RequireConfirmedAccount = true
            services.AddSingleton<IEmailSender, EmailSender>();
            services.Configure<EmailOptions>(Configuration);
            services.Configure<StripeSettings>(Configuration.GetSection("Stripe"));
            services.AddScoped<IDbInitializer, DbInitializer>();
            services.AddControllersWithViews();
            services.AddRazorPages().AddRazorRuntimeCompilation();
            services.AddSession(options =>
                options.Cookie.IsEssential = true;
                options.IdleTimeout = TimeSpan.FromMinutes(30);
                options.Cookie.HttpOnly = true;
            });
        public void Configure(IApplicationBuilder app, IWebHostEnvironment env,
IDbInitializer dbInitializer)
            if (env.IsDevelopment())
                app.UseDeveloperExceptionPage();
                app.UseDatabaseErrorPage();
            else
            {
                app.UseExceptionHandler("/Home/Error");
                app.UseHsts();
            app.UseRouting();
            StripeConfiguration.ApiKey = Configuration.GetSection("Stripe")["SecretKey"];
            dbInitializer.Initialize();
            app.UseHttpsRedirection();
            app.UseStaticFiles();
            app.UseCookiePolicy();
            app.UseSession();
            app.UseAuthentication();
            app.UseAuthorization();
            app.UseEndpoints(endpoints =>
                endpoints.MapControllerRoute(
                    name: "areas",
                    pattern: "{area=Customer}/{controller=Home}/{action=Index}/{id?}");
                endpoints.MapRazorPages();
            });
        }
```

6.8 Index Razor View toevoegen voor winkelwagen

Maak een nieuwe folder 'Cart' aan onder de folder Areas/Customer/Views en

Maak hierin een razor view Index.cshtml

```
@model PittigRestoMVC.Models.ViewModels.OrderDetailsCart
    ViewData["Title"] = "Index";
    Layout = "~/Views/Shared/ Layout.cshtml";
}
<form method="post">
    @if (Model.listCart.Count > 0)
        <input id="userId" asp-for="@Model.listCart[0].ApplicationUserId" hidden />
        <div class="backgroundWhiteBorder">
            <div class="container">
                 <div class="card">
                     <div class="card-header bg-dark text-light ml-0 row container">
                         <div class="col-6">
                             <i class="fa fa-shopping-cart"></i> &nbsp;
                             Winkelwagen
                         </div>
                         <div class="col-6 text-right">
                             <a asp-area="Customer" asp-controller="Home" asp-</pre>
action="Index" class="btn btn-outline-info btn-sm">Verder winkelen</a>
                         </div>
                     </div>
                     <div class="card-body">
                         @foreach (var item in Model.listCart)
                             <div class="row">
                                 <div class="d-none d-lg-block col-lg-2 text-center py-2">
                                     <img src="@item.MenuItem.Image" class="rounded"</pre>
width="120" height="80" />
                                 </div>
                                 <div class="col-12 text-sm-center col-lg-5 text-lg-left">
                                     <h4><strong>@item.MenuItem.Name</strong></h4>
                                      <h4><small>@item.MenuItem.Description</small></h4>
                                 <div class="col-12 text-sm-center col-lg-5 text-lg-right"</pre>
row">
                                      <div class="col-4 text-md-right" style="padding-</pre>
top:5px;">
                                          <h6><strong>€@item.MenuItem.Price <span
class="text-muted">x</span> @item.Count </strong></h6>
                                      </div>
                                      <div class="col-6 col-sm-4 col-lg-6">
                                          <div class="float-right mx-1">
                                              <button type="submit" class="btn btn-primary"</pre>
asp-action="plus" asp-route-cartId="@item.Id">
                                                  <i class="fas fa-plus"></i></i>
                                              </button>
                                          </div>
                                          <div class="float-right mx-1">
                                              <button type="submit" class="btn btn-danger"</pre>
asp-action="minus" asp-route-cartId="@item.Id">
                                                  <i class="fas fa-minus"></i></i></or>
                                              </button>
                                          </div>
                                      </div>
```

```
<div class="col-2 col-sm-4 col-lg-2 text-right">
                                        <button type="submit" class="btn btn-outline-</pre>
danger" asp-action="remove" asp-route-cartId="@item.Id">
                                           <i class="fas fa-trash"></i></i>
                                        </button>
                                    </div>
                                </div>
                            </div>
                            <hr />
                        }
                        <div class="row">
                            <div class="col-12 col-md-5">
                                <div class="row">
                                    <div class="col-7">
                                       <input asp-for="@Model.OrderHeader.CouponCode"</pre>
id="txtCouponCode" class="form-control" placeholder="korTingscode..." />
                                    </div>
                                    <div class="col-5" style="margin-top:2px;">
                                        <button type="submit" class="btn btn-sm form-</pre>
control btn-outline-success" id="btnCoupon" asp-action="AddCoupon">
                                           Toevoegen
                                        </button>
                                        <button type="submit" class="btn btn-sm form-</pre>
control btn-outline-danger" style="display:none" id="btnRemoveCoupon" asp-
action="RemoveCoupon">
                                           Verwijderen
                                        </button>
                                   </div>
                               </div>
                            </div>
                            <div class="col-12 col-md-6 offset-md-1 col-lg-4 offset-lg-3</pre>
pr-4">
                                between bg-light">
                                       <span class="text-info"> Totaal (EUR)</span>
                                        <strong class="text-info">€ <span</pre>
id="txtOrderTotal">@Model.OrderHeader.OrderTotal</span></strong>
                                </div>
                        </div>
                    </div>
                    <div class="card-footer">
                        <div class="col-12 col-1g-4 offset-1g-8 col-md-6 offset-md-6">
                           <a asp-action="Summary" asp-area="Customer" asp-</pre>
controller="Cart" class="btn btn-success form-control">Overzicht</a>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    }
    else
```

```
<div class="backgroundWhiteBorder"> Winkelwagen is leeg...</div>
</form>
@section Scripts{
    <script>
        $(function () {
            var couponCode = document.getElementById("txtCouponCode").value;
            if (couponCode.length > 0) {
                document.getElementById('btnCoupon').style.display = 'none';
                document.getElementById('btnRemoveCoupon').style.display = '
            }
            else {
                document.getElementById('btnCoupon').style.display = '';
                document.getElementById('btnRemoveCoupon').style.display = 'none';
            }
        });
    </script>
}
```

7 Views/Shared/ Layout.cshtml aanpassen:

7.1 tonen/verbergen van delen op basis van rollen en winkelwagen tonen

```
@using PittigRestoMVC.Utility
Qusing Microsoft.AspNetCore.Http
@inject IHttpContextAccessor HttpContextAccessor
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>@ViewData["Title"] - PittigRestoMVC</title>
    <link rel="stylesheet" href="~/lib/bootstrap/dist/css/bootstrap.min.css" />
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.5.0/css/all.css"</pre>
integrity="sha384-B4dIYHKNBt8Bc12p+WXckhzcICo0wtJAoU8YZTY5qE0Id1GSseTk6S+L3B1XeVIU"
crossorigin="anonymous">
    <link rel="stylesheet" href="~/css/site.css" />
</head>
<body class="search-background">
    <header>
        <nav class="navbar navbar-expand-sm navbar-toggleable-sm navbar-dark bg-dark border-bottom</pre>
box-shadow mb-3">
           <div class="container">
               <a class="navbar-brand" asp-area="" asp-controller="Home" asp-</pre>
action="Index">PittigRestoMVC</a>
               <button class="navbar-toggler" type="button" data-toggle="collapse" data-</pre>
target=".navbar-collapse" aria-controls="navbarSupportedContent"
                       aria-expanded="false" aria-label="Toggle navigation">
                   <span class="navbar-toggler-icon"></span>
               <div class="navbar-collapse collapse d-sm-inline-flex flex-sm-row-reverse">
                   <partial name="_LoginPartial" />
                   @if (User.IsInRole(SD.ManagerUser))
                           <a class="nav-link dropdown-toggle" href="#"</pre>
id="navbarDropDownMenuLink" role="button"
                                  data-toggle="dropdown" aria-haspopup="true" aria-
expanded="false">
                                   Inhoud beheren
```

```
</a>
                               <div class="dropdown-menu" aria-
labelledby="navbarDropDownMenuLink">
                                   <a class="dropdown-item" asp-action="Index" asp-</pre>
controller="Category" asp-area="Admin">categorie</a>
                                   <a class="dropdown-item" asp-action="Index" asp-</pre>
controller="SubCategory" asp-area="Admin">subcategorie</a>
                                   <a class="dropdown-item" asp-action="Index" asp-</pre>
controller="MenuItem" asp-area="Admin">Menu</a>
                                   <a class="dropdown-item" asp-action="Index" asp-</pre>
controller="Coupon" asp-area="Admin">Kortingen</a>
                                   <a class="dropdown-item" asp-action="Index" asp-</pre>
controller="User" asp-area="Admin">Personeel</a>
                               </div>
                           @if
(HttpContextAccessor.HttpContext.Session.GetInt32(@SD.ssShoppingCartCount) != null)
                           <a asp-area="Customer" asp-controller="Cart" asp-action="Index"</pre>
class="nav-link">
                                       var count =
HttpContextAccessor.HttpContext.Session.GetInt32(@SD.ssShoppingCartCount);
                                   <i class="fas fa-shopping-cart"></i> &nbsp; (@count)
                               </a>
                           }
                       else
                           <a href="#" class="nav-link">
                                  <i class="fas fa-shopping-cart"></i> &nbsp; (θ)
                               </a>
                           <a class="nav-link" asp-area="" asp-controller="Home" asp-</pre>
action="Index">Home</a>
                       <a class="nav-link" asp-area="" asp-controller="Home" asp-</pre>
action="Privacy">Privacy</a>
                       </div>
           </div>
       </nav>
    </header>
    <div class="container">
       <main role="main" class="pb-3">
           @RenderBody()
       </main>
    </div>
    <footer class="border-top pl-3 footer text-white-50" style="background-color:#343a40">
       <div class="container">
           © 2020 - PittigRestoMVC - <a asp-area="" asp-controller="Home" asp-</pre>
action="Privacy">Privacy</a>
       </div>
    </footer>
    <script src="~/lib/jquery/dist/jquery.min.js"></script>
    <script src="~/lib/bootstrap/dist/js/bootstrap.bundle.min.js"></script>
    <script src="~/js/site.js" asp-append-version="true"></script>
```

```
@RenderSection("Scripts", required: false)
</body>
</html>
```

8 Bestellingen toevoegen

8.1 Viewmodel class aanmaken voor OrderDetails

Maak in een folder Models/Viewmodels de class OrderDetailsViewModel aan:

```
namespace PittigRestoMVC.Models.ViewModels
{
    public class OrderDetailsViewModel
    {
        public OrderHeader OrderHeader { get; set; }
        public List<OrderDetails> OrderDetails { get; set; }
    }
}
```

8.2 Viewmodel class aanmaken voor OrderDetails

Maak in een folder Models/Viewmodels de class OrderDetailsViewModel aan:

```
namespace PittigRestoMVC.Models.ViewModels
{
    public class OrderDetailsViewModel
    {
        public OrderHeader OrderHeader { get; set; }
        public List<OrderDetails> OrderDetails { get; set; }
    }
}
```

8.3 Paging Info model aanmaken onder de folder Models (om te gebruiken in orderdetails)

```
public class PagingInfo
{
   public int TotalItem { get; set; }

   public int ItemsPerPage { get; set; }

   public int CurrentPage { get; set; }

   public int totalPage => (int)Math.Ceiling((decimal)TotalItem / ItemsPerPage);

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

8.4 Viewmodel class aanmaken voor OrderListViewModel

Maak in een folder Models/Viewmodels de class OrderListViewModel aan:

```
namespace PittigRestoMVC.Models.ViewModels
{
    public class OrderListViewModel
    {
        public IList<OrderDetailsViewModel> Orders { get; set; }
```

```
public PagingInfo PagingInfo { get; set; }
}
```

8.5 Order Controller toevoegen

Maak onder de folder Areas/Customer/Controllers een Lege MVC Controller toe met naam 'OrderController'



9 Referenties

https://docs.microsoft.com/en-us/aspnet/core/security/authentication/accconfirm?view=aspnetcore-3.1&tabs=visual-studio

https://fontawesome.com/6?next=%2Fv5.5.0%2Ficons%2Flock-open

http://bekenty.com/send-e-mail-in-asp-net-core-with-sendgrid/

https://hostlaunch.io/docs/how-to-get-a-sendgrid-api-key/

https://www.youtube.com/watch?v=ddSymc0hE0Ahttps://app.sendgrid.com/guide/integrate/langs/csharp

https://www.codeproject.com/Articles/1276970/NET-Core-Razor-Page-Email-Form-using-SendGrid-and https://sendgrid.com/docs/API Reference/index.html