

Web Scripting 1

Assignment: 05 – Create a Cat Manager application

Course Value: 15%

Due Date: Before the start of class 08

Assignment Description:

Create a cat manager application where the user must take care of a pet cat.

Assignment Versions:

This assignment has three versions of increasing difficulty. If your group is struggling with JavaScript, then try the base version with JavaScript starter code. This version will help your group get started with the assignment. If your group wants a bit more of a challenge, then try the base version without starter JavaScript code. Lastly, if your group is looking for a bigger challenge, then try the bonus version of this assignment.

All versions of the assignment will receive a maximum grade of 20.

Instructions:

1. Join your team members in a breakout room
 - a. The instructor will assign you to a team
2. Open the **ws1-a-05-start** folder located in the **ws1-day-05** folder in your text editor of choice
 - a. All the HTML and CSS have been completed for you
 - b. All you need to do is create the JavaScript code and attach it to the "index.html" file
 - i. The JavaScript code requirements are located at the end of this document
3. When the above steps are complete do either of the following:
 - a. If you finish during lab time, show your completed assignment for marking to your instructor or to the lab instructor
 - b. If you finish outside of class time, then go to The Learning Hub and find the drop box for Assignment 03
 - i. Zip up your code
 1. Make sure to include the HTML, CSS and the JavaScript files
 - ii. Upload your code to the drop box
 - iii. In your submission, let your instructor know who all the members of your team were

Notes:

- Email me at Michael_Whyte@bcit.ca or contact me on Slack if you have any questions
- View the included demo videos (found in the "ws1-day-05" folder) to see a demonstration of how the various versions of this application should run

Marking Criteria:

This project will be marked out of 20 and will be marked based on the following criteria:

- | | |
|-------------------------------------|----------|
| 1) All Instructions followed | 3 marks |
| 2) All Technical Specifications Met | 12 marks |

Total: 20 marks

Late Penalty

- Late submissions will receive a **7-mark penalty**. If you are late, the maximum mark you can receive is 8 / 15 on this assignment

Application Requirements

Overview

The user selects a cat, gives it a name, and then must manage the cat by keeping it fed, providing it with water, and giving it love. If the user allows the cat to go too long without food or water, then the cat will die.

General Code Requirements

- The application must contain a “Cat” class that has at a minimum:
 - o Properties
 - name, hunger, thirst, and happiness
 - The above properties should be used for displaying the stats in the game
 - o Methods
 - feed
 - Should increase or decrease hunger
 - drink
 - Should increase or decrease thirst
 - love
 - Should increase or decrease happiness
- The application should create one instance of this cat class for the game
- You are free to add more properties and methods to the “Cat” class
- You are free to add more functionality to the feed, drink, and love methods

Views

Both the regular and bonus version of the application have three views (divs) located on one HTML page.

1. Cat Selector View
 - a. This view is visible on page load
2. Cat Name View
 - a. This view appears once the user has selected a cat
3. Gameboard View
 - a. This view appears once the user has chosen a name for the cat

Base Version

The Cat Selector View

- When the user clicks on one of the cat images, that image should be stored and used as the cat image for the gameboard
- When the user clicks on one of the cat images, this view should disappear, and the cat name view should appear

Cat Name View

- When the user enters a name into the form and presses the submit button, the name entered in the form should be used as the cat's name for the gameboard
- When the form is submitted, this view should disappear, and the gameboard view should appear

Gameboard View

- This is the main view for the game
- Stats
 - o When the user clicks the plus and minus buttons for food, water, or pet, then the corresponding stat under the "Stats" column should increase or decrease
 - Food = Hunger
 - Water = Thirst
 - Pet = Love
 - o The maximum level for all stats is 10
 - o The minimum level for all stats is 0
 - o If the "Hunger" or the "Thirst" stat goes down to 0, then the cat dies
- Image
 - o The cat selected by the user in the cat select view should be displayed in this section
- Message
 - o Hungry
 - If the hunger stat is 6 or above, display a message in the hunger out element that says:
 - "I'm not hungry..."
 - If the hunger stat goes down to 5 or below, display a message in the hunger out element that says:
 - "I'm hungry..."
 - If the hunger stat goes to 0, display a message in the hunger out element that says:
 - "I'm dead!!!"
 - o Thirsty
 - If the thirst stat is 6 or above, display a message in the hunger out element that says:
 - "I'm not thirsty..."
 - If the thirst stat goes down to 5 or below, display a message in the thirst out element that says:
 - "I'm thirsty..."

- If the thirst stat goes to 0, display a message in the thirst out element that says:
 - “I’m dead!!!”
 - Love
 - Display the following messages in the love out element
 - If the love stat is 10, display a message in the love out element that says:
 - “I’m well loved... 🐱”
 - If the love stat is 9, 8, or 7, display a message in the love out element that says:
 - “I need some love! 🐱”
 - If the love stat is 6, 5, or 4, display a message in the love out element that says:
 - “I feel unloved, please pet me! 🐱”
 - If the love stat is 3, 2, or 1, display a message in the love out element that says:
 - “I’m going to ignore you now! 🐱”
 - If the love stat is 0, display a message in the love out element that says:
 - “I’M DISOWNING YOU! 🐱”
- Game Over
 - If the thirst or hunger stat goes down to 0, then the game is over
 - When the game is over the game should do the following:
 - Hide the cat image and show the grim reaper image
 - Note:
 - The grim reaper image is already in the HTML file with a CSS property of “display: none;”
 - The animation of the grim reaper is controlled by CSS
 - You do not have to write any code for the grim reaper image animation
 - Disable all the game control buttons
 - Show the “Play Again” button
- Play Again
 - If the user clicks the play again button, then the following should happen
 - Reset the hunger, thirst, and love stats to 10
 - Reset the hunger, thirst, and love messages to their initial values
 - Hide the grim reaper image
 - Show the cat image
 - Hide the gameboard view
 - Show the cat select view

Bonus Version

The bonus version has the following differences compared to the base version:

Gameboard View

- The game should run automatically using timers
- At different set time intervals, the hunger, thirst, and love stats should decrease by 1
 - o The duration of the time intervals is up to you
 - o The duration of the time intervals for the hunger, thirst, and love stats should be different
- If the user clicks the “Food” button, do the following:
 - o Increase hunger by 1
 - o Display a hunger message that says either of the following:
 - If the hunger stat is 9 or below
 - “Yummy! Thank you for the food!”
 - If the hunger stat is 10
 - “I’m full!”
- If the use clicks the “Water” button, do the following:
 - o Increase thirst by 1
 - o Display a thirst message that says either of the following:
 - If the thirst stat is 9 or below
 - “Ah, refreshing! Thank you!”
 - If the thirst stat is 10
 - “I don’t need to drink”
- If the use clicks the “Pet” button, do the following:
 - o Increase love by 1
 - Note:
 - For this version, there is no maximum value for love
 - o Display a love message that says the following:
 - “I love you! Prrrr!!! 🐱”
- Display the following messages when the hunger, thirst and love stats decrease
 - o If the hunger, thirst, or love stat is 9, 8, or 7:
 - Hunger message:
 - “I’m hungry!”
 - Thirst message:
 - “I’m thirsty!”
 - Love message:
 - “I need some love! 🐱”
 - o If the hunger, thirst, or love stat is 6, 5, or 4:
 - Hunger message:
 - “I’m starving, please feed me!”
 - Thirst message:
 - “I’m dehydrated, please give me water!”
 - Love message:
 - “I feel unloved, please pet me! 🐱”
 - o If the hunger, thirst, or love sat is 3, 2, or 1:

- Hunger message:
 - “I’m feeling very weak. Any food would help!”
- Thirst message:
 - “I’m not going to make it. I need water!!!”
- Love message:
 - “I'm going to ignore you now! 😼”
- If the hunger, thirst, or love stat is 0:
 - Hunger message:
 - “I’m dead!!!”
 - Thirst message:
 - “I’m dead!!!”
 - Love message:
 - “I'M DISOWNING YOU! 😼”