

Troubleshooting JavaScript Crushing programming bugs

Assignment Description

Use the in-class build files (the Puzzle Drag and Drop) and fix the bugs that were discovered in class. This is a research assignment - solve the problems outlined in the brief.

Create new branches (named appropriately) and update the functionality to improve the game UX.

Puzzle Drag & Drop Bugs:

Problem One

1. You can drag and drop more than one puzzle piece into a drop zone - this shouldn't happen. There should only be one piece in one drop zone at a time.
- Drag & drop pieces overlap each other. We need to figure out how to ensure only 1 puzzle piece is allowed in 1 section at a time.
 - "Preventdefault" is used to drop elements onto elements, such as the drop zone - but it also enables other pieces to be dropped on top of one another too. We have to find a way to prevent a puzzle piece from being dropped when a spot is already occupied with another one.
 - If the drop zone is already occupied, we need to prevent the drop event from occurring.

Fixing the problem:

The handleDrop function can "check" to see if the drop zone already has a child element (puzzle piece). If it does, we can prevent the puzzle piece from entering the drop zone and return: "false".

If the puzzle piece has a length of 0, it means that the drop zone is empty and we can add the dragged piece to it. If it has a length greater than 0, that means a puzzle piece is already there.

** we can use the original drop function to solve this problem.

Problem Two

2. The second bug is the problem with pieces appearing in the drop zones on reset / choosing a new puzzle. Those should be removed / reparented back to the drag zone as well, so that the player has a fresh board to drop onto.
- Puzzle pieces remain in the dropzone when selecting a new puzzle. We need to figure out how to reparent the puzzle pieces back to the drag zone or remove them depending on the puzzle game chosen.
 - `changeBGImage` is responsible for changing the background image of the puzzle board and resetting the puzzle pieces

Things we can research:

- How to reset an element back to a particular area
- "Exiting a function"
- "Javascript return function"
- "ParentNodeChildren"
- "Node > Removing Child"