

Digital Footprint

Teacher Guide





Alex:

Hey Kenzo, my friend Jake posted a meme on social media where he made fun of one of our classmates during a basketball game.



Kenzo:

Oh no, Alex. That doesn't sound very kind.



Alex:

He deleted the post, but other people have already shared it, and it keeps popping up. Why is that?



Kenzo:

Unfortunately, Alex, once something is shared online, it's almost impossible to erase completely. This is what we call a Digital Footprint—it sticks with you and can spread far beyond your control.



Alex:

Digital Footprint? I think I need to understand this better. Can you explain it to me?



Kenzo:

Absolutely, Alex! I'm always here to help. But before we get started...



Learning Objectives

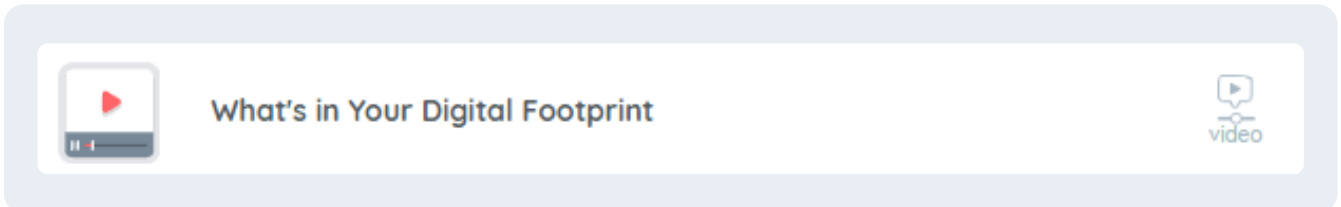


Skills	Tools
<ul style="list-style-type: none"> • Define the term "digital footprint". • Explain how it can affect our online privacy. • Learn and give examples of an invisible audience. • Analyze how different parts of our digital footprint can lead others to draw conclusions -- both positive and negative -- about who we are. • Create a trivia-style game based on digital footprints. 	<ul style="list-style-type: none"> • HTML • CSS • JS • BSD Education Online



Before We Begin

Before we start, let's watch a video about what a digital footprint is. Go to BSD Online's Platform and find this video.



Vocabulary Review



1. **Digital Footprint:** Information online about a person posted either by that person or by others, intentionally or unintentionally.
2. **Persistent:** Lasting a long time.

Activity Zone

Now that you have watched the video, watch it again but while you are watching, complete the worksheet below.

Directions: What images did you see in the video and what do those images have to do with your digital footprint?

Images	Digital Footprint
Footprint	You leave tracks or footprints wherever you go
Magnifying Glass	You are spotted or seen everywhere you go online
Lighthouse	You can be searched
Copy Machine	Everything you post can be copied
Two people whisper	Information is shared
Sports Arena	When you post on social media you are broadcasting it to the world
Permanent Marker	Everything is post is permanent

How do you feel knowing that everything you do on the internet gets saved and could be looked up, shared, or shown to others?

Example:

1. "I feel a little nervous because I want to make sure I don't post or do anything I'd regret. It makes me think more about being careful online."
2. "It makes me feel like I have to be really responsible and only do things I'm okay with other people seeing."
3. "I feel a bit weird because I want my private stuff to stay private, so I try to be extra safe online."

Think about it like this:

Imagine you had a neighbor you used to play with when you were little, but you haven't seen them in ages. Now picture them following you on social media and checking out all your videos. What if they decide to share your funny dances with their family or take a screenshot to show their friends? And what if those social media videos stay online for a long time, and reappear long after you forgot about them?

"Being appropriate" is like knowing the right things to do in different situations. It's like using good manners when you're at a friend's house or following the rules when you're playing a game. On social media, being "appropriate" means using it in a way that's respectful, safe, and follows the guidelines. It's about sharing things that won't hurt anyone's feelings and treating others online with kindness. So, being appropriate on social media is like playing by the rules and making sure everyone has a positive experience. And don't forget, anything you do online can be seen by others!

Vocabulary Review



1. Invisible Audience: Unknown or unanticipated people who can see information about what you posted online.

Give a list of at least three examples of an invisible audience. One example is given.

Example: Future employers

1. Colleges
2. Teachers
3. Hackers

Quick Check

Q1. What does your digital footprint include?

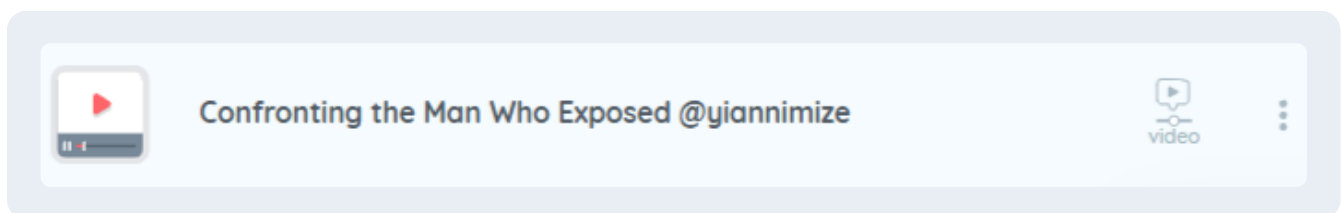
- A. Information you post about yourself online.
- B. Information others post about you online.
- C. Both 1 and 2.
- D. None of the above.

Q2. Which of the following activities contributes to a positive digital footprint?

- A. Volunteering for a community service project.
- B. Texting your friends.
- C. Writing a letter to your grandma.
- D. Sharing photos on social media.

Activity Zone

Go to BSD Online’s Platform and find this video.



Now that you have watched the video, think about the questions below. Write your thoughts in the space provided.

What were the significant actions and interactions shown in the video?

Example 1: Sharing Stories: Jay shares his story about how he was inspired by Yanni and another person named Calvin. He talks about how he had a tough time in life but started a successful business.

Example 2: Understanding Each Other: They both learn from each other. Yanni explains that people online can be mean, and Jay realizes he could have handled things differently.

How did the online actions of the individuals impact their digital footprints?

Example 1: Videos Going Viral: When Jay made a funny video about Yanni's car, it got a lot of views. This means more people saw it, which can be good for getting noticed but also can lead to mixed comments.

Example 2: Comments and Reactions: Both Yanni and Jay got many comments from people online. Some were nice, but others were mean. This can affect how people see them, and it shows that not everyone is kind online.

What were the possible outcomes of their actions, both advantageous and disadvantageous?

Example 1 advantage: Getting Noticed: Jay's video went viral, which means lots of people saw it. This can help him get more followers and customers for his business.

Example 2 advantage: Building a Friendship: By talking things out, Yanni and Jay could become friends. They learned more about each other and could work together in the future.

Example 1 disadvantage: Comments: After Jay's video, they both received some mean comments. This can hurt their feelings and make them feel bad about themselves.

Example 2 disadvantage: Reputation Risks: If people think negatively about Jay's video or Yanni's response, it could hurt their reputations. Others might not take them seriously.

How might they have managed the situation differently to preserve a positive digital footprint?

Example:

Talk Before Posting:

- Communication: Instead of posting the video right away, Jay could have reached out to Yanni first to talk about how they felt. This way, they could clear up any misunderstandings before sharing anything online.

Think Before Sharing:

- Consider the Impact: Both could have thought about how their videos might affect each other. If Jay had considered how his video could be seen by others, he might have chosen to share it differently.

Focus on Positivity:

- Highlight the Good: Instead of focusing on what he didn't like, Jay could have highlighted the positive aspects of Yanni's work or shared a funny story about their meeting. This would create a more positive vibe.

Personal Reflection:

What types of online activities do you engage in regularly?

Example:

Online Gaming
Social Media
Video Creation

How do you think your online behavior contributes to your digital footprint?

Example:

My online behavior adds to my digital footprint because everything I post, share, or comment on stays online. If I'm kind and careful, it shows I'm a good person, but if I'm not, it could make me look bad.

Are there any changes you can make to ensure a more positive digital footprint in the future?

Example:

I can think before I post, be nice to others online, and only share things that I wouldn't mind everyone seeing.

Creating Positive Digital Footprints:

Brainstorm and write down three actionable steps you can take to improve or maintain a positive digital footprint. Such as:

- Posting uplifting and supportive comments on classmates' social media posts.
- Being mindful of privacy settings and avoiding sharing personal information online.

1. "Only post nice and positive things that make people feel good."
2. "Check my privacy settings to make sure only people I trust can see my stuff."
3. "Think before I share anything and make sure it's something I'd be okay with everyone seeing."

Teacher Summary:

- Summarize the key learnings from the activity, highlighting the significance of digital footprints in online interactions.
- Reiterate the importance of thinking before posting and making conscious choices to contribute positively to digital spaces.
- Encourage ongoing reflection and discussion about digital citizenship and responsible online behavior.

Activity Zone

Creating Positive Digital Footprints:

Use the below planning document to begin the process of creating your own trivia game.

Title of the game <h1>:

Digital Citizenship Game

Tagline <p>:

Do you have a good digital footprint?

alert() to greet users when the game starts:

Welcome to my Digital Citizenship Game

prompt() for trivia question 1:

The word permanent means that it will never go away. Is this true or false?

Answer: true

prompt() for trivia question 2:

What is it called when information is posted online about a person either by that person or by others, intentionally or unintentionally?

Answer: digital footprint

prompt() for trivia question 3:

Wearing pajamas to school is appropriate. Is this true or false?

Answer: false

Creating Positive Digital Footprints:

Step 1: Introduction

Let's create a way to quiz your friends and get them to pause and think before they post, share, or respond.

Go to BSD Education's Platform to see an example of a project called Trivia Game.

In this project, we will use HTML and JavaScript (also known as JS) to create a trivia game.

The trivia game will include three questions, and players will score a point for each question they answer correctly.



I created an example of the game, when you are done playing my trivia game, come back here so we can start planning your version of the game.

Step 2: Add a title

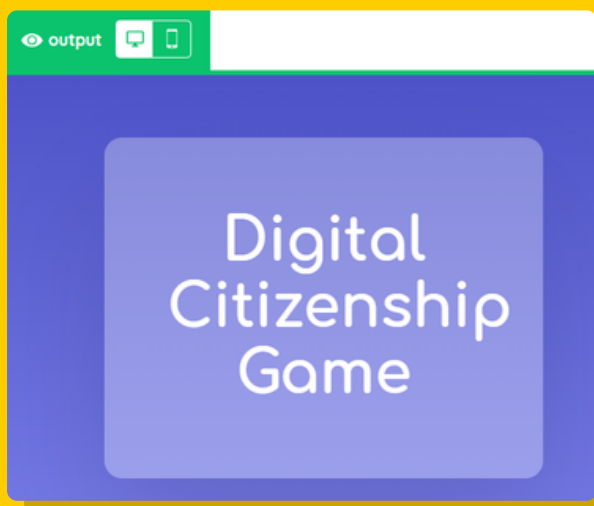
Let's begin by adding a title for our trivia game.

The title should reflect the topic of the trivia questions, such as "Digital Citizenship Game", or "Digital Footprint Quiz".

Objective: On **HTML line 11**, create an `<h1>` element and type the title for the game between the tags.

```

1  <!DOCTYPE html>
2  <html>
3
4  <head>
5    <link rel="stylesheet" type="text/css" href="style.css" />
6  </head>
7
8  <body>
9
10  <div>
11    <h1>Digital Citizenship Game</h1>
12  </div>
    
```



Step 3: Add a tagline

Next, let's add a short, catchy tagline beneath our heading.

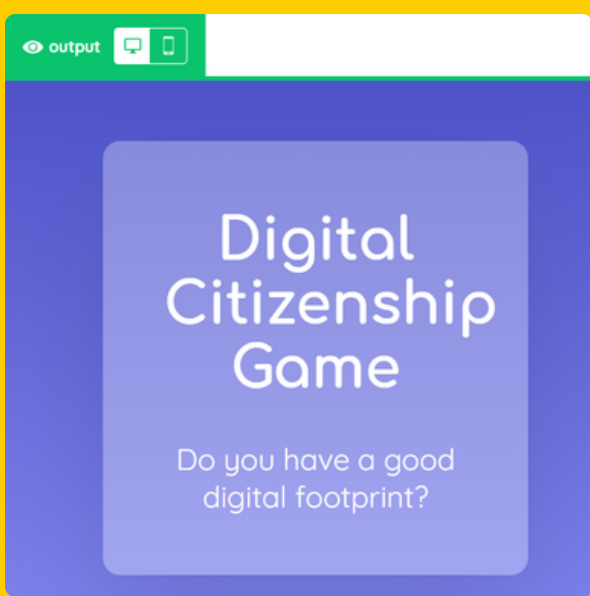
Examples:

- "Do you have a good digital footprint?"
- "Test your digital citizenship knowledge"

Objective: On HTML line 12, create a `<p>` element and type a tagline between the tags.

```

1  <!DOCTYPE html>
2  <html>
3
4  <head>
5      <link rel="stylesheet" type="text/css" href="style.css" />
6  </head>
7
8  <body>
9
10     <div>
11         <h1>Digital Citizenship Game</h1>
12         <p>Do you have a good digital footprint?</p>
13     </div>
    
```



Step 4: Add a “Play” button

Next, let’s add a button that players will need to click in order to start playing.

Objective: On HTML line 13, create a `<button>` element and type **Play** between the tags.

A screenshot of a code editor with three tabs: 'html index.html', 'css style.css', and 'js script.js'. The 'html index.html' tab is active. Line 13 contains the code `<button>Play</button>`, which is highlighted with a blue selection box. Line 14 contains the closing tag `</div>`.



Step 5: Add an onclick attribute

In order to make a button do something when clicked, we need to add an **onclick** attribute!

An **onclick** attribute will then call a corresponding JavaScript **function**, which we will be creating in the next step.

Objective: On HTML line 13, add an **onclick** attribute that calls a **function** named "quiz()".

```

13 <button onclick="quiz()">Play</button>
14 </div>
    
```

Note: You will not see any change to your output.

Step 6: Create a function

Time for JavaScript!

In the previous step, we added an **onclick** attribute to the button to call a **function** named **quiz()**.

Now let's actually create that **function**!

Objective: On JS line 1, create an empty **function** named **quiz**.

Note: You will not see any change to your output.

```

1 function quiz() {}
    
```

Step 7: Add an alert() to greet players

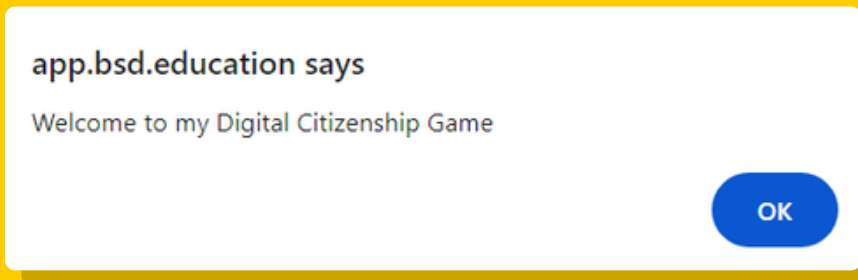
Next, inside our **function**, let's create an **alert** pop-up message box that will greet players when they start the game.

Objective: On JS line 2, create an **alert()** to greet players when they start the game.

Note: You will not see any change to your output.


```

html index.html  css style.css  js script.js
1  function quiz() {
2      alert("Welcome to my Digital Citizenship Game");
3  } //closing bracket for the entire function
    
```



In this game, we are going to keep score by awarding points for the correct answers.

We already learned about const variables but now let's look at let variables.

What is it?

Variables are used to store and track information. It is used to "remember" information that we want to use later on. We can use the `let` keyword to declare a variable.

js let

Remember!

1. Variables are a form of named storage; used to store information, like a storage box with a name!
2. We can put data inside the container, and access the data anytime by referring to the name of the container.

3. In JavaScript, creating a new variable is called declaring a variable.

4. All variables must have a unique name, followed by =, then the value we want to store to the variable.

Example

```
let myName = "Ayesha";
let myAge = 10;
```

In the examples above, the variable called **myName** is storing "Ayesha", and **myAge** is storing a value of **10**.

In the next step we will create two different variables. A let variable to keep track of the player's score, the player will earn one point for each correct answer. Then a const variable to give the total value of points, three questions worth one point each for a total of 3 points.

Step 8: Declare variables to keep track of the score

For our game, players will score one point each time they answer correctly.

To set up a score system, we'll create two variables - one for the player's score, and one for the total number of trivia questions.

Objective 1: On JS line 4, declare a **let** variable named **score** and set its value to **0**.

Objective 2: On JS line 5, declare a **const** variable named **totalQuestions** and set its value to **3**.

Note: You will not see any change to your output.

```
4 let score = 0;
5 const totalQuestions = 3;
6 } //closing bracket for the entire function
```

Trivia Question 1

In the next steps, we are going to create the following for EACH question that we ask.

1. Create the question (prompt with const variable)
2. Answer to the question (if statement)
3. Tell the player they are correct (alert)
4. Increase the players' score by 1 point (+)
5. Tell the player they are incorrect (alert)

Step 9: Add a prompt() for the first question

Now, let's create our trivia questions using **prompt** pop-up boxes.

In order for our game program to remember what the player answered for each question, we also need to store each **prompt** to a variable.

Objective: On **JS line 8**, create a **prompt** for the first trivia question, and store it to a **const** variable named **q1**.

```

1  function quiz() {
2      alert("Welcome to my Digital Citizenship Game");
3
4      let score = 0;
5      const totalQuestions = 3;
6
7      //first trivia question
8      const q1=prompt("The word permanent means that it will never
9      go away. Is this true or false?");
10     } //closing bracket for the entire function
    
```

app.bsd.education says

The word permanent means that it will never go away. Is this true or false?

OK

Cancel

Step 10: Add a conditional statement

To check if the player answered correctly, we'll use an **if** statement (also called a **conditional statement**).

```
if (q1 == "True") {
    //what will happen if player answers correctly
}
```

Objective: On **JS line 9**, add an **if** statement to check if **q1** is equal to the answer to the first trivia question.

TIP: Use the "equal to" **==** operator in your condition!

Note: You will not see any change to your output.

```
html index.html  css style.css  js script.js
1  function quiz() {
2      alert("Welcome to my Digital Citizenship Game");
3
4      let score = 0;
5      const totalQuestions = 3;
6
7      //first trivia question
8      const q1=prompt("The word permanent means that it will never
go away. Is this true or false?");
9      if (q1=="true") { }
10 } //closing bracket for the entire function
```

Step 11: Create an alert() for the correct answer

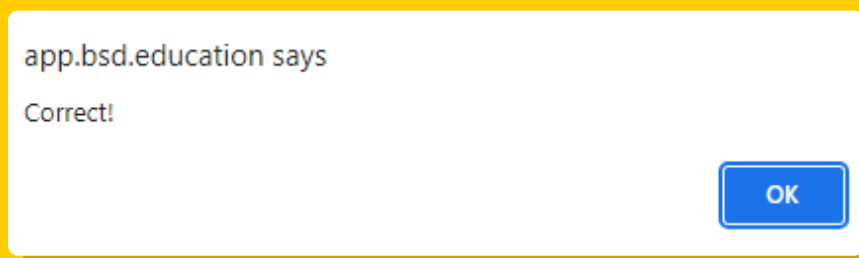
If a player answers correctly, a message will appear to tell the player that they got the question correct.

To do that, let's add an **alert**.

Objective: On JS line 10, create an **alert** that says, "Correct!".

```

9     if (q1 == "Mercury") {
10        alert("Correct!");
11    }
12 } //closing bracket for the entire function
    
```



We learned about comparison operators during our last project, this time we are going to learn about arithmetic operators.

What is it?

In JavaScript, we can use **arithmetic operators** to perform math calculations, such as addition, subtraction, multiplication, exponentiation, and division.

Remember we created a let variable and set its value to 0. Now we are going to update that variable by 1 point if the answer is correct!

Step 12: Increase the player score

When a player answers a question correctly, we'll also increase the player's score by one point.

To do that, we can use an **arithmetic operator** to update our **score** variable by increasing its value by 1.

```
variableName = variableName + 1;
```

Objective: On JS line 11, use **+** to increase the value of the **score** variable by 1.

Note: You will not see any change to your output.



```
11 score = score + 1;  
12 }
```

Step 13: Create an else conditional statement

What if the player answers incorrectly?

In this case, we can add another conditional statement!

This time, we'll use an **else** statement.

Objective: On JS line 13, create an empty **else** statement.

Note: You will not see any change to your output.

```

13  else { }
    
```

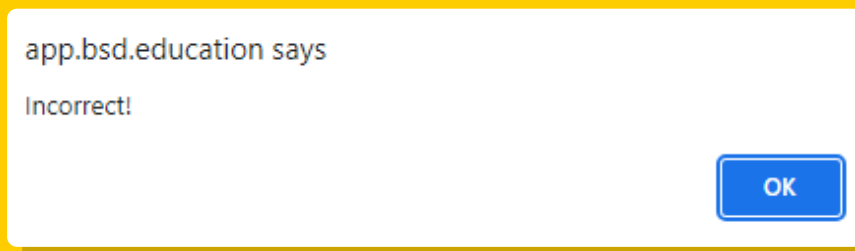
Step 14: Create an alert() for an incorrect answer

Now, inside our `else` statement, let's add an `alert` that will tell players when they've answered the first trivia question incorrectly.

Objective: On JS line 14, create an `alert` that says, "Incorrect!".

```

13  else {
14      alert("Incorrect!");
    }
    
```



Quick Check

Fill in the blanks. Here is your word bank.

else statement arithmetic operators let variable const variable

1. In JavaScript, a _____ is a variable that cannot be updated or redeclared.

2. In JavaScript, we can use _____ to perform math calculations, such as addition, subtraction, multiplication, exponentiation, and division.
3. In JavaScript, an _____ can be added after an **if** statement. This is the default action that will be taken if the **if** statement condition is not true.
4. In JavaScript, _____ is a variable that can be updated or declared.

Trivia Question 2-3

Step 15: Add the second trivia question

Great job!

We've finished our first trivia question - now let's move on to creating our second trivia question.

Just like we did before, we will use a **prompt**, and store the player's answer to a variable.

Objective: On JS line 18, create a **prompt** for the second trivia question, and store it to a **const** variable named **q2**.

```

1  function quiz() {
2      alert("Welcome to my Digital Citizenship Game");
3
4      let score = 0;
5      const totalQuestions = 3;
6
7      //first trivia question
8      const q1=prompt("The word permanent means that it will never
go away. Is this true or false?");
9      if (q1=="true") {
10         alert("Correct!");
11         score = score + 1;
12     }
13     else {
14         alert("Incorrect!");
15     }
16
17     //second trivia question
18     const q2=prompt("What is it called when information is posted
online about a person either by that person or by others,
intentionally or unintentionally?");
19 } //closing bracket for the entire function
    
```


app.bsd.education says

What is it called when information is posted online about a person either by that person or by others, intentionally or unintentionally?

OK

Cancel

Step 16: Add a conditional statement

Just like our first trivia question, we'll check if the player answered the second question correctly by adding an **if** statement.

```
if (q2 == "digital footprint") {

    //what will happen if player answers correctly

}
```

Objective: On **JS line 19**, add an **if** statement to check if **q2** is equal to the answer to the second trivia question.

Note: You will not see any change to your output.

```

1  function quiz() {
2      alert("Welcome to my Digital Citizenship Game");
3
4      let score = 0;
5      const totalQuestions = 3;
6
7      //first trivia question
8      const q1=prompt("The word permanent means that it will never
go away. Is this true or false?");
9      if (q1=="true") {
10         alert("Correct!");
11         score = score + 1;
12     }
13     else {
14         alert("Incorrect!");
15     }
16
17     //second trivia question

```

```

17 //second trivia question
18 const q2=prompt("What is it called when information is posted
online about a person either by that person or by others,
intentionally or unintentionally?");
19 if (q2=="digital footprint") { }
20 } //closing bracket for the entire function
    
```

Step 17: Add an alert() and increase the player's score

Just like before, we'll add an **alert** to notify players if they've answered correctly, and we'll also increase their total score.

Objective 1: On JS line 20, create an **alert** that says, "Correct!".

Objective 2: On JS line 21, use **+** to increase the value of the score variable by 1.

```

19 if (q2 == "Saturn") {
20     alert("Correct!");
21     score = score + 1;
22 }
    
```

app.bsd.education says

Correct!

OK

Step 18: Add an else conditional statement

What if the player answers incorrectly?

Once again, we'll add an **else** conditional statement!

Objective: On JS line 23, create an empty **else** statement.

Note: You will not see any change to your output.

The screenshot shows a code editor with three tabs: 'html index.html', 'css style.css', and 'js script.js'. The 'js script.js' tab is active. The code editor shows the following code:

```

23     else { }
24 } //closing bracket for the entire function
    
```

Step 19: Add an alert() for an incorrect answer

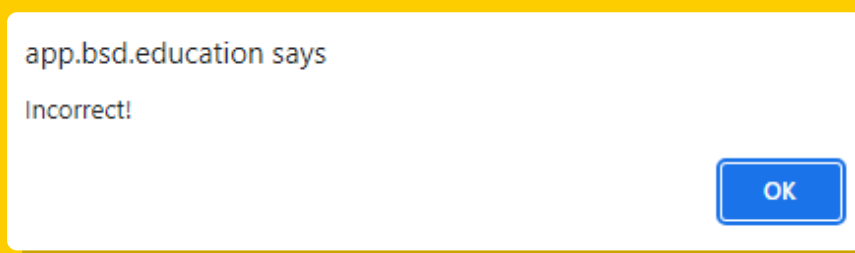
Now let's add an **alert** that will notify players that they've answered the trivia question incorrectly.

Objective: On JS line 24, create an **alert** that says, "Incorrect!".

The screenshot shows the same code editor as in Step 18. The code editor now shows the following code:

```

23     else {
24         alert("Incorrect!");
    
```



Step 20: Add the third trivia question

Nice work!

Now let's add our third and final trivia question using a **prompt** pop-up box.

Just like we did with our previous questions, we will store the player's answer to a variable.

Objective: On JS line 28, create a **prompt** for the third trivia question, and store it to a **const** variable named **q3**.

```

html index.html  css style.css  js script.js
8   const q1=prompt("The word permanent means that it will never
   go away. Is this true or false?");
9   if (q1=="true") {
10      alert("Correct!");
11      score = score + 1;
12   }
13   else {
14      alert("Incorrect!");
15   }
16
17   //second trivia question
18   const q2=prompt("What is it called when information is
   posted online about a person either by that person or by others,
   intentionally or unintentionally?");
19   if (q2=="digital footprint") {
20      alert("Correct!");
21      score = score + 1;
22   }
23   else {
24      alert("Incorrect!");
25   }
26
27   //third trivia question
28   const q3 = prompt("Wearing pajamas to school is appropriate.
   Is this true or false?");
29 } //closing bracket for the entire function

```

app.bsd.education says

Wearing pajamas to school is appropriate. Is this true or false?

OK

Cancel

Step 21: Add a conditional statement

Once again, let's add an **if** statement to check if the player answered the third question correctly.

Objective: On JS line 29, add an **if** statement to check if **q3** is equal to the answer to the third trivia question.

```

html index.html  css style.css  js script.js
go away. Is this true or false?");
9     if (q1=="true") {
10        alert("Correct!");
11        score = score + 1;
12    }
13    else {
14        alert("Incorrect!");
15    }
16
17    //second trivia question
18    const q2=prompt("What is it called when information is
posted online about a person either by that person or by others,
intentionally or unintentionally?");
19    if (q2=="digital footprint") {
20        alert("Correct!");
21        score = score + 1;
22    }
23    else {
24        alert("Incorrect!");
25    }
26
27    //third trivia question
28    const q3 = prompt("Wearing pajamas to school is appropriate.
Is this true or false?");
29    if (q3=="false") { }
30 } //closing bracket for the entire function

```

Step 22: Add an alert() and increase the player's score

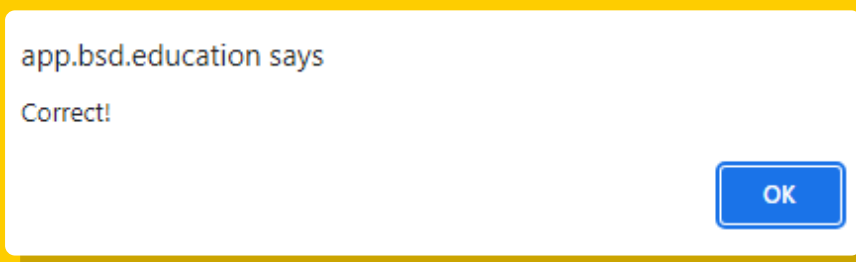
Just like our previous questions, we'll add an **alert** to tell players that they've answered the question correctly, and we'll also increase their total score by one point.

Objective 1: On JS line 30, create an **alert** that says, "Correct!".

Objective 2: On JS line 31, use **+** to increase the value of the **score** variable by 1.

```

html index.html  css style.css  js script.js
30 alert("Correct!");
31 score = score + 1;
    
```



Step 23: Add an else conditional statement

Just like before, we'll add an **else** conditional statement if players enter the incorrect answer.

Objective: On JS line 33, create an empty **else** statement.

Note: You will not see any change to your output.

```

html index.html  css style.css  js script.js
33 else { }
    
```

Step 24 Add an alert() for an incorrect answer

Now let's add an alert that will inform players if they've answered the trivia question incorrectly.

Objective: On JS line 34, create an **alert** that says, "Incorrect!".

```

html index.html  css style.css  js script.js
33     else {
34         alert("Incorrect!");
35     }
    
```

app.bsd.education says
Incorrect!

OK

Step 25: Display the final score to the player

Finally, let's tell players their final score after they have answered all three trivia questions!

Objective: On JS line 38, create an **alert** that says, "You got " + score + " out of " + totalQuestions + " questions correct!"

```

html index.html  css style.css  js script.js
37     //tell players their final score
38     alert("You got " + score + " out of " + totalQuestions + " questions correct!");
    
```

app.bsd.education says
You got 3 out of 3 questions correct!

OK

Quick Check

1. Why did we use an else conditional statement?

We used an **else** conditional statement because it tells the game what to do when the answer is wrong. If we only used **if**, it would check one thing, but it wouldn't do anything else if the answer was incorrect. The **else** makes sure the game knows how to respond to both correct and wrong answers

2. To create a string, the text must go in between what symbol?

To create a string, the text must go in between **quotation marks**.

Summing Up - Step 26



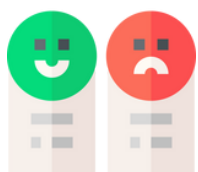
A digital Footprint is information online about a person posted either by that person or by others, intentionally or unintentionally. Define the term "digital footprint".



Something that is persistent means it lasts a long time.



An invisible audience is someone unknown or unanticipated people who can see information about what you posted online.



Analyze how different parts of our digital footprint can lead others to draw conclusions -- both positive and negative -- about who we are.



Explain how online presence can be searched, copied, and then shared.



Let's Build Something Different Together

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