COMP1073 – Client-Side JavaScript

ASSIGNMENT 1

Emulating a Classic Toy with a Web App

DESCRIPTION

Using the provided HTML, CSS, and JavaScript as a starting point, emulate the user experience of the popular children's toy, the **Mattel® 'See 'N' Say Storymaker'**.

INSTRUCTIONS

1. Watch the short video at https://www.youtube.com/watch?v=gG8y_e6t0G4 (limegl0wstix, 2010), and carefully watch how the user interacts with the toy.
2. Download the provided .zip file (includes HTML, CSS, and JS), extract the contents, then open the HTML file in a browser and click on the button.
3. Examine the JavaScript – note that by setting a string value to the variable, `textToSpeak` and clicking the button, the built-in TextToSpeech API will read the words aloud (in every browser except MSIE – but Edge is fine).
4. Edit the HTML file to include 5 buttons – each one will pick a random phrase from a JavaScript array (use the image on the last page of this assignment to build each of the five arrays). Note that the first column is a list of nouns (forming the sentence subject), the second is a list of verbs, the third is a list of adjectives, the fourth, another list of nouns, and the fifth consists of a number of places (or settings).
5. The user will push each of the buttons, and each will concatentate the random word from it's array, eventually building the text string that will be assigned to the variable textToSpeak.
6. Create a sixth button that will actually pass the value to `textToSpeak` to the `speakNow()` function (this part of the assignment is already built for you).
7. Once you've completed the functionality of the interface, add some CSS to make the page visually attractive (don't spend too much time on this – the focus is the JS).
8. Ensure that all your HTML, CSS, and JS is well-commented, formatted, and organized.
9. Upload your application to a webserver.
10. Post the URL to **Assignment 1** on Blackboard.

TAKE IT FURTHER

1. Add another button that generates a random story with one click.
2. Add a reset button so that another story can be created.
3. Try as much as possible to create a user experience that matches the original product.
4. Output the random story in a text format as well as the audio output.

5. Anything else that you can dream up…

SUBMITTING YOUR WORK

Upload the HTML, CSS and any media files to a web server and then post a link to the document in the assignment on Blackboard. *Your work will not be graded unless it is posted on a web server*.

EVALUATION

Please refer to the chart (assessment rubric) below. You will be graded on *how well* you followed the *assignment instructions* from both a *technical* and a *creative* perspective as spelled out in the rubric. This assignment is weighted in terms of your final mark as indicated on the course syllabus.

Criteria	Mark
TECHNICAL EVALUATION	
HTML, CSS, and JavaScript is valid, properly structured, formatted and commented.	**/5**
JavaScript is well organized, with appropriate variable names and helpful descriptions for each section of the script.	**/5**
The basic functionality of the application is complete.	**/5**
There are additional features and/or functionality that go beyond the basic application requirements.	**/5**
CREATIVE EVALUATION	
The application is fun, intuitive, and easy-to-use – a pleasurable user experience.	**/5**
The JavaScript is thoughtfully organized, and it offers a creative solution to the application requirements.	**/5**
There are other innovative or imaginative elements of the script that go beyond the basic application requirements.	**/5**
TOTAL	**/35**

OTHER RESOURCES

Use the image on the next page as a guide as you build out the files for this application


1
The turkey
Mom
Dad
The dog
My teacher
The elephant
The cat
2
sat on
ate
danced with
saw
doesn't like
kissed
3
a funny
a scary
a goofy
a slimy
a barking
a fat
4
goat
monkey
fish
cow
frog
bug
worm
5
on the moon
on the chair
in my spaghetti
in my soup
on the grass
in my shoes
surprises
playback