

# Overview

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EECS 368 Programming Language Paradigms

Monday September 19 2022

## In-Class Problem

Changes the background color of a webpage.

```
document.body.style.background
```

Changes color to Transparent and Green

```
document.body.style.background = "green";  
document.body.style.background = "";
```

When a key on the keyboard is pressed, your browser fires a "keydown" event. When it is released, you get a "keyup" event. The `key` property of the event object holds a string that corresponds to the symbol that pressing that key would type.

```
<!DOCTYPE html>  
<html>  
<meta charset="utf-8">  
  
<head>  
  <title>  
    handling events  
  </title>  
  
<body>  
  <!-- add inline css -->  
  <h1>press down the letter "g" to change the color of this window</h1>  
  <script>  
    /*  
      add a comment here that describes what this JavaScript program  
      does  
      this program changes the color of the window when the user presses  
      the letter "g" on the keyboard, when the user releases the key the window  
      goes back to its original color, specifically transparent.  
    */
```

```
/*
  add a comment here that describes what this function does:
  window is the global object in JavaScript and
  window.addEventListener is a method that adds an event listener to the
  window object, specifically it appends an event listener to the object
  window that listens for the event "keydown". The event listener is a
  function that takes an event object as an argument. The event object is an
  object that contains information about the event that was triggered. The
  event object has a property called "key" that contains the value of the
  key that was pressed. If the key that was pressed is "g", then the
  background color of the window is changed to green. Otherwise the event
  does nothing.
*/

window.addEventListener("keydown", event => {
  if (event.key == "g") {
    document.body.style.background = "green";
  }
});

/*
  add a comment here that describes what this function does:
  this function is an event listener that listens for the event
  "keyup" and when the event is triggered the background color of the window
  is changed back to transparent. It essentially behaves similarly to the
  function above, but it changes the background color back to transparent
  instead of green. However there are no shared assumptions regarding the
  current state of the windows previous background color at the time of
  callback.
*/
window.addEventListener("keyup", event => {
  if (event.key == "g") {
    document.body.style.background = "";
  }
});
</script>

</body>
</head>

</html>
```