

Homework 4: JavaScript and Feedback

Due Friday 2/15 @4pm on Courseworks.

What to submit:

- 3 separate files with the following titles:
 - 1_post_tweet.html
 - 2_color_and_font.pdf
 - 3_user_interaction.pdf
- Submit them separately to Courseworks, do **not** zip them up.

Problem 1. JavaScript and Feedback

1. **Recreate functionality to post a tweet.** Create a website in HTML, JavaScript and JQuery where a user can write a tweet and see it appear below in a list of their own tweet. This is similar to the functionality of twitter described in class regarding execution and evaluation. Don't replication the twitter design, just the basic functionality of writing and posting a tweet with a max of 30 characters and providing feedback to help users evaluate the goal of posting a tweet and the subgoal of writing a tweet that within the max number of characters. The following is the functionality you need to replicate:
 - a. There needs to be place to write the tweet and a button to press to post the tweet.
 - b. There needs to be a number that shows how many characters the user has remaining (call it `characters_remaining`). The max length can be hard coded in JavaScript (but not in HTML).
 - c. As the user writes their tweet text, the following must happen:
 - i. The `characters_remaining` number must change to reflect the current number of characters left.
 - ii. If the user exceeds the number of characters, a negative number must be shown for `characters_remaining`.
 - iii. Negative `characters_remaining` numbers must be red and bold
 - iv. Non-negative `characters_remaining` must be grey and normal weight.
 - v. **If the number of `characters_remaining` is negative, the "post tweet" button must not be clickable (disabled).**
 - d. When the user presses the "post tweet" button the following things must happen:
 - i. The post must appear with the poster's username (not an image). The username can be hard coded in JavaScript (but not in HTML). The post text cannot be hard coded (obviously).
 - ii. New posts must appear at the top of the list of posts, so that users see the latest tweets at the top of the list.
 - iii. The text in the box where users write tweets must disappear.

- iv. The number that counts the number of characters remaining must return to the maximum number.
- v. The cursor must return to the box where the user writes tweets (so that they can immediately start writing another tweet!)

Obviously, this will only work on your computer. You're not putting it on a server to broadcast it to the world (yet!)

For this problem you only need to turn in your code, there is no write up. Use a single HTML file with the following link to include JQuery:

```
<script  
src="https://code.jquery.com/jquery-3.3.1.min.js"  
integrity="sha256-FgpCb/KJQlLNfOu91ta32o/NMZxltwRo8QtmkMRdAu8=" "  
crossorigin="anonymous"></script>
```

You do not need bootstrap, but if you want to use it, please use the same link from previous assignments.

This assignment is about functionality and not design. As long as we can see and read all the elements and they have appropriate sizes and positions, the design is fine. Below is a screenshot of a reference solution. You do not need to copy it, it is only here to convey that having very basic design is fine.

Write a tweet

Call me Ishmael. Some years ago— never mind how long precisely—having -37	Post Tweet
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POSTS

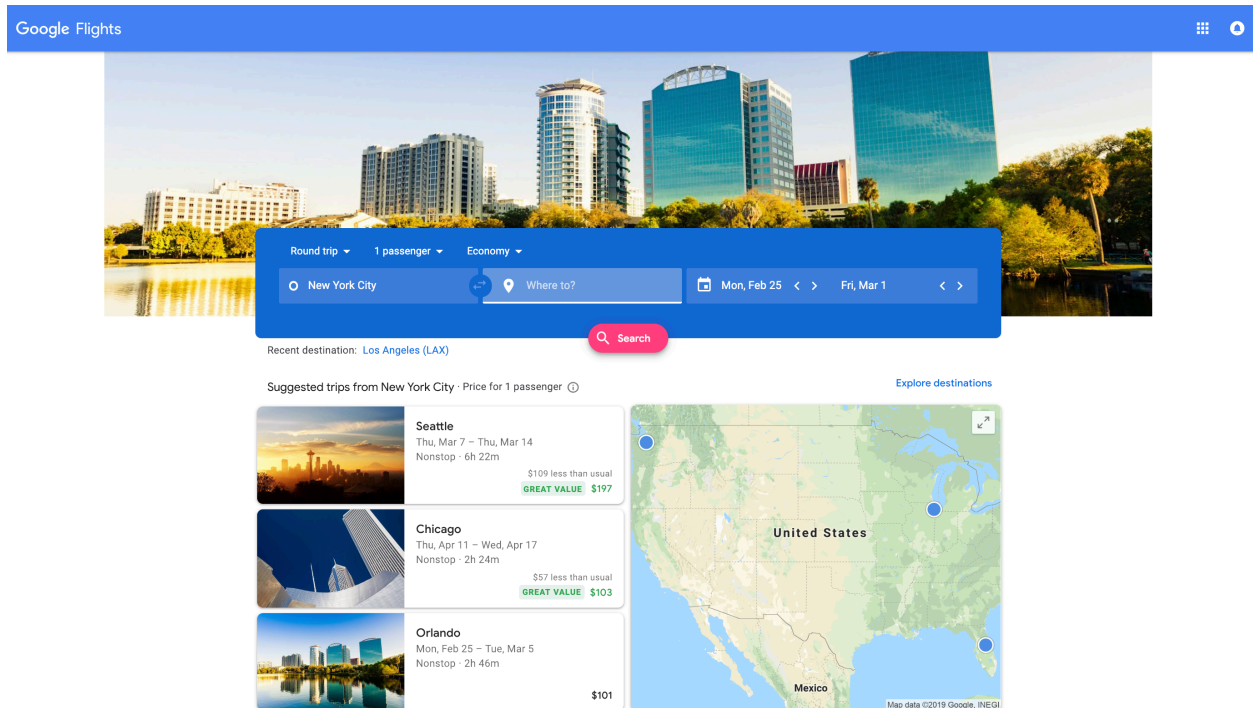
chilton Most recent post
chilton More ambitious third post
chilton Second post
chilton First post

Problem 2. Color and Font

1. **Color usage example.** Find an example of a webpage or mobile app where color is used to represent something within a cultural context.
 - a. Show us a screenshot (and highlight where the color is being used)
 - b. What is the color, what is the cultural context, and what is the intended meaning?
 - c. What is a way this could be misinterpreted in another cultural context?
2. **Good font usage example.** Find an example of a font (or mix of fonts) being used well to convey a meaning or connotation (**does not have to be from a webpage of mobile app**)
 - a. Show us an **image/ screenshot** (highlight where the font is being used, if it isn't obvious)
 - b. Use terms and words introduced in the lecture slide to describe the positive aspects of this font and how it helps convey a connotation. Use must use 3 typography terms introduced in class.
3. **Bad font usage example.** Find an example of a font usage that distracts from the message. (Most uses of *Comic Sans*, *Papyrus* or *BrushScript MT* will work.) (**does not have to be from a webpage of mobile app**)
 - a. Show us an **image/ screenshot** (highlight where the font is being used, if it isn't obvious)
 - b. Describe why this font does a disservice to the message.
 - c. Based on the message the font is conveying, what font should they have used? Show us a quick sample of how it would look in the new font. You don't have to spend much time on the graphic design. Just do the minimum to convey how much better it could be.
 - d. What are the properties of the new font that make it a better choice for this message? Use at least 2 typography terms introduced in class.

Problem 3. User Interaction

1. What is the primarily reason users interact with a website?
2. Is browsing the primary design goal of most websites? Say why or why not *in your own words*.
3. What is the primary (high-level) goal of this interface?



4. What is the subgoal on this on this page?
5. What low-level interactions would the user do on this page to achieve the subgoal?
6. When they execute those actions, what will the user see or do to be able to evaluate whether they achieved that subgoal?
7. After completing this subgoal, what is the next important subgoal the user will be guided to do?
8. After completing all the subgoals (whatever those may be), what is the final piece of feedback they will get to evaluate whether their original high-level goal was achieved?