# Product Review Analysis for Genuine Rating

This system is used to help a user to get a product at its best choice and best price. The ***admin*** and the ***user*** part both are a **.NET Application**. **Web APIs** must be created for all operations. The front end can be a console application or any web app of your choice (*HTML+JavaScript, React, Angular, ASP.NET etc.*) and **SQL Server** as its backend. This system allows the user to look into a product with different reviews and rating rated by other users and for their simplicity, the system shows the overall average rating of that product. The system also allows the user to compare 2 products of the same kind or same category and to rate and review the product as they wish to but limiting it to only once per product. The system is meant to give a rough as well as a much-detailed idea of whether the user should go for a product. The system gives a list of sellers and their price offered which is added by the admin for the user’s convenience and preference. The user’s role is to check out for the product using all the resources offered by the system in finding the best product and give their rating and review. The User is also allowed to give their feedback. The admin is responsible to add update or delete a product while adding seller’s information as well and likewise view users and their feedbacks.

## Admin

* **Add Product:** The Admin adds a product by filling all the details related to the product along with the seller’s information.
* **View Product:** The Admin can also filter the product based on their category and view all the product details with the ratings by the users.
* **Edit Product**: The Admin is allowed to modify the product details as well as delete a product.
* **View User:** The Admin gets a list of all the users with all their details.
* **View Feedback**: The Admin is allowed to monitor all the feedback sent by the users and delete them if they are irrelevant.

## User

* **Registration:** The user must register into the System with all his basic details.
* **Login**: The user has to login into the system and then can make use of the system resources.
* **View Category**: The user can view all the products based on the category.
* **View Product**: The user can view a single product with all the details, namely, pictures, overall ratings, sellers’ information, description, and ratings/reviews.
* **Rate/Review**: The user is allowed to rate and review a product only once.
* **Compare**: The user can compare products of the same kind/category.
* **Feedback**: The user can give his feedback about the system or product.
* **Update Details**: The user is allowed to update or modify a few of its own details.

## Tech Stack and Project Requirements

* ASP.NET Core.
* Web APIs.
* SQL Server.
* Proper layering / structuring of the solution is expected.
* Proper Exception handling and Logging must be implemented.
* Dependency Injection must be implemented.
* Unit Tests (*with xUnit*) must be implemented.
* There should be at least 50% code coverage.
* You are free to use any other additional technology, framework etc. to add / enhance the application features. For e.g.;
  + **ML.NET**: <https://dotnet.microsoft.com/en-us/apps/machinelearning-ai/ml-dotnet>.
  + **GraphQL.NET**: <https://graphql-dotnet.github.io/docs/getting-started/introduction/>

## Features

* The user has to Login to make use of the system keeping the data secure.
* The system helps the user to get the best product with many resources.
* Minimizes user’s time.
* Users can rate and review a product.
* Wrong reviews and ratings will affect the overall ratings of a product.
* This system can be used by Ecommerce institutions to help their users get the best product.

## Schedule

* The system is to be completed by Thursday, 17th August, 2023.
* Everyone will have to showcase their work individually.
* Everyone will get 15 minutes to present their work and an additional 5 minutes for Q&A.