Checkout WebAPI project

- Language: C#
- Framework: .Net Core 3.1 /Code First
- Database: MS SQL Server 2019 Developer edition
- API: Full REST API
- Authorization: OpenID Connect

Solution Name: CheckoutSln
Projects:

1. Checkout.Core
2. Checkout.Web
3. Checkout.TestAPI

Project Init

Before rung solutions, we need to configure some things:

- Connection string
- Database
- API URLs

Connection string

Open appsettings.json on Checkout.Web project and change *DefaultConnection*, current value is :

"DefaultConnection": "Server=.;initial catalog=CheckoutDB;User Id=sa;Password="

Database:

1. For creation database, you can create empty database and running the script file in DB folder.

2. Create empty database and run ***update-database*** command on package manager console.

API URLs

They are using current port numbers, but if you change port numbers on project you must update them on appsettings.json for projects

Checkout.Core

This project contains all classes and entity that we need in other projects. DB context is a code first strategy and we use migration to create database.

Checkout.Web

This project contains two parts:

1. UI for payment selection page and card payment page
2. API for merchant to connect Checkout system

When we create a payment request with out API with Merchant, we create a checkout URL and send back to merchant, this URL will point to this project.

If it is a test mode, API call, then we show a drop drown to end user to select payment status.

The default page of this project will show a document for API, that generated with https://swagger.io/.

For Authorization we use OpenID Connect bearer token that handle with JwtBearer.

For every call of API's we must first send a request for token, and then use our token on request header.

Lifetime of token is 10 minutes, for increase or decrease this time, must change code on TokenController :

var token = new JwtSecurityToken(_configuration["Jwt:Issuer"], _configuration["Jwt:Audience"], claims, expires: *DateTime.UtcNow.AddMinutes(10),* signingCredentials: signIn);

Checkout.TestAPI

This is a test project for calling checkout API's from Checkout.Web project.