

Github repo: <https://github.com/ttfo/FarmManager-sbs19016.git>

NOTE: Postman collection is available for testing in the above repo under the README.md file

The application runs on top of [Spring Boot](#) as a [Gradle Project](#) and employs Java version 8 as base language.

The application can be run in Eclipse via the main method in FarmManagerSbs19016Application.java

The application itself consists of two packages:

- package **ie.cct.Animals**:
in this package we have the overall 'animal' structure, with an abstract class ('Animal') and 3 sub-classes, one for each animal type as per CA requirements ('Chicken', 'Cow', 'Pig');
- package **ie.cct.FarmManagersbs19016**:
in this package we have the main method, however all the main functionalities of the application live in FarmController.java.

End-points

1. [GET] Endpoint to retrieve information of all livestock in JSON format.
This was not required in CA, but it is helpful for testing.

<http://localhost:8080/get-livestock>

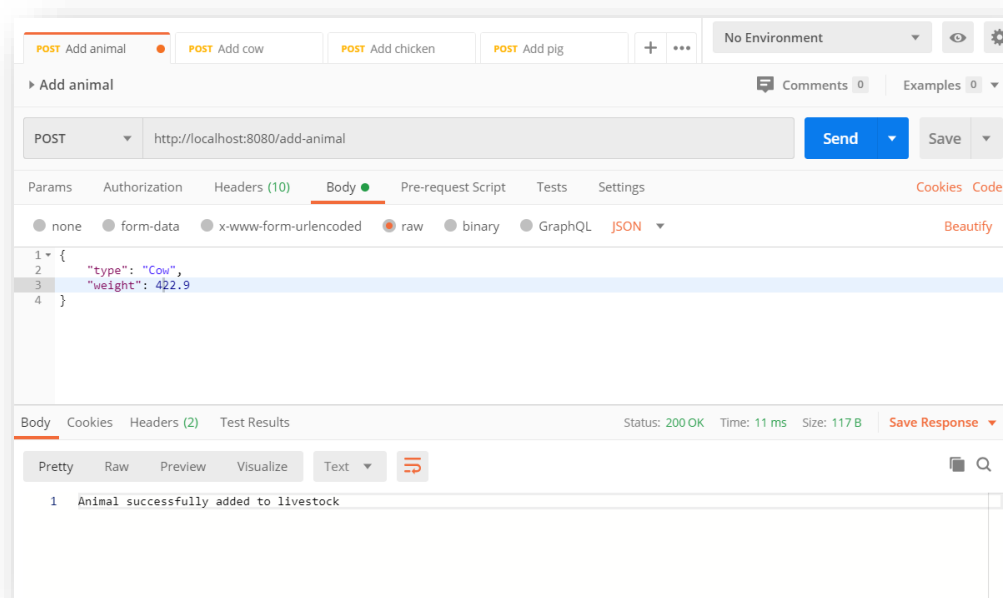
Example of response:



2. [POST] Endpoint to add 1 animal to the existing livestock.
Accepts “Chicken”, “Cow” and “Pig” as values for attribute “type”.

<http://localhost:8080/add-animal>

Example of request and response:



Individual endpoints for each animal type are also provided for the same purpose, e.g.

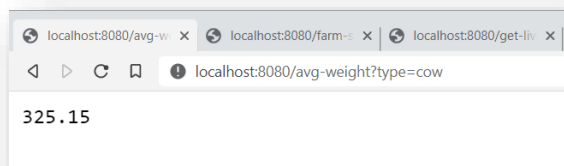
<http://localhost:8080/add-pig>

3. [GET] Endpoint to retrieve avg. weight by animal type. Returns a float if any of the following values are provided: “chicken”, “cow”, “pig”, “all”. For “all” it returns the overall average of all animals regardless of their type. If no valid option is provided, it returns HTTP Status 404.

Example:

<http://localhost:8080/avg-weight?type=cow>

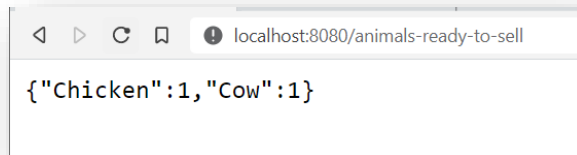
Example of response:



4. [GET] Endpoint that provides a count of animals that meet the minimum weight requirements and can therefore be sold.

<http://localhost:8080/animals-ready-to-sell>

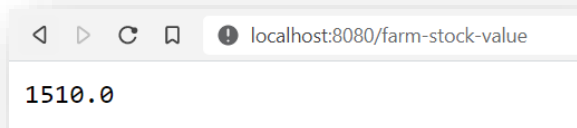
Example of response:



5. [GET] This endpoint returns the total value of all owned livestock. Animals need to meet the minimum weight requirements to be account for.

<http://localhost:8080/farm-stock-value>

Example of response:



6. [GET] This endpoint returns the hypothetical value of owned livestock, based on the price per unit of livestock by type provided in request. Calculations are allowed also for the individual animal types. Weight thresholds that applied to the previous endpoint are not applicable to this one (this is based on the CA requirements).

<http://localhost:8080/farm-stock-value-hyp?cow=950&pig=420&chicken=6>

Example of response:

