

Writeup of Pizza Project:

My Pizza Project is a web application built using ASP.NET Core MVC. The project follows the Model-View-Controller (MVC) architectural pattern and i have used C# programming language.

-Models: The project employs three models: ``Pizzaltem``, ``CartItem``, and ``Checkout``. ``Pizzaltem`` represents pizza details such as name, description, and price. ``CartItem`` captures items in the cart, while ``Checkout`` encompasses order details.

-Views: We designed three main views: ``Index.cshtml``, responsible for displaying pizza items, ``Checkout.cshtml`` for cart management and order processing, and ``Confirmation.cshtml`` for order confirmation.

-*Controllers: The application boasts three controllers: ``HomeController`` manages the homepage and pizza item actions, ``CheckoutController`` handles cart and checkout actions, and ``ConfirmationController`` oversees order confirmation.

Testing Approach:

Following Behavior-Driven Development (BDD) principles, we utilized SpecFlow, a BDD framework. The test scenarios are organized into feature files: ``addPizza.feature`` for adding pizzas to the cart, ``clearCart.feature`` for emptying the cart, ``confirmation.feature`` for order confirmation, and ``login.feature`` for user login.

- Step Definitions: C# step definitions translate Gherkin steps into executable actions. Selenium WebDriver was utilized to interact with the application, ensuring comprehensive testing.

Additionally, we incorporated database management using Entity Framework Core and migrations. The project integrates three controllers: ``HomeController``, ``CheckoutController``, and ``ConfirmationController``, with two models: ``CartItem`` and ``Pizzaltem``. Database migrations facilitate efficient database updates and version control.

Azure VM Deployment:

To extend the project's reach, we deployed it on an Azure Virtual Machine (VM). After configuring the VM and necessary software, we utilized IIS for hosting and SQL Server Management Studio (SSMS) for efficient database management. Our deployment included the publication of the project and the setup of an SSMS server on the VM for streamlined database operations.