

Course End Project

Create a Prototype for Joe's Pizza Portal Using Selenium, NUnit, and SpecFlow to Develop and Test. Deploy it into Azure VM Using Jenkins

GitHub Link: <https://github.com/saraswathy15/PhaseEndProPizza.git>

WriteUp: Joe's Pizza Portal Prototype

Overview:

This project aims to create a prototype for Joe's Pizza Portal, an online ordering system for pizzas. The prototype will be developed using ASP.NET Core and tested using NUnit, Selenium, and SpecFlow. The final prototype will be deployed to an Azure VM using Jenkins.

Project Components:

1. **ASP.NET Core Web Application:** The application will consist of three pages:
 - **Pizza Selection Page:** Allows users to choose the type of pizza they want to order.
 - **Order Checkout Page:** Displays the selected pizza with quantity and pricing. Allows users to proceed to the confirmation page.
 - **Order Confirmation Page:** Displays a message with an order ID, amount, and the type of pizza ordered.
2. **Windows Class Library Project:** This project will contain the test suites for the web application. It will have references to the ASP.NET Core web application project.
3. **NUnit, Selenium, and SpecFlow:** These frameworks will be used for testing the web application. NUnit will be used for unit testing, Selenium for automated browser testing, and SpecFlow for behavior-driven development (BDD).
4. **Azure VM:** An Azure VM will be set up to host the prototype application.

5. **Jenkins:** Jenkins will be configured to create builds of the application at scheduled intervals and deploy them to the Azure VM.

Tasks:

1. **Setting Up the ASP.NET Core Web Application:** Create the three pages (Pizza Selection, Order Checkout, Order Confirmation) using cshtml files.
2. **Setting Up the Test Project:** Create a Windows Class Library project and add references to the ASP.NET Core web application. Configure NUnit, Selenium, and SpecFlow for testing.
3. **Writing Test Cases:** Write test cases to test the functionality of the web application, including pizza selection, order checkout, and order confirmation.
4. **Running Test Cases:** Use the Test Runner to execute the test cases and ensure the web application functions as expected.
5. **Deploying to Azure VM:** Set up an Azure VM to host the prototype application. Configure Jenkins to create builds of the application and deploy them to the Azure VM at scheduled intervals.

Conclusion:

By following these steps, we will create a prototype for Joe's Pizza Portal, test it thoroughly using NUnit, Selenium, and SpecFlow, and deploy it to an Azure VM using Jenkins. This will ensure that the application meets the requirements and functions correctly before being deployed to production.