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## Design Documentation:

We used the onload call to load all the images to use for canvas animating. We also have an entry() function which setups our game, initializing bugs and foods array to empty, restarting the timer, and resetting the DOM score element.

After onload, we call functions addFood(), addBug(), drawFood(), drawBug(), bugShape, foodShape, which changes the opacity and size of the food. The eat function is called in drawBug to check if at every draw interval, there is a food in range, if there is, it eats it by splicing and removing it from the food array. We have event handlers for killBug, which just reacts and checks if the click event is within the pixels of the bug array, if it is, the bug is spliced from the array and its opacity changes and after two seconds, it is not drawn anymore.

After we lose the game, we simply call reStart function which cleans up the global variables and entry() reinitializes everything.

## Test Plan:

- 1. We set different speed in the start page, level 1 and level 2 have different speed in the game page.
- 2. We enter the game, after 60 seconds, the game end.

- 3. We enter the game, after bugs eat all food, the game end.
- 4. In the game page, when we tap bug, it stop and fade in 3 second, our score increases.
- 5. When game end, after we click restart, the game restart.
- 6. When game end, after we click New Game, we return to the start page.
- 7. When we click pause button in the game, the timer and the bugs stop, and the button change to Resume.
- 8. When we close the window, and renter the page, the previous high score remains.