

# Code Challenge



First-in, First out Animal Shelter.

## Specifications

- Read all of these instructions carefully. Name things exactly as described.
- Do all your work in a public repository called `data-structures-and-algorithms`, with a well-formatted, detailed top-level README.md.
- Create a new branch in your repo called `fifo_animal_shelter`.
- Your top-level readme should contain a “Table of Contents” navigation to all of your challenges and implementations so far. (Don’t forget to update it!)
- This assignment should be completed within the `challenges` subdirectory of the repository.
- On your branch, create...
  - C#: a new .NET Core console project named `FIFOAnimalShelter`. Within your `Program.cs` create a new static method outside of `Main()` following the naming conventions below. Call your newly created method in `Main()` once complete.
  - JavaScript: a folder named `fifoAnimalShelter` which contains a file called `fifo-animal-shelter.js`
  - Python: a folder named `fifo_animal_shelter` which contains a file called `fifo_animal_shelter.py`
  - Java: a folder named `fifoAnimalShelter` which contains a file called `AnimalShelter.java`
- Include any language-specific configuration files required for this challenge to become an individual component, module, library, etc.
  - *NOTE: You can find an example of this configuration for your course in your class lecture repository.*

## Feature Tasks

- Create a class called `AnimalShelter` which holds only dogs and cats. The shelter operates using a *first-in, first-out* approach.
- Implement the following methods:
  - `enqueue(animal)`: adds `animal` to the shelter. `animal` can be either a dog or a cat object.
  - `dequeue(pref)`: returns either a dog or a cat. If `pref` is not `"dog"` or `"cat"` then return null.

## Stretch Goal

If a cat or dog isn't preferred, return whichever animal has been waiting in the shelter the longest.

## Requirements

Ensure your complete solution follows the standard requirements.

1. Write [unit tests](#)
2. Follow the [template for a well-formatted README](#)
3. Submit the assignment following [these instructions](#)

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