ACCESSIBLE REQUIRED FORM FIELDS

What are required fields?

Required (or mandatory) fields, are form questions that **must be answered by the by the user** before the form can be submitted.

The opposite of required fields are **optional fields**; where users can choose whether to answer the form questions or not.

It is important to ensure that **all users can identify which fields are required**, and which are optional.

Being able to identify required fields is important for all users, including **sighted users** and **vision-impaired users**.

Sighted users

Sighted users need to be provided with a **visual mechanism** that allows them to identify required fields.

Some **common visual mechanisms** include:

1. Asterisk

This method involves adding a **text-based asterisk symbol** to the label for all required fields.

The markup normally involves placing the asterisk **inside a** `<span>` **or** `<em>`
element.

```
<label for="one">
  Name
  <span class="required">*</span>
</label>
<input id="one" type="text">
```

However, this method can present **a range of different issues**:

1. Some sighted users **don't notice these asterisk symbols**, as they is often very small characters.

2. Some users **may not understand what the asterisk symbol means** - even if a descriptive key is provided above the form.

This is especially true for **some types of cognitive-impaired users**, as well as technically-challenged users.

For these reason, the "Asterisk method" is **not recommended**.

2. Adding the word "Required"

This method involves adding the word **"Required"** to the label for all required fields.

This wording must be **placed inside the** `<label>` **element** so that it is announced with the form control.

```html
<label for="one">
  Name
  Required
</label>
<input id="one" type="text">
```

This content can be **placed inside a** `<span>` **or** `<em>` **element** so that it can be styled as needed.

```html
<label for="one">
  Name
  <span class="required">Required</span>
</label>
<input id="one" type="text">
```

CSS can then be used to **differentiate this word** from the rest of the label content.

```css
.required {
  color: red;
  font-size: .8em;
}
```

This method **does not require a descriptive key** above the form as the wording is clear.

It is also more intuitive for **cognitive-impaired and technically-challenged** users.

All required fields?

If all fields in the form are required, a simple statement can be **added before the** `<form>` **element**.

There is **no need to flag each of the individual fields** as required.

```html
<p>All form fields are required.</p>

<form action="#">
  ...
</form>
```

Vision-impaired users

For visual-impaired users, especially screen reader users, **required fields need to be programmatically defined**.

This can be achieved using **two different HTML attributes**.

The first attribute is the `required` attribute, which **defines the element as required**.

```html
<label for="one">
  Name
  <span class="required">*</span>
</label>
<input id="one" type="text" required>
```

The second attribute is the `aria-required` attribute, which **notifies assistive technologies that the element is required**.

```html
<label for="one">
  Name
  <span class="required">*</span>
</label>
<input id="one" type="text"
  required aria-required="true">
```

Most modern screen readers **will announce a form control as "required"** if the `required` attribute is present.

So, the `aria-required` attribute is not needed **unless you want to support older versions of screen readers**.

Exercise 04:
Required fields

Open **exercise04-required/exercise4-start.html**

Review your work against **exercise04-required/exercise4-finished.html**

1. Add an asterisk inside a `<span>` with a class of `required-star`.
2. Add the word "Required" inside a `<span>` with a class of `required`.
3. Add the `required` and `aria-required="true"` attributes to form controls.