Web Development – Mr. Turner

Project – Bug Splat

Project Overview

Your home has become infested with dangerous alien bugs. Sadly, all attempts to negotiate with the invaders have failed. You are left with no alternative but to begin splatting.

The user will splat 15 bugs by clicking on them while the bugs make comments to try and dissuade him or her.

Display

The list below includes the essential elements of the page.

- Use CSS to create an attractive and intuitive user experience.
- The page will need 15 images of bugs.
- The page will need a message area.

Functionality

The user's job is to splat the bugs by clicking on them. Each time a bug is splatted, the page should replace the image of the bug with a splat image. If the user clicks on a bug that has already been splatted, nothing should happen.

The bugs have a bank of comments that they will fire back each time one of them is splatted. The comments will either be nasty and defiant or pleading in nature. Feel free to be creative, but not vulgar or profane, with your comments.

While there are still at least 8 bugs left on screen, the bugs will be defiant. Once their numbers dip below that threshold, they will begin to beg for mercy.

With the exception of which type of comment appears (defiant or pleading), the comments should appear at random. If the page is loaded a second time, the users should see the comments in a different order or new comments altogether.

No comment should ever be used twice during a single execution of the page.

At the very end of the splatfest, the comment should change to, "You've splatted us all."

Enhancements

- While there are fewer than 8 bugs on screen, the bugs have the ability to come back. After each splat, there is a 10% chance that one of the dead bugs will return.
- After the last bug is splatted, the screen will change to show a big picture of a scary bug. The comment will read, "That's it. Now Mamma's angry!"

- Give the bugs a fighting chance. After each splat, they attack back. There is a 2% percent chance, per bug, that the user will be wounded. Each time the user is wounded, it takes an extra click to splat a bug. There should be a display on screen, telling the user how many clicks it takes to splat a bug.

Necessary Programming Skills

- Comprehension of the specifications sheet.
- Design Document
    - Figure out the information you need to keep track of.
        - This information will become your global variables.
    - Plan out the individual tasks your program must perform.
        - Think through the steps for each task.
        - Think through the information your task needs (where does it come from?).
        - These will become your functions.
    - Plan out the user interface.
        - You can start with the barest interface, but you should have an idea what you want the final product to look like.
- Managing your variables
    - What's global, local, and passed through as parameters?
    - Are you making groups of variables into arrays?
    - Do you have a complete back end design (variables and functions that work the program)?
    - Does your back end inform your display?
- Sequencing
    - Does your program sort out the different tasks into their own functions?
    - Does your program sequence from the user interaction into the necessary functions?
    - Is there an efficiency to your code that flows from the design document?
- An intuitive user experience
    - Is your display appropriate to the program (what's viewable and what scrolling has to be done)?
    - Is your display adaptable to other resolutions?
    - Is the interface intuitive?