

Name _____ Period _____

Skill 22.01 Exercise 1

Think about the objects you interact with in your life: your phone, car, etc. Provide a few examples of event – response interactions you encounter.

Skill 22.02 Exercise 1

The code below, creates the text and button shown. But, there is more to be read!

- (a) First, create an event handler property for a click event that uses the *readMoreButton* button as the event target.
- (b) Now, you need to make more info display. Write a function that appends more text to the content text when the *readMoreButton* is clicked.

```
var content = document.createElement("div");
content.innerHTML = "JavaScript is a programming
language of the web. You can use it to add dynamic
behavior and store information.";

var readMoreButton = document.createElement("button");
readMoreButton.innerHTML = "Read More";
exercise2.append(readMoreButton);
```

JavaScript is the programming
language of the web. You can use it to
add dynamic behavior and store
information.

Read More

Skill 22.03 Exercise 1

Add two click eventListeners to the readMoreButton. The first event listener should call the same function you wrote in the previous example. The second event listener should call a function that changes the text on the button to “read less”.

```
var content = document.createElement("div");
content.innerHTML = "JavaScript is a programming
language of the web. You can use it to add dynamic
behavior and store information.";

var readMoreButton = document.createElement("button");
readMoreButton.innerHTML = "Read More";
exercise2.append(readMoreButton);
```



Skill 22.04 Exercise 1

This digital restaurant needs your help because the lock on the door is broken! People are able to get in even when the restaurant is closed. You need to use the `.removeEventListener()` to keep the door locked. **First**, you must add an event listener to the `lock` element to call the `closed` function when it is clicked. **Next**, inside the `closed` function,

- (a) Change the `backgroundColor` of the unlocked button to `lightGrey`
- (b) Change the `backgroundColor` of the locked button to `pink`
- (c) Close the door
- (d) Remove the event listener from the door so it cannot be reopened.

add a `.removeEventListener()` to turn off the `openDoor` function when a user tries to click the `door` element.

```

var door = document.getElementById('door');
var unlock = document.getElementById('unlock');
var lock = document.getElementById('lock');

function openDoor() {
    door.hidden = true;
}

function closeDoor(){
    door.hidden = false;
}

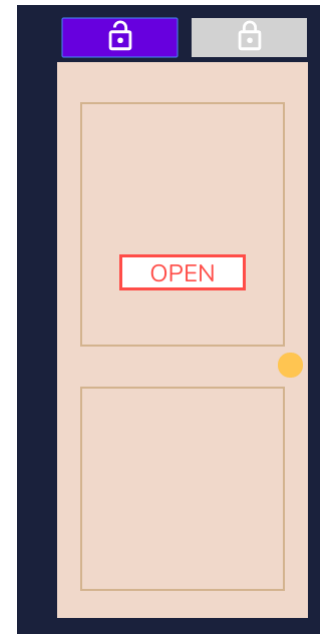
function open(){
    door.innerHTML = "OPEN";
    unlockButton.style.backgroundColor = "lightGreen";
    lockButton.style.backgroundColor = "lightGrey";
    door.addEventListener('click', openDoor);
}

function closed(){
    door.innerHTML = "CLOSED";
    //Write your code for parts (b) thru (d) below

}

unlock.addEventListener('click', open);
//Write your code for part (a) below

```



Skill 22.05 Exercise 1

- (a) Navigate to the MDN Events Reference page – <https://developer.mozilla.org/en-US/docs/Web/Events>. Once there, scroll to the section on mouse events.
- (b) The code below creates a simple div element on the screen. Write three different functions: `changeColor`, `changeSize`, `changeText`. In the body of each function, write code to change the `backgroundColor`, the size, and text.
- (c) Write three event listeners for each of the above functions. Each should fire for different mouse events.

```
var width = 200;
var height = 200;
var moreInfo = document.createElement("div");
moreInfo.innerHTML = "JavaScript can also handle requests and responses on a website. It's a great language to master for front-end and back-end web development.";
moreInfo.style.width = width + "px";
moreInfo.style.height = height + "px";
moreInfo.style.backgroundColor = "red";
moreInfo.style.textAlign = "center";
moreInfo.style.padding = "10px";
moreInfo.style.margin="10px";
document.body.append(moreInfo);
```

Skill 22.06 Exercise 1

Now it's time to create a game! Program this code to dribble the ball on the platform using any key on a keyboard. When a user presses a key down, it should lift the ball up. When the user releases the key, the ball should drop.

First, make a function named *ballUp* that will raise the *ball* to 300px from its starting position.

Next, make a function named *ballDown* that will change the position of the ball to its original position. **Finally**, add two event listeners. The first event listener should run the *ballUp* function when a *keydown* event fires, the second should run the *ballDown* function when a *keyup* event fires anywhere on the document.

```
var ball = document.createElement("div");
ball.style.position = "absolute";
ball.style.borderRadius = "50%";
ball.style.width = "50px";
ball.style.height = "50px";
ball.style.top = "570px";
ball.style.left = "125px";
ball.style.backgroundColor = "yellow";
gameDiv.append(ball);
```

Ball Bounce

Let's dribble the ball using any key on the keyboard. Hold a key down to lift the ball, then release a key to drop the ball.



