My Dojo Quiz

This tutorial will show you how to build a quiz game with bootstrap and jquery.

1) Download the starter files

First, download the starter file from GitHub on

https://github.com/coderdojowaterford/dojo_quiz_starter

This contains the following files :
- index.php : this is the file where we will put all the html in this tutorial
- style.css : this file is where we will write the css code we need
- script.js : this file is where we will write the javascript we need
- img : this folder contains the images we will use in our quiz
- bootstrap.min.css : this is a library file (we can ignore what is in it)
- bootstrap.min.js : this is a library file (we can ignore what is in it)
- jquery-3.2.1.slim.min.js : this is a library file (we can ignore what is in it)
- popper.min.js : this is a library file (we can ignore what is in it)

The index.html file contains the bootstrap starter template, this is taken from :
https://getbootstrap.com/docs/4.0/getting-started/introduction/

2) Getting started

First open the following files a code editor such as notepad++ or sublime:
- index.php : this is the file where we will put all the html in this tutorial
- style.css : this file is where we will write the css code we need
- script.js : this file is where we will write the javascript we need

3) Link the style.css file and the script.js file and add the base HTML structure.

Go edit the index.php file and link the style.css file and the script.js files in the html file as done in the code below,

And finally change the title and create the base html structure as shown in the code below :

```html
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="bootstrap.min.css">
    <link rel="stylesheet" href="style.css">

    <title>My Dojo Quiz</title>
  </head>
  <body>
    <div id="start" class="container">
            <h1>My Dojo Quiz</h1>
      <button id="start-button" class="btn btn-primary" >Start</button>
      </div>
      <div id="quiz" class="container">
        <h1>The Quiz</h1>
      </div>
      <div id="results" class="container">
        <h1>Results</h1>
      </div>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="jquery-3.2.1.slim.min.js" ></script>
    <script src="popper.min.js" ></script>
    <script src="bootstrap.min.js" ></script>
    <script src="script.js"></script>
  </body>
</html>
```

Save the changes and check your browser to see what it looks like.

4) What is jQuery ?

jQuery is a library that allows you to select an htlm element and make that html element dynamic.
This library is already included with bootstrap.

The jQuery library gives you the $() function.

To use jQuery use the lines

```
$( document ).ready( function () {

});
```

These two lines tell jQuery what to do once the page is first loaded, and we will put everything else between those two lines.

To tell jQuery what to do, we use the $() function.

First we tell jQuery what HTML element to select by giving a css selector in the $() function like

```
$('#quiz')
```

Most commonly we will use either an ID or a Class

To use an ID, we first have to give an ID to the HTML element we want to use, like here the id « quiz » :

```
<div id="quiz"></div>
```

Then the corresponding css selector to use in the $() function is the id with a « # » character in front of the id, here that would be

```
$('#quiz')
```

To use a class, we give a class name to an HTML element, like here the class name « container »

```
<div class="container"></div>
```

Then the corresponding selector to use in the $() function is the class name with a « . » character in front of the class, here that would be

```
$('.container')
```

Note : when we are using a class jQuery well select ALL the HTML element that have that specific class name

Once we have told jQuery what HTML element we want to select, then we can tell it what to do to that element by adding a method to the $() function just after the $() function.

There are many possible methods to the $() function, here we will focus on the three following methods :

- hide() which makes the HTML element disappear, this looks like :

```
$('#quiz').hide();
```

- show() which makes the HTML element reappear, this looks like :

```
$('#quiz').show();
```

- click() which creates an action whenever we click on the HTML element, this looks like :

```
$('#start-button').click(function(){

});
```

5) Add some jQuery to our quiz

Edit the script.js file and add the code below

```
$( document ).ready( function () {
```

```
      console.log( "ready!" );

      $('#quiz').hide();
      $('#results').hide();


      $('#start-button').click(function(){
        $('#start').hide();
        $('#quiz').show();
      });
});
```

Save the file and go check in your browser what this looks like

6) Adding some content to the index.html page

Now we are going to add some buttons and some content to the html page.

Edit the index.html file and add the content as below

```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="bootstrap.min.css">
    <link rel="stylesheet" href="style.css">

    <title>My Dojo Quiz</title>
  </head>
  <body>
    <div id="start" class="container">
      <h1>My Dojo Quiz</h1>
      <div>Check your French</div>
      <button id="start-button" class="btn btn-primary" >Start</button>
    </div>
    <div id="quiz" class="container">
```

```html
        <h1>The Quiz</h1>

        <div id="message-question" class="alert alert-warning">What is this called ?</div>
        <div id="message-correct" class="alert alert-success">Correct</div>
        <div id="message-wrong" class="alert alert-danger">Wrong</div>

        <div id="card-1" class="card text-center">
            <img src="img/img1.jpg" class="card-img-top" />

            <div class="row name-options" >
                <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-correct">Un moustique</button>
                <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Un oiseau</button>
                <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une abeille</button>
                <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Une Tortue</button>
            </div>
        </div>


        <button id="button-next" class="btn btn-primary">Next</button>
    </div>

    <div id="results" class="container">
        <h1>Results</h1>
        <div id="score-display">
            <span id="score">0</span>/<span id="total">0</span>
        </div>
    </div>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="jquery-3.2.1.slim.min.js" ></script>
    <script src="popper.min.js" ></script>
    <script src="bootstrap.min.js" ></script>
    <script src="script.js"></script>
</body>
</html>
```

Save the file and check in your browser what it looks like

7) Now let's add some css to make it all look more pretty

Edit the style.css file and add the code as below :

```css
body > .container {
  max-width: 300px;
  min-height: 100vh;
  background: rgba(255,255,200,0.5);
}

#start-button {
  margin: 20% auto;
}

#quiz .card {
  background: rgba(255,255,255,0.5);
  padding-bottom: 0.7em;
}

#quiz .card > img {
  max-width: 80%;
  margin: 1em auto;
}

#button-next {
  margin-top: 1em;
}
```

Save the changes and go look in the browser what it looks like

8) Add more jQuery

Now add the extra jQuery below and see what it does

```javascript
$( document ).ready( function () {
  console.log( "ready!" );

  $('#quiz').hide();
  $('#results').hide();
```

```
$('#start-button').click(function(){
    $('#start').hide();
    $('#quiz').show();
    $('#message-question').show();
    $('#message-correct').hide();
    $('#message-wrong').hide();
    $('#button-next').hide();
});

    $('.answer-correct').click(function(){
        $('#message-question').hide();
        $('#message-correct').show();
        $('#message-wrong').hide();
        $('#button-next').show();
        $('.name-options .btn').attr("disabled",true);
        $(this).removeClass('btn-secondary').addClass('btn-success');
    });

    $('.answer-wrong').click(function(){
        $('#message-question').hide();
        $('#message-correct').hide();
        $('#message-wrong').show();
        $('#button-next').show();
        $('.name-options .btn').attr("disabled",true);
        $(this).removeClass('btn-secondary').addClass('btn-danger');
    });

});
```

Save and go look in the browser what it does.

Then try to figure out what the following lines do :

```
$('.name-options .btn').attr("disabled",true);
$(this).removeClass('btn-secondary').addClass('btn-success');
```

9) Add more questions for the quiz and add the HTML for the results

Edit the index.html file and add the HTML below (do a copy/paste of the HTML here)

```html
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="bootstrap.min.css">
    <link rel="stylesheet" href="style.css">

    <title>My Dojo Quiz</title>
  </head>
  <body>
    <div id="start" class="container text-center">
      <h1>My Dojo Quiz</h1>
      <button id="start-button" class="btn btn-primary w-50" >Start</button>


    </div>
    <div id="quiz" class="container text-center">
      <h1>The Quiz</h1>

    <div id="message-question" class="alert alert-warning">What is this called ?</div>
    <div id="message-correct" class="alert alert-success">Correct</div>
    <div id="message-wrong" class="alert alert-danger">Wrong</div>

    <div id="card-1" class="card text-center">
      <img src="img/img1.jpg" class="card-img-top" />

      <div class="row name-options" >
        <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-correct">Un moustique</button>
        <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Un oiseau</button>
        <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une abeille</button>
        <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Une Tortue</button>
      </div>
    </div>
    <div id="card-2" class="card text-center">
      <img src="img/img2.jpg" class="card-img-top" />
```

```html
    <div class="row name-options" >
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Un projecteur</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Une flamme</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une lampe</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-correct">Un phare</button>
    </div>
  </div>

  <div id="card-3" class="card text-center">
    <img src="img/img3.jpg" class="card-img-top" />

    <div class="row name-options" >
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une chaussette</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Un tapis</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-correct">Une chaussure</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Un pull</button>
    </div>
  </div>

  <div id="card-4" class="card text-center">
    <img src="img/img4.jpg" class="card-img-top" />

    <div class="row name-options" >
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une poign&eacute;e</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Un tournevis</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une serrure</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-correct">Une cl&eacute;</button>
    </div>
  </div>

  <div id="card-5" class="card text-center">
    <img src="img/img5.jpg" class="card-img-top" />

    <div class="row name-options" >
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Un couteau</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-correct">Un ciseau</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 offset-1 answer-wrong">Une pince</button>
      <button type="button" class="btn btn-sm btn-secondary col-5 answer-wrong">Une hache</button>
    </div>
  </div>
```

```html
    <button id="button-next" class="btn btn-primary">Next</button>
  </div>

    <div id="results" class="container text-center">
      <h1>Results</h1>
      <h2>Your score is:</h2>
    <div id="score-display" class="alert alert-info h1 w-50">
      <span id="score">0</span>/<span id="total">0</span>
    </div>
      <button id="button-home" class="btn btn-primary">Home</button>
    </div>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="jquery-3.2.1.slim.min.js" ></script>
    <script src="popper.min.js" ></script>
    <script src="bootstrap.min.js" ></script>
    <script src="script.js"></script>
  </body>
</html>
```

Save and go look in the browser what it looks like

10) Complete the jQuery for the quiz

Edit the script.js file by adding the rest of the jQuery below

```javascript
var currentCard = 1;
var score = 0;
var total = 5;

$( document ).ready( function () {
  console.log( "ready!" );

  $('#quiz').hide();
  $('#results').hide();
  $('#quiz .card').hide();
  $('#card-1').show();

  $('#start-button').click(function(){
```

```javascript
    $('#start').hide();
    $('#quiz').show();
    $('#message-question').show();
    $('#message-correct').hide();
    $('#message-wrong').hide();
    $('#button-next').hide();
});

$('.answer-correct').click(function(){
    $('#message-question').hide();
    $('#message-correct').show();
    $('#message-wrong').hide();
    $('#button-next').show();
    $('.name-options .btn').attr("disabled",true);
    $(this).removeClass('btn-secondary').addClass('btn-success');
    score++;
});

$('.answer-wrong').click(function(){
    $('#message-question').hide();
    $('#message-correct').hide();
    $('#message-wrong').show();
    $('#button-next').show();
    $('.name-options .btn').attr("disabled",true);
    $(this).removeClass('btn-secondary').addClass('btn-danger');
});

$('#button-next').click(function(){
    $('.name-options .btn').removeClass('btn-danger').removeClass('btn-success').addClass('btn-secondary');
    $('.name-options .btn').attr("disabled",false);
    $('#card-' + currentCard).hide();
    currentCard = currentCard + 1;
    if (currentCard > total) {
        $('#quiz').hide();
        $('#results').show();
        $('#score').html(score);
        $('#total').html(total);
    }
    $('#card-' + currentCard).show();
    $('#message-question').show();
    $('#message-correct').hide();
    $('#message-wrong').hide();
    $('#button-next').hide();
```

```
    });

    $('#button-home').click(function(){
        currentCard = 1;
        score = 0;
        $('#results').hide();
        $('#start').show();
        $('#quiz .card').hide();
        $('#card-1').show();
    });
});
```

Save and go look in the browser what it looks like

11) Add some final CSS

Edit the style.css file and add the rest of the CSS

```css
body {
    background: url(img/bg.jpg) no-repeat bottom center fixed;
    background-size: cover;
}

body > .container {
    max-width: 300px;
    min-height: 100vh;
    background: rgba(255,255,200,0.5);
}

#start-button {
    margin: 20% auto;
}

#quiz .card {
    background: rgba(255,255,255,0.5);
    padding-bottom: 0.7em;
}

#quiz .card > img {
    max-width: 80%;
```

```css
    margin: 1em auto;
}

#button-next {
    margin-top: 1em;
}

#score-display {
    border-radius: 50%;
    margin: 20% auto;
}
```

Save and go look in the browser what it looks like