

MITx: 6.00.1x Introduction to Computer Science and Programming Using P...

■ Bookmarks Week 7 > Problem Set 7 > Part 1 - The Adoption Center

■ Bookmark

Overview

The Adoption Center

EntranceSurvey

(10 points possible)

▶ Week 1

The adoption center class will hold information specific to each adoption center, as well as methods for fetching information from or modifying the adoption center.

Week 2

We want to store this information in an *object* that we can then pass around in the rest of our program. Your task, in this problem, is to write a class,

AdoptionCenter, starting with a **constructor** that takes

Week 3

(name, location, species_count) as arguments and stores them appropriately. You will also **write some methods**, detailed later on in this section.

Week 4

Adoption Center Initialization

Quiz

The following information should be stored in an AdoptionCenter instance, and passed in as its initialization variables:

Week 5

__init__(self, name, species_types, location)

- Week 6
- name A string that represents the name of the adoption center
- ▼ Week 7
- <u>location</u> A tuple (x, y) That represents the x and y as floating point coordinates of the adoption center location.

Lecture 13 - Trees -Time 51:54 Lecture Sequence species_types - A string:integer dictionary that represents the number of specific pets that each adoption center holds. An example would be:
 {"Dog": 10, "Cat": 5, "Lizard": 3}
 , and another example would be
 {"Cat": 10, "Horse": 8}
 . Species names will always begin with a capital letter followed by lowercase letters, so you do not have to check for the case of the species name ('Cat' will never be stored as 'cat' or 'cAT' etc). Note that the specific animals tracked depend on the adoption center. If an adoption center does not have any of a specific species up for adoption, it will not be represented in the dictionary.

Wrap up - Time 33:39

Problem Set 7

Adoption Center Methods

Problem Set due Aug 04, 2016 at 23:30 UTC

The following methods should be implemented for the AdoptionCenter class. The solution to this problem should be relatively short and very straightforward (please review what get methods should do if you find

Sandbox

yourself writing multiple lines of code for each).

- get_name() Returns the name of the adoption center
- get_location() Returns the location of the adoption center
- get_species_count() Returns a **copy** of the full list and count of the available species at the adoption center.
- [get_number_of_species(species_name)] Returns the number of a given species that the adoption center has.
- adopt_pet(species_name) Decrements the value of a specific species at the adoption center and does not return anything.

Additional notes about adopt_pet

Why do we want get_species_count() to return a copy?

Enter your code for the AdoptionCenter class here# Be sure to include the __init__, get_name, get_species_count, get_number_of_species

Unanswered

You have used 0 of 30 submissions

© All Rights Reserved



© edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

















