

Name \_\_\_\_\_ Period \_\_\_\_\_

#### Skill 24.01 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 24.02 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 24.03 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 24.04 Exercise 1

The digital restaurant doesn't quite work. When the door is clicked it should open, but only when the door is unlocked. When the door is open a monster appears. Then when the monster is clicked the door should close. When the door is locked, it should not open when the door is clicked. (See the example Pluska developed).

```
var door = document.getElementById('door');
var unlock = document.getElementById('unlock');
var lock = document.getElementById('lock');
var monster = document.createElement("div");

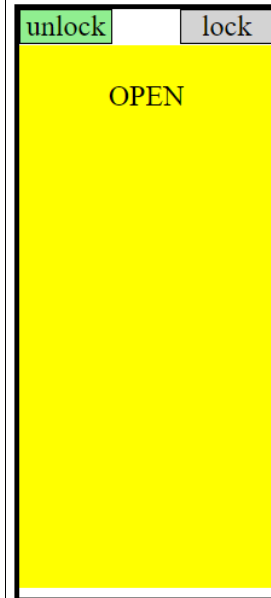
function openDoor() {
    door.hidden = true;
}

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";
    unlockButton.style.backgroundColor = "lightGrey";
    lockButton.style.backgroundColor = "pink";
    closeDoor();
    //TODO: Remove the click event listener openDoor from the door
}

unlock.addEventListener('click', open);
lockButton.addEventListener('click', closed);
//TODO: Add an event listener to monster to close the door
```



**Skill 24.05 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 24.06 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.



