

Functions and Variables

`listadder(num)` – Calls the Python method “`listadd(num)`” through Eel.

`backspace()` – Calls the Python method “`listpop()`” through Eel.

`listclear()` – Calls the Python method “`listclear()`” through Eel.

`maplevel(floornum)` – The variable “`floornum`” is an integer in this case and if it is 1, 2, or 3, it changes the canvas’ background image to its respective floor map.

`listdisplay()` – This function is asynchronous because we need it to wait for Python’s `numtostring` function to finish running, hence, the `await` keyword. Then, the function finds the HTML element with the identifier “`num`” and replaces it with the result of `numtostring()`.

`startNew(room)` – Tries to delete all style tags created by this function. If it can’t, part of this function just says, “don’t worry about it” and tells it to carry on without doing anything. After that, a “`style`” element is created to add CSS animations later. The function then performs a check to see if the room number is in the array of rooms provided. If it isn’t, return the error image. If it passes that without an issue and the room number starts with “1,” new CSS animation keyframes are created to fade from the stairs map to the room and back to the stairs map. The keyframes are added to the style and then appended to the HTML header. The canvas is assigned the animation and its properties. The same goes for rooms that start with “2.” Except this time, there are no stairs to go up or down. The function checks if the room number happens to be 318, 321, 323, 325, or 327. If the room number is one of those numbers, you can take a different set of stairs to these rooms and the keyframes are changed. There is also a special case for rooms 317 and 319 because there is a more efficient way to get there. If the room just starts with “3,” it takes the same set of stairs as the first floor. If, for some random, unknown reason everything else fails, just display the error message.

`radiochoice()` – This function checks if the radio buttons are set to CRN or room number. If it’s set to CRN, it gets the room number from `crntoroom()` from Python through Eel and calls `startNew()` with the room number resulting from `crntoroom()` as a parameter. If the radio button is set to anything else (the only other option is room number), it calls `startNew()` with the room number as the parameter.

Notes

How to change the map and JavaScript functions will be covered in a separate document.