

# JavaScript

*Accordion Project from Scratch*

INSTRUCTOR:

# LAURENCE SVEKIS



Course instructor : Laurence Svekis

- Over 300 courses in technology and web applications.
- 20 years of JavaScript web programming experience
- 500,000+ students across multiple platforms
- Digital instructor since 2002

**READY TO HELP YOU LEARN and ANSWER ANY questions you may have.**

# Setup HTML for the Accordion

Accordion typically contains a list of panels that open and close.

The panels are HTML and open close is done with JavaScript. Panels have a head which is always showing and body which is toggled to show or not.

```
Panel 1 Head
Panel 1 Body Content
Panel 2 Head
Panel 2 Body Content
Panel 3 Head
Panel 3 Body Content
```

```
<div class="main">
  <div class="panel">
    <div class="ahead">Panel 1 Head</div>
    <div class="abody">Panel 1 Body Content</div>
  </div>
  <div class="panel">
    <div class="ahead">Panel 2 Head</div>
    <div class="abody">Panel 2 Body Content</div>
  </div>
  <div class="panel">
    <div class="ahead">Panel 3 Head</div>
    <div class="abody">Panel 3 Body Content</div>
  </div>
</div>
```

## EXERCISE :

1. Create the HTML structure for your accordion, content of head and body.

# Setup CSS for the Accordion

Setup styling classes to hide body by default, the default state when the accordion loads. Also add option to apply class and show body with active class. This will make it easier with JavaScript to open the body content. Notice that when you add the class of active to the panel it shows.

Panel 1 Head

Panel 2 Head

Panel 3 Head

```
<style>
  .main .abody {
    padding: 5px;
    border: 1px solid #eee;
    display: none;
  }

  .main .active .abody {
    display: block;
  }

  .main .ahead {
    background-color: #333;
    padding: 5px;
    font-size: 1.6em;
    margin: 5px 0;
    color: white;
  }
</style>
```

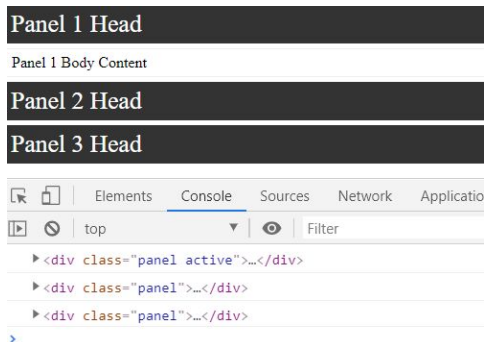
## EXERCISE :

1. Create style content for html elements

# Accordion Interactions JavaScript

Select all the panels in the accordion as one JavaScript Object.

The Document method **querySelectorAll()** returns a static (not live) NodeList representing a list of the document's elements that match the specified group of selectors.



```
<script>
  const accordion = document.querySelectorAll('.panel');
  accordion.forEach(function (ele) {
    console.log(ele);
  })
</script>
```

## EXERCISE :

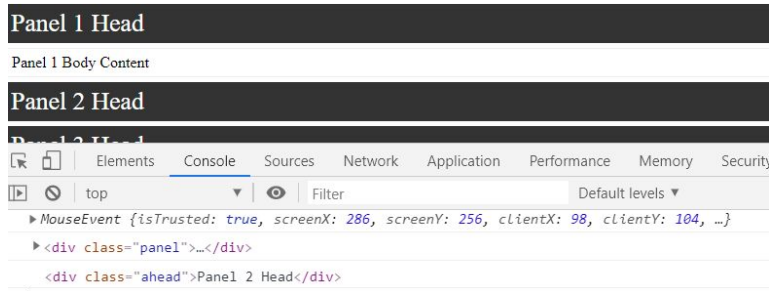
1. Using JavaScript select all elements that have a class panel.
2. Output into the console.

# Accordion JavaScript Event

The EventTarget method `addEventListener()` sets up a function that will be called whenever the specified event is delivered to the target.

<https://developer.mozilla.org/en-US/docs/Web/API/EventTarget/addEventListener>

Pass the event object, notice the difference of output for `e`, `this` and `e.target`.



```
<script>
  const accordion = document.querySelectorAll('.panel');
  accordion.forEach(function (ele) {
    console.log(ele);
    ele.addEventListener('click', toggleEle);
  })

  function toggleEle(e) {
    console.log(e);
    console.log(this);
    console.log(e.target);
  }
</script>
```

## EXERCISE :

1. Add EventListener to the invoke toggle function

# Toggle Active

The `Element.classList` is a read-only property that returns a live `DOMTokenList` collection of the class attributes of the element. This can then be used to manipulate the class list.

<https://developer.mozilla.org/en-US/docs/Web/API/Element/classList>

Panel 1 Head

Panel 1 Body Content

Panel 2 Head

Panel 2 Body Content

Panel 3 Head

Panel 3 Body Content

```
<script>
  const accordion = document.querySelectorAll('.panel');
  accordion.forEach(function (ele) {
    ele.addEventListener('click', toggleEle);
  })
  function toggleEle(e) {
    this.classList.toggle('active');
  }
</script>
```

## EXERCISE :

1. Toggle the classlist add/remove active to hide and show the panel body contents.

# Hide all open panels

You already have the panel elements in the accordion so you can use this list of elements, iterate through it and remove class of active from all.

Other options, select all the active elements on the page using `querySelector` and then remove the active class.

## EXERCISE :

1. Find all elements with the active class and remove active from the panels

```
<script>
  const accordion = document.querySelectorAll('.panel');
  accordion.forEach(function (ele) {
    console.log(ele);
    ele.addEventListener('click', toggleEle);
  })

  function toggleEle(e) {
    const allActives =
document.querySelectorAll('.active');
    allActives.forEach(function (ele) {
      ele.classList.remove('active');
    })
  }
  /* accordion.forEach(function (ele) {
    ele.classList.remove('active');
  })*
  this.classList.toggle('active');
}
</script>
```



# Finishing Touches

Apply some styling to the active element to differentiate from others.

## EXERCISE :

Apply styling and content as needed.

Panel 1 Head

Panel 1 Body Content

Panel 2 Head

Panel 3 Head

```
<style>
  .main .abody {
    padding: 5px;
    border: 1px solid #eee;
    display: none;
  }

  .main .active .abody {
    display: block;
  }

  .main .ahead {
    background-color: #333;
    padding: 5px;
    font-size: 1.6em;
    margin: 5px 0;
    color: white;
  }

  .main .active .ahead {
    background-color: #bbb;
  }
</style>
```

# Final Code

Panel 1 Head

Panel 1 Body Content

Panel 2 Head

Panel 3 Head

Elements Console Sources

```
<script>
  const accordion = document.querySelectorAll('.panel');
  //console.log(accordion);
  accordion.forEach(function (ele) {
    //console.log(ele);
    ele.addEventListener('click', toggleEle);
  })

  function toggleEle(e) {
    console.log(e.target.parentElement);
    accordion.forEach(function (ele) {
      if (e.target.parentElement === ele) {
        ele.classList.toggle('active');
      }
      else {
        ele.classList.remove('active');
      }
    })
  }
</script>
```