Web Development .NET
Final Project: MVC Dinosaurs Web Application

Your final project will consist of a .NET Web Application using MVC and an SQL Server database that teaches kids about dinosaurs. It will contain data for several dinosaurs and will display a list as well as individual pages for each dinosaur (with text and image).

You must not allow the user to edit the data via the pages/views.

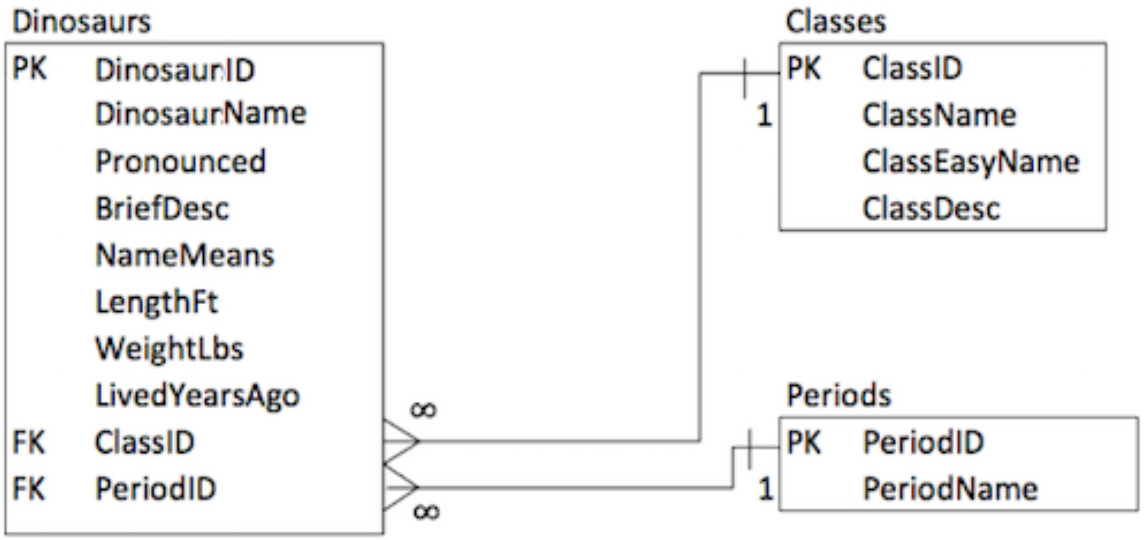
Requirements:

The web application must consist of the following pages:

- Home (Index)
- Periods
- Classes
- Dinosaurs (List)
- Individual Dinosaur Page

The layout/style of the website must be as close to possible as the screenshots provided.

The database structure created must be as shown:



The database must be seeded with the data provided (SeedData.txt)

Users must be able to search by dinosaur name.

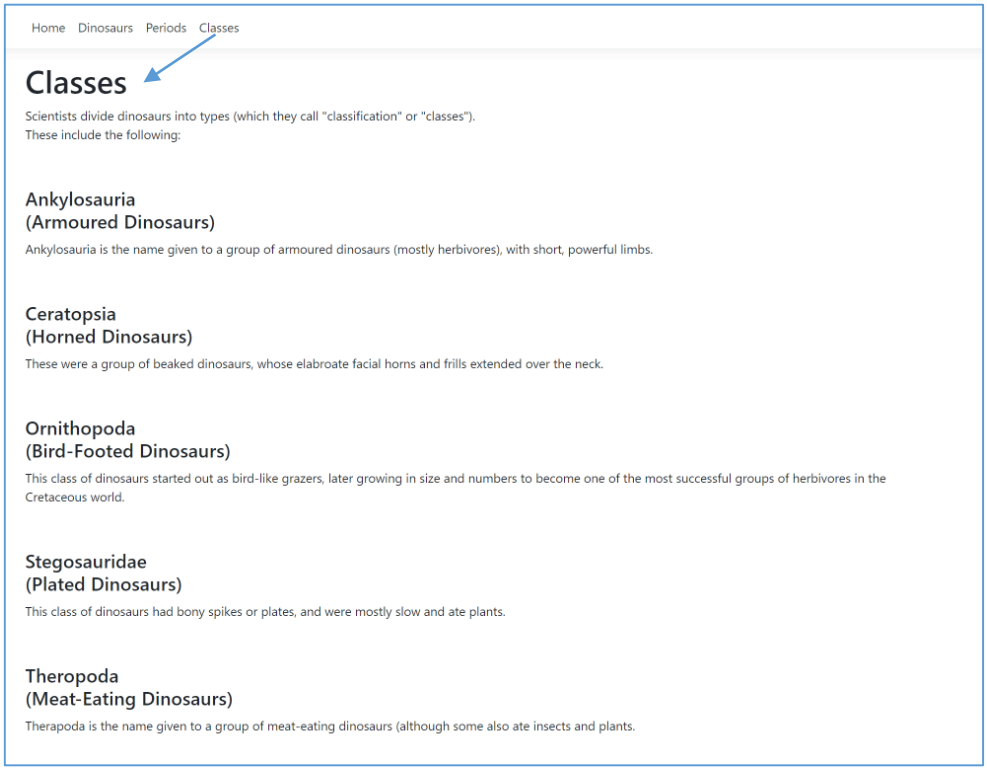
Layout must follow the screenshots as closely as possible but you should add some colour/background/style to make your site look unique.

The homepage must contain some information about Dinosaurs (you can use the sample text provided) and contain links to the Classes, Periods, and list of Dinosaurs page as shown.

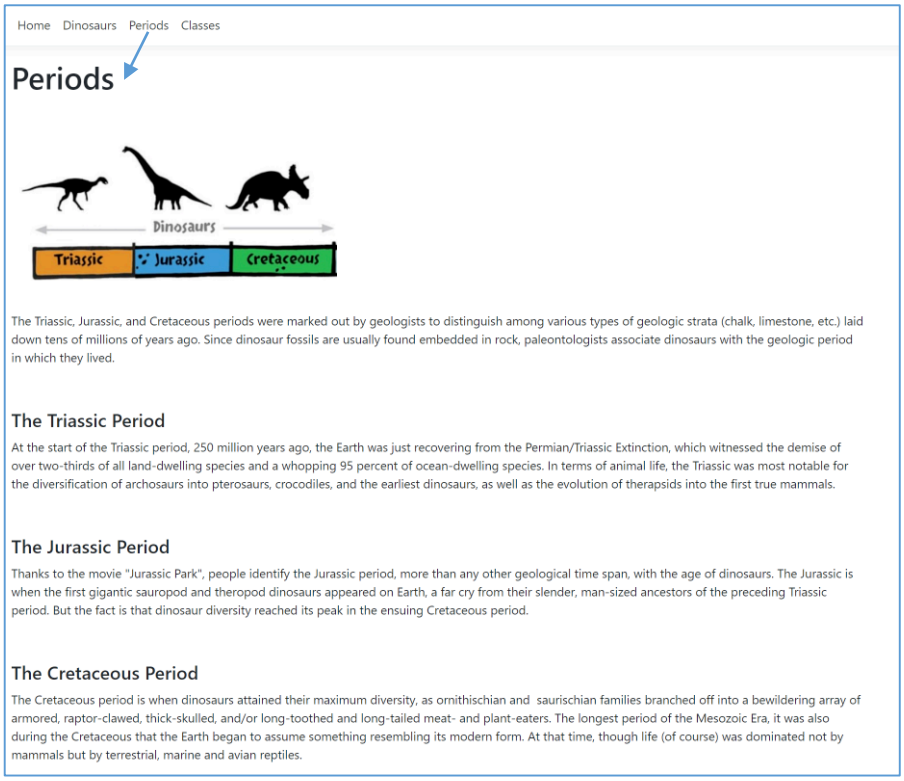
The navigation bar must allow for navigation to the list of Dinosaurs page, the list of Classes and the list of Periods.

The footer must contain your full name and the name of this course.
We do not need a Privacy page, so please remove this page and link from your project.

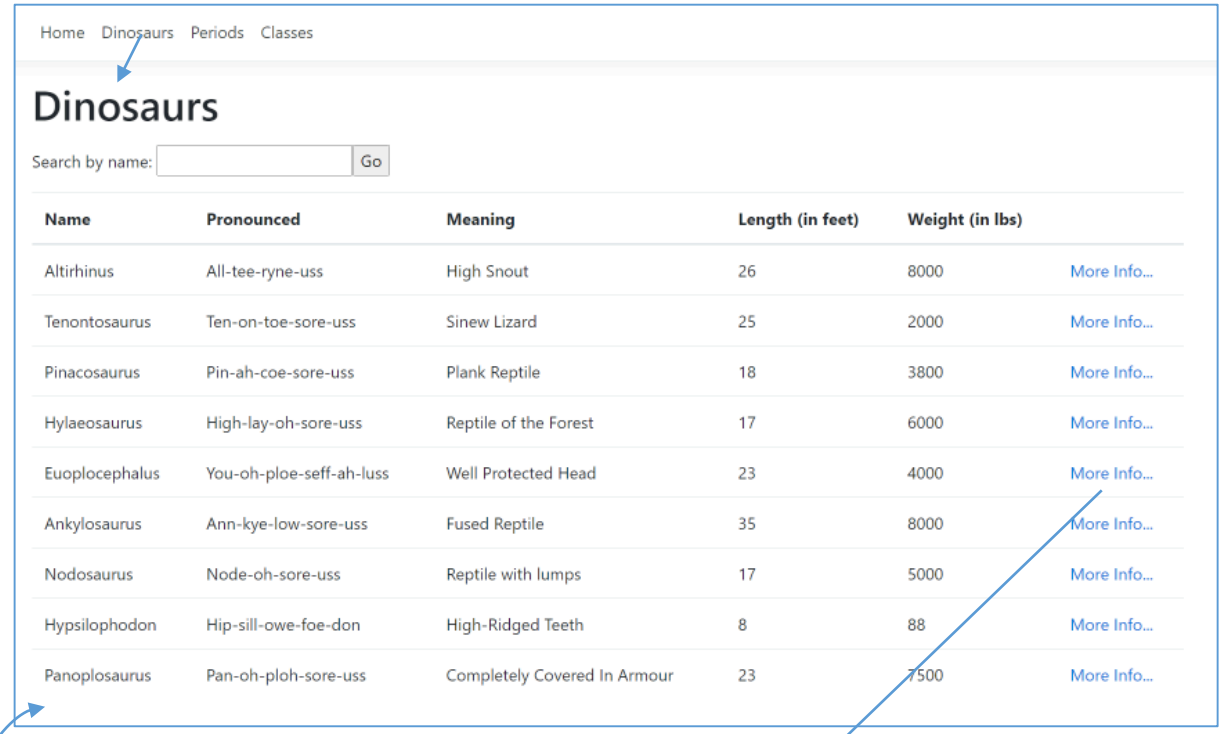
The Classes page must list the classifications included in the database (and show official name, easy name and description.)



The Periods page must list the periods (with the image attached), showing the names an descriptions included in the database.



The Dinosaurs page should list all the dinosaurs in the database (displaying its name, pronunciation, meaning, length and weight, and a link to navigate to the respective Dinosaur page. Users should be able to search by dinosaur name.



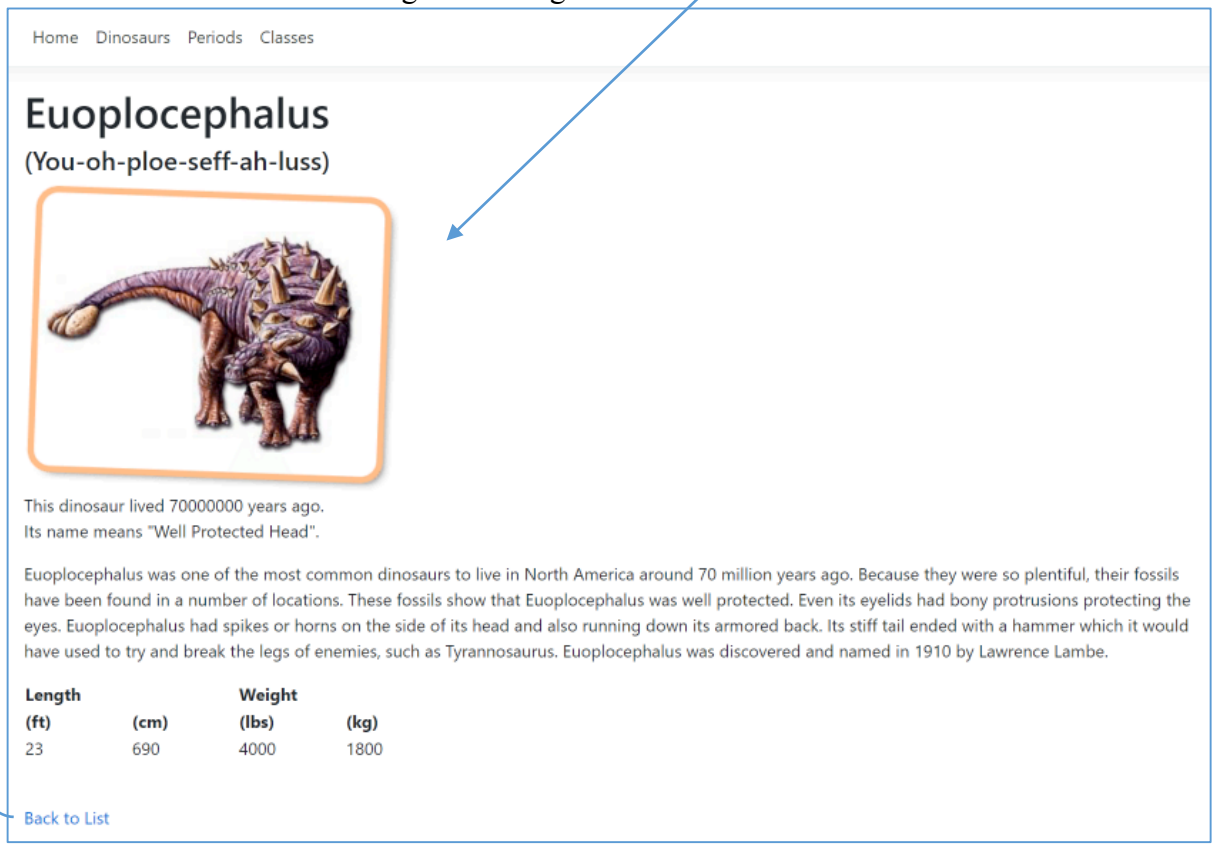
Home Dinosaurs Periods Classes

Dinosaurs

Search by name: Go

Name	Pronounced	Meaning	Length (in feet)	Weight (in lbs)	
Altirhinus	All-tee-ryne-uss	High Snout	26	8000	More Info...
Tenontosaurus	Ten-on-toe-sore-uss	Sinew Lizard	25	2000	More Info...
Pinacosaurus	Pin-ah-coe-sore-uss	Plank Reptile	18	3800	More Info...
Hylaeosaurus	High-lay-oh-sore-uss	Reptile of the Forest	17	6000	More Info...
Euoplocephalus	You-oh-ploe-seff-ah-luss	Well Protected Head	23	4000	More Info...
Ankylosaurus	Ann-kye-low-sore-uss	Fused Reptile	35	8000	More Info...
Nodosaurus	Node-oh-sore-uss	Reptile with lumps	17	5000	More Info...
Hypsilophodon	Hip-sill-owe-foe-don	High-Ridged Teeth	8	88	More Info...
Panoplosaurus	Pan-oh-ploh-sore-uss	Completely Covered In Armour	23	7500	More Info...

When you click on the "More info…" link, the user should be taken to the appropriate Dinosaur page. This should display the following information about the dinosaur, and include the image, as well as the conversion of length and weight as shown. There must also be a back to list link.



Home Dinosaurs Periods Classes

Euoplocephalus

(You-oh-ploe-seff-ah-luss)

This dinosaur lived 70000000 years ago.
Its name means "Well Protected Head".

Euoplocephalus was one of the most common dinosaurs to live in North America around 70 million years ago. Because they were so plentiful, their fossils have been found in a number of locations. These fossils show that Euoplocephalus was well protected. Even its eyelids had bony protrusions protecting the eyes. Euoplocephalus had spikes or horns on the side of its head and also running down its armored back. Its stiff tail ended with a hammer which it would have used to try and break the legs of enemies, such as Tyrannosaurus. Euoplocephalus was discovered and named in 1910 by Lawrence Lambe.

Length (ft)	(cm)	Weight (lbs)	(kg)
23	690	4000	1800

Back to List

Step-By-Step Instructions:

1. Create an MVC .NET Web Application called MVCDinos (without authentication).
2. Install NuGet Packages for Entity Framework as required.
3. Create the classes for Dinosaur, Period and Class (inside the Models folder).
4. Create the database context class (inside the Data folder).
5. Register the database context class with the ConfigureServices method (Startup.cs).
6. Register the ability use static files in the Config() method (Startup.cs).
7. Copy the images provided over to an appropriate subfolder within wwwroot.
8. Use migrations to enable Entity Framework Code First to create the database.
9. Use SQLServer Object Explorer to check that your database tables have been created.
10. Use the SeedData class provided to seed your database.
11. Create controllers (and associated views for Dinosaurs, Periods and Classes.
12. Add a search feature to the Dinosaurs page so users can search by dinosaur name.
13. Add the respective content (text/ images) to the pages/views as required.

Submission Requirements:

You must upload a ZIP file (only ZIP format will be accepted) containing your solution file.

Please also upload the following screenshots:

Code:

- Models/Dinosaur.cs
- Models/Period.cs
- Models/Class.cs
- Views/Classes/Index.cshtml
- Views/Periods/Index.cshtml
- Views/Dinosaurs/Index.cshtml
- Views/Dinosaurs/Details.cshtml
- Controllers/HomeController.cs
- Controllers/ DinosaursController.cs
- Controllers/ PeriodsController.cs
- Controllers/ ClassesController.cs
- Data/Database context class
- Startup.cs showing both ConfigureServices() and Config() methods.

Browser View:

- Homepage (Index)
- Periods
- Classes
- Dinosaurs (List)
- Individual Dinosaur Page

- Proof of successful search by dinosaur name.