

Homework 4 – Programming Assignment

CS5700

Get Article Title

Due: Friday, February 10 at 11:59 pm Eastern

Points Possible: 20

Problem Statement:

Using the server.py and client.py code on Canvas as a guide, modify them to accommodate the following use case:

The client will send an LA Times (<https://www.latimes.com/>) article URL to the server, the server will then respond back to the client with the article's title. The format of the message that should be displayed must match that of the example below.

You can use whatever LA Times article you want for your testing, we'll only test with LA Times articles, as indicated in the "Constraints" section below. We will not reveal our test cases before the deadline and will only reveal failed test cases after the deadline.

The LA Times URL must be able to be inputted to the client via the command prompt or Terminal.

See the example below.

Submission Requirements:

1. Write your name as a comment at the top of your code.
2. You should submit two files: client.py and server.py
 - a. Using any other file name will get you points deducted.
3. Your program must be able to be executed via the command prompt in Windows or the Terminal on the Mac. See the examples below.
4. The input LA Times article URL must be able to be inputted to the client via the command prompt or Terminal.
5. You can work with other students or individually, up to you. However, you must submit your assignment individually on Canvas.
6. You must submit your file(s) on Canvas. Any other submission method (such as email) will be rejected and you will receive zero credit.
7. This assignment must be done using the Python version 3.10 or later programming language.
8. The format of the output after you execute the client.py should match exactly to the format that you see in the example below. Anything different or any other result that's outputted via our test cases will result in point deductions.
9. Canvas will automatically add a hyphen and a number to the file name if you upload the same file more than once (e.g. client-2.py or server-3.py). That's fine and don't worry about it, I will not deduct points for that.
10. Do not have your code in any class (e.g. `class Solution:`). You will get points deducted if you do.

11. Do not have any print statements in your client.py code other than the print statement to output the LA Times article's title (as you can see in the example). Any other print statements in the client.py file will get you points deducted. Having print statements in server.py is fine.

Example:

The following is run from the command prompt. This is how your code will be graded. Your program absolutely needs to be able to be run from the command prompt or Terminal, otherwise you will get zero credit. No exceptions. The output of your code should display in the command prompt or Terminal console.

Example:

```
>python client.py https://www.latimes.com/food/story/2022-09-09/queen-elizabeth-ii-scones-british-tea
Remembering Queen Elizabeth II with scones, her way
```

Constraints:

- The input is an LA Times article to which you can access without a paid subscription. Some articles require a paid subscription and so we will not be testing against those.
- Library restrictions: you can only import the follow libraries:
 - client.py:
 - import socket
 - import sys
 - server.py:
 - import socket
 - import requests
 - from bs4 import BeautifulSoup

Grading Guidelines:

- Does the program meet the requested requirements/criteria?
- Are the submission instructions followed?
- Does your code compile and execute?
- Does your code pass my test cases?