**ASP.NET MVC CRUD Application with Web API**

**Unit Tests (CRUD):**

1. **GetAllProducts\_ReturnsOkResult**:

Verifies that the GetAllProducts action returns an Ok response with a list of products.

1. **GetProductById\_UnknownId\_ReturnsNotFoundResult**:

Tests that the GetProductById action returns a NotFound response when an invalid ID is provided.

1. **GetProductById\_ExistingId\_ReturnsOkResult**:

Checks that the GetProductById action returns an Ok response with the correct product when a valid ID is provided.

1. **InsertProduct\_ValidObject\_ReturnsOkResult**:

Ensures that a product can be successfully added to the database.

1. **UpdateProduct\_UnknownId\_ReturnsNotFoundResult**:

Verifies that trying to update a non-existent product returns a NotFound response.

1. **UpdateProduct\_ExistingId\_ReturnsOkResult**:

Confirms that updating an existing product works as expected.

1. **DeleteProduct\_UnknownId\_ReturnsNotFoundResult**:

Tests that attempting to delete a product with an unknown ID returns a NotFound response.

1. **DeleteProduct\_ExistingId\_ReturnsOkResult**:

Ensures that a product can be successfully deleted from the database.

