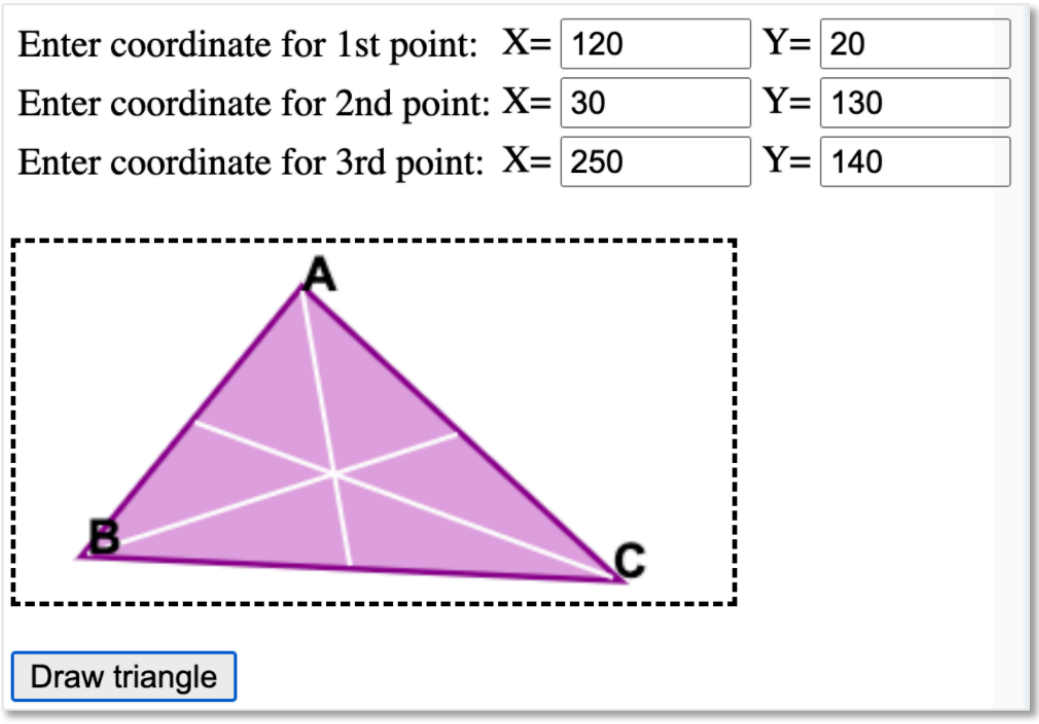
CSIT884 Web Development

Week 12 Exercise – Canvas & Form Validation

Please submit the **zip file containing the source code files and resource files** to the entry named "Week 12 Exercise – Canvas & Form Validation" on Moodle before **19:00 Sunday, Week 12**.

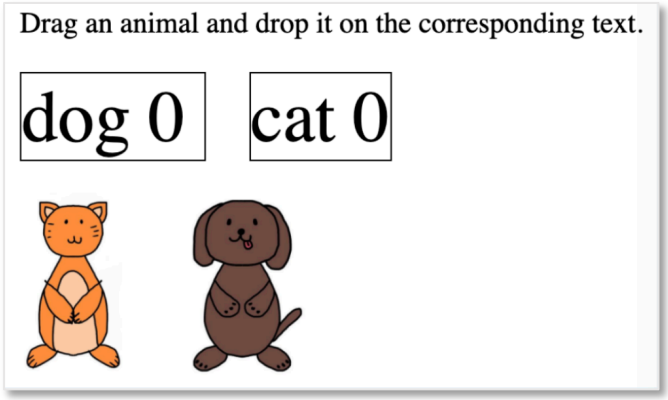
Q1. Create a web page and display the following:



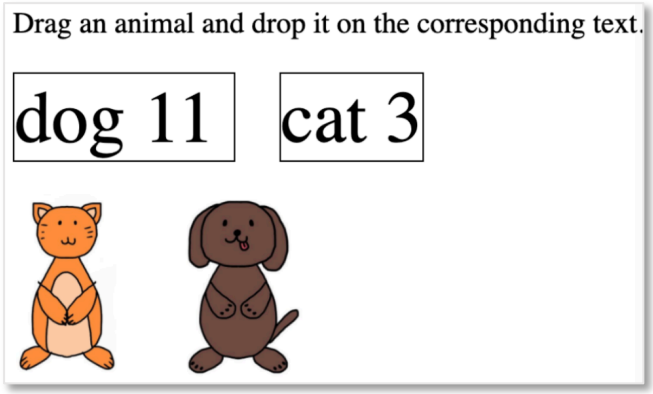
The web page allows the user to enter the coordinates of the 3 vertices of a triangle. When the user clicks the button, then draw the triangle on the canvas as above.

A median of a triangle is a straight line from a vertex to the midpoint of the opposite side. The drawing demonstrates a mathematical fact that: the 3 median lines intersect in a single point (which is called the triangle's centroid).

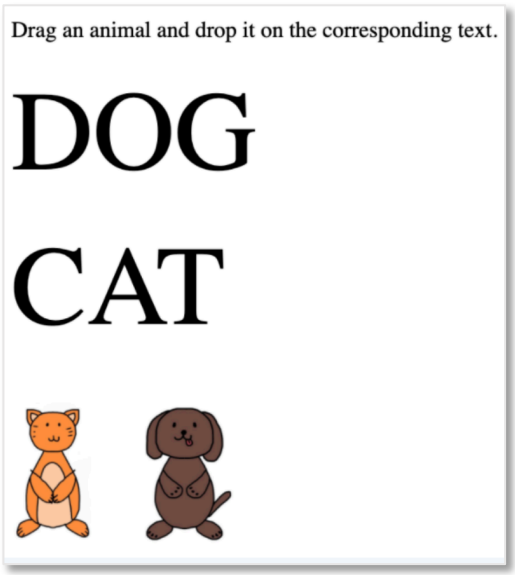
Q2. Create a web page and display the following:



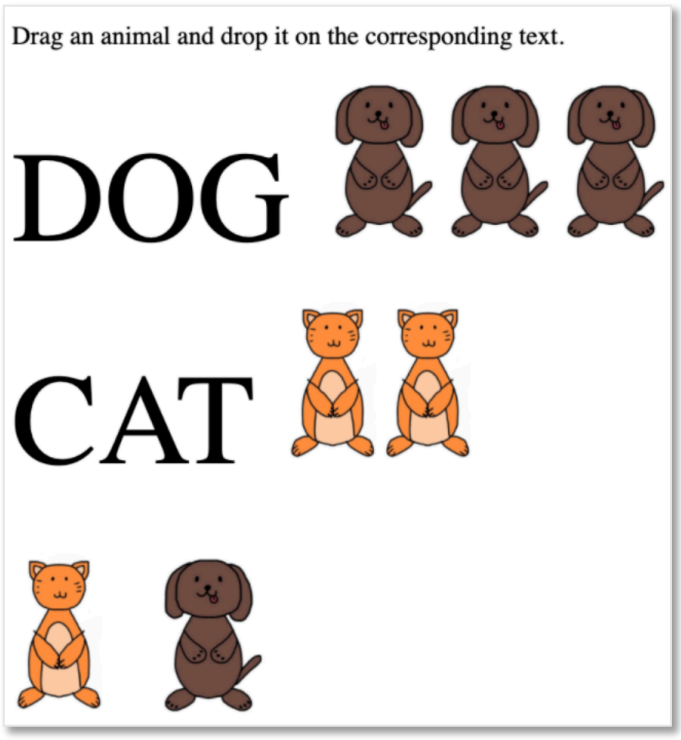
When an animal is dropped into a matching text then the corresponding counter is increased by 1. For example, if the cat is dropped correctly 3 times and the dog is dropped correctly 11 times then the web page shows the following:



Q3. Create a web page and display the following:



When an animal is dropped into a matching text then the web page will be updated in the following manner. For example, if the cat is dropped correctly 2 times and the dog is dropped correctly 3 times then the web page shows the following:

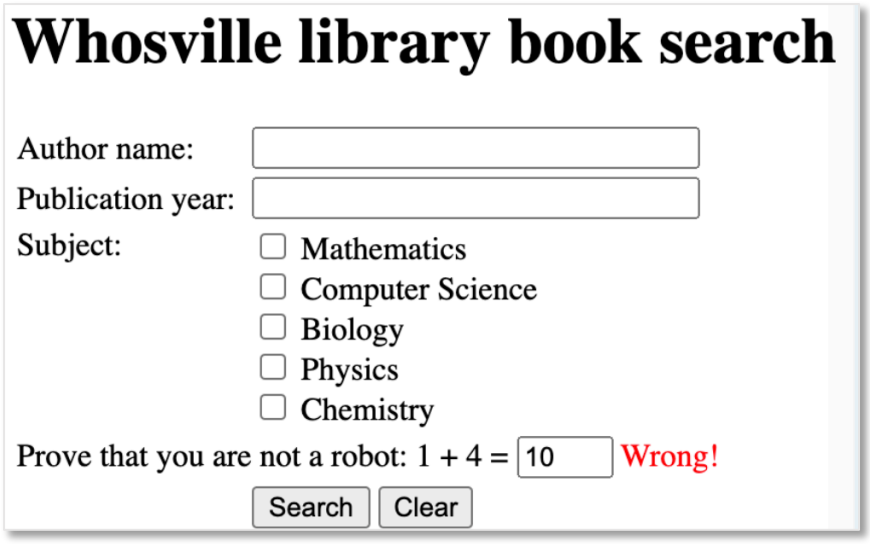


Q4. Recall that in the lab exercise on webform, we created a form for library book search.

The library at a fictional Whosville College provides an online web form for the students to search for books in the library. The server service for this web form is running at `http://library.whosville/bsearch` with method GET and it accepts the following parameters:

- `author`: this parameter is to specify the author of the books;
- `year`: this is to specify the publication year;
- `sub`: this parameter is to specify the subject of the books. It can accept multiple values, and the valid values are: `mth` for Mathematics, `cs` for Computer Science, `bio` for Biology, `phy` for Physics, and `chem` for Chemistry.

Now modify this webform so that it generates a simple random math problem. If the user answers the math problem incorrectly then display a message `"Wrong!"`. If the user answers the math problem correctly then submit the form as normal.


Whosville library book search
Author name:
Publication year:
Subject:
Mathematics
Computer Science
Biology
Physics
Chemistry
Prove that you are not a robot: 1 + 4 = 10
Wrong!
Search
Clear