

# C#.NET ASSESSMENT 7

## ASSESSMENT 7 - UNIT 9: WEB APIs

Core concepts: Web APIs

### CHALLENGE A

#### OVERVIEW

Implement an .NET Core MVC web application that displays a list of zoo animals and information about their species from an API. The application has two pages: a list of animals and a details page for each species.

Use the zoo animal API found at <https://gc-zoo.surge.sh>.

This API has 2 endpoints:

- 1) [/api/animals.json](#) This endpoint contains a list of different animals with their names and a pointer to learn about their species
- 2) [/api/species/{name}.json](#) - this endpoint contains info on a single animal species

#### SETUP

Use the ASP.NET MVC Web Application provided in the assessment repository.

#### BUILD SPECIFICATIONS

The assessment is worth ten points, one for each of the test cases below. **Pay special attention to the spelling and capitalization of the items in bold.**

For calling the API, use whichever setup you wish, whether you put the code in the controller or in a DAL.

Your models should contain the following at minimum:

**Animal** model:

1. A property for **Name**
2. A property for **Weight**
3. A property for **SpeciesName**

**Species** model:

1. A property for **Name**
2. A property for **Diet**
3. A property for **Habitat**

**Index** view:

- a. In the home controller, in your **Index** action, get the list of animals from the animals endpoint, convert them into a list of Animal models, and pass the list to the view.
- b. In the view, display the **Name**, **Weight**, and **Species** of each Animal model
- c. At the bottom of **Index**, create a form with the following:
  - i. An action attribute set to **Species**
  - ii. An input named **SpeciesName**
  - iii. A submit button

**Species** view:

- a. In your home controller, in your **Species** action, pass in a string named **SpeciesName**
- b. Use that string to call the API on the Species endpoint and convert the json into a **Species** model
- c. Pass that **Species** model down to the view.
- d. In the view, display **Name**, **Diet**, and **Habitat**

**SUBMISSION**

When finished, push your changes to the same GitHub repository you cloned your project from.