The final step before payment is usually a preview of the future <u>order</u>. In this step, visitors/<u>customers</u> can check content of their <u>s</u> <u>hopping cart</u>, billing/shipping <u>details they typed about themselves</u>, and they can select their preferred <u>payment method</u>. Finally, the page provides a button that finalizes the <u>checkout process</u> and creates an order. Also, the button can redirect to a payment gateway if the customer selects a suitable <u>payment method</u>.

To create the checkout process steps, use the **Kentico.Ecommerce** integration package.



Tip: You can view a sample preview checkout process step on the sample MVC Dancing Goat site.

1. Open your controller for the checkout process in your MVC project in Visual Studio.



The following example uses the **ShoppingService** and **IPaymentMethodRepository** classes initialized in the controller's constructor. See <u>Using a shopping cart on MVC sites</u>.

2. Create a model for payment methods. The model can use the **PaymentOptionInfo** class from the **CMS.Ecommerce** nam espace.

```
public class PaymentMethodViewModel
        public int PaymentMethodID { get; set; }
        public SelectList PaymentMethods { get; set; }
        /// <summary>
        /// Creates a payment method model.
        /// </summary>
        /// <param name="paymentMethod">Selected payment method.</param>
        /// <param name="paymentMethods">List of all available payment methods.<
/param>
        public PaymentMethodViewModel(PaymentOptionInfo paymentMethod, SelectList
paymentMethods)
        {
            PaymentMethods = paymentMethods;
            if (paymentMethod != null)
                PaymentMethodID = paymentMethod.PaymentOptionID;
        }
        /// <summary>
        /// Creates an empty payment method model.
        /// </summary>
        public PaymentMethodViewModel()
        }
    }
```

If you do not want to enable your customers to select their preferred payment method, you can skip this step.

3. Create a model for all previous steps - PreviewAndPayViewModel.



This model uses the *DeliveryDetailsViewModel* model created during a process described in <u>Creating the customer details step in MVC checkout processes</u>.

```
public class PreviewAndPayViewModel
{
    public DeliveryDetailsViewModel DeliveryDetails { get; set; }
    public ShoppingCart Cart { get; set; }
    public PaymentMethodViewModel PaymentMethod { get; set; }
}
```

4. Add methods that prepare the selection of payment methods.

```
/// <summary>
        /// Decides whether the specified payment method is valid on the current
site.
        /// </summary>
        /// <param name="paymentMethodID">ID of the applied payment method.<
/param>
        /// <returns>True if the payment method is valid.</returns>
        private bool IsPaymentMethodValid(int paymentMethodID)
        {
            // Gets the current user'S shopping cart
            ShoppingCart cart = shoppingService.GetCurrentShoppingCart();
            // Gets a list of all applicable payment methods to the current
user's shopping cart
            List<PaymentOptionInfo> paymentMethods = GetApplicablePaymentMethods
(cart).ToList();
            // Returns whether an applicable payment method exists with the
entered payment method's ID
            return paymentMethods.Exists(p => p.PaymentOptionID ==
paymentMethodID);
        }
        /// <summary>
        /// Gets all applicable payment methods on the current site.
        /// </summary>
        /// <param name="cart">Shopping cart of the site</param>
        /// <returns>Collection of applicable payment methods</returns>
        private IEnumerable<PaymentOptionInfo> GetApplicablePaymentMethods
(ShoppingCart cart)
            // Gets all enabled payment methods from Kentico
            IEnumerable<PaymentOptionInfo> enabledPaymentMethods =
paymentRepository.GetAll();
            // Returns all applicable payment methods
            return enabledPaymentMethods.Where(cart.IsPaymentMethodApplicable);
        }
```

5. Add a method to the controller that creates the **PreviewAndPayViewModel**.

```
/// <summary>
        /// Prepares a view model of the preview checkout process step including
the shopping cart,
        /// the customer details, and the payment method.
        /// </summary>
        /// <returns>View model with information about the future order.</returns>
        private PreviewAndPayViewModel PreparePreviewViewModel()
            // Gets the current user's shopping cart
            ShoppingCart cart = shoppingService.GetCurrentShoppingCart();
            // Prepares the customer details
            DeliveryDetailsViewModel deliveryDetailsModel = new
DeliveryDetailsViewModel
                Customer = new CustomerModel(cart.Customer),
                BillingAddress = new BillingAddressModel(cart.BillingAddress,
null, null)
            };
            // Prepares the payment method
            PaymentMethodViewModel paymentViewModel = new PaymentMethodViewModel
                PaymentMethods = new SelectList(GetApplicablePaymentMethods
(cart), "PaymentOptionID", "PaymentOptionDisplayName")
            };
            // Gets the selected payment method if any
            PaymentOptionInfo paymentMethod = cart.PaymentMethod;
            if (paymentMethod != null)
                paymentViewModel.PaymentMethodID = paymentMethod.PaymentOptionID;
            // Prepares a model from the preview step
            PreviewAndPayViewModel model = new PreviewAndPayViewModel
                DeliveryDetails = deliveryDetailsModel,
                Cart = cart,
                PaymentMethod = paymentViewModel
            return model;
        }
```



If you provide a possibility to have a different shipping address, prepare also the shipping address for the *Delive* ryDetailsViewModel.

6. Add a method to the controller that displays the preview step.

```
/// <summary>
/// Display the preview checkout process step.
/// </summary>
public ActionResult PreviewAndPay()
{
    // Gets the current user's shopping cart
    ShoppingCart cart = shoppingService.GetCurrentShoppingCart();

    // If the cart is empty, returns to the shopping cart
    if (cart.IsEmpty)
    {
        return RedirectToAction("ShoppingCart");
    }

    // Prepares a model from the preview step
    PreviewAndPayViewModel model = PreparePreviewViewModel();

    // Displays the preview step
    return View(model);
}
```

7. Add a method to the controller that processes the order. If the processing is successful, the method displays a payment page.

```
/// <summary>
        /// Validates that all information is correct to create an order, creates
an order.
        /// and redirects the customer to payment.
        /// </summary>
        /// <param name="model">View model with information about the future
order.</param>
        [HttpPost]
        public ActionResult PreviewAndPay(PreviewAndPayViewModel model)
            // Gets the current user's shopping cart
            ShoppingCart cart = shoppingService.GetCurrentShoppingCart();
            // Validates the shopping cart
            ShoppingCartCheckResult checkResult = cart.ValidateContent();
            // Gets the selected payment method and assigns it to the shopping
cart
            cart.PaymentMethod = paymentRepository.GetById(model.PaymentMethod.
PaymentMethodID);
            // Evaluates the shopping cart
            cart.Evaluate();
            // If the validation was not successful, displays the preview step
again
            if (checkResult.CheckFailed | !IsPaymentMethodValid(model.
PaymentMethod.PaymentMethodID))
                // Prepares a model from the preview step
                PreviewAndPayViewModel viewModel = PreparePreviewViewModel();
                // Displays the preview step again
                return View("PreviewAndPay", viewModel);
            // Creates an order from the shopping cart
            Order order = shoppingService.CreateOrder(cart);
            // Deletes the shopping cart from the database
            shoppingService.DeleteShoppingCart(cart);
            // Redirects to the payment gateway
            return RedirectToAction("Index", "Payment", new { orderID = order.
OrderID });
```



To limit payment methods based on the selected shipping options, see <u>Making payment methods dependent</u> on shipping options.



If you provide only <u>manual payment methods</u> (and therefore, you do not want to <u>connect any payment gateways</u>), you can redirect them directly to the thank-you page. For example:

```
return RedirectToAction("ThankYou", new { orderID = order.
OrderID });
```

8. Create a view for the preview step.

```
<div id="customerDetails">
   <h2>Customer Details</h2>
    <div>
       @Html.LabelFor(m => m.DeliveryDetails.Customer.FirstName)
       @Html.DisplayFor(m => m.DeliveryDetails.Customer.FirstName)
   </div>
    <div>
       @Html.LabelFor(m => m.DeliveryDetails.Customer.LastName)
       @Html.DisplayFor(m => m.DeliveryDetails.Customer.LastName)
   </div>
   <div>
       @Html.LabelFor(m => m.DeliveryDetails.Customer.Company)
       @Html.DisplayFor(m => m.DeliveryDetails.Customer.Company)
   </div>
</div>
<div id="cartContent">
       @* Loops through all shopping cart items. *@
       @foreach (Kentico.Ecommerce.ShoppingCartItem cartItem in Model.Cart.Items)
           @* Displays the shopping cart items' properties. *@
               @cartItem.Units× @cartItem.Name ... @currency.FormatPrice
(cartItem.Subtotal)
           </div>
<div id="shoppingCartTotals">
   Total tax: @currency.FormatPrice(Model.Cart.TotalTax)
   Total shipping: @currency.FormatPrice(Model.Cart.Shipping)
   Total (incl. tax): @currency.FormatPrice(Model.Cart.GrandTotal)
@using (Html.BeginForm("PreviewAndPay", "Checkout", FormMethod.Post))
    <div id="paymentMethod">
       @Html.LabelFor(m => m.PaymentMethod.PaymentMethodID)
       @Html.DropDownListFor(m => m.PaymentMethod.PaymentMethodID, Model.
PaymentMethod.PaymentMethods)
   </div>
    <input type="submit" value="Create an order" />
}
```

When a visitor gets to the customer details step during their <u>checkout process</u>, they review their information and the cart content and can continue with creating an order. You can add either a redirect to a payment gateway or a redirect to the thankyou page.

After creating an order, a notification email is sent based on the **Send order notification** setting.