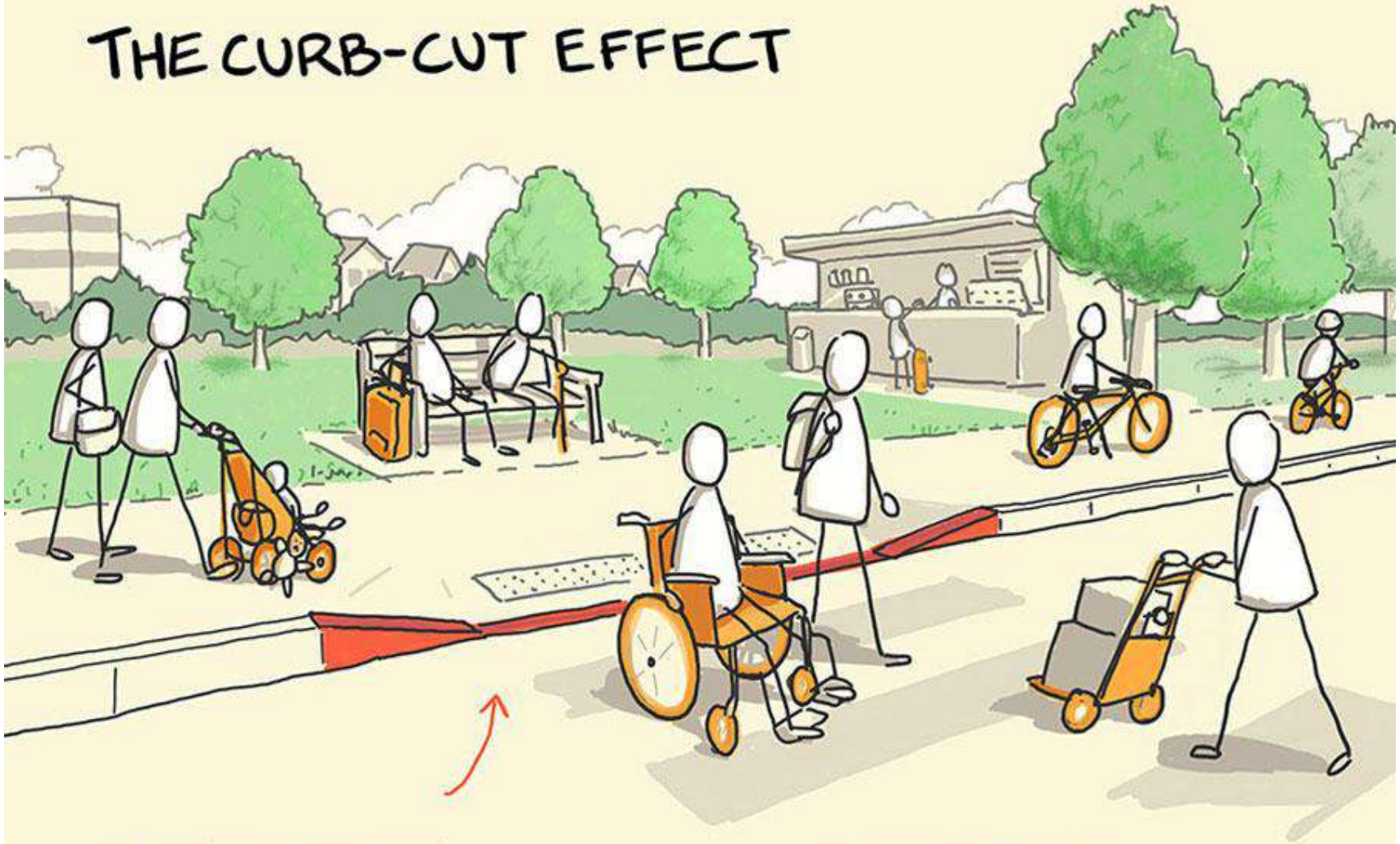
Making <form>s accessible

Tim Damen
26 October 2023
ABN AMRO x PP Meetup

Tim Damen

- FE Dev
- Accessibility guild lead

THE CURB-CUT EFFECT

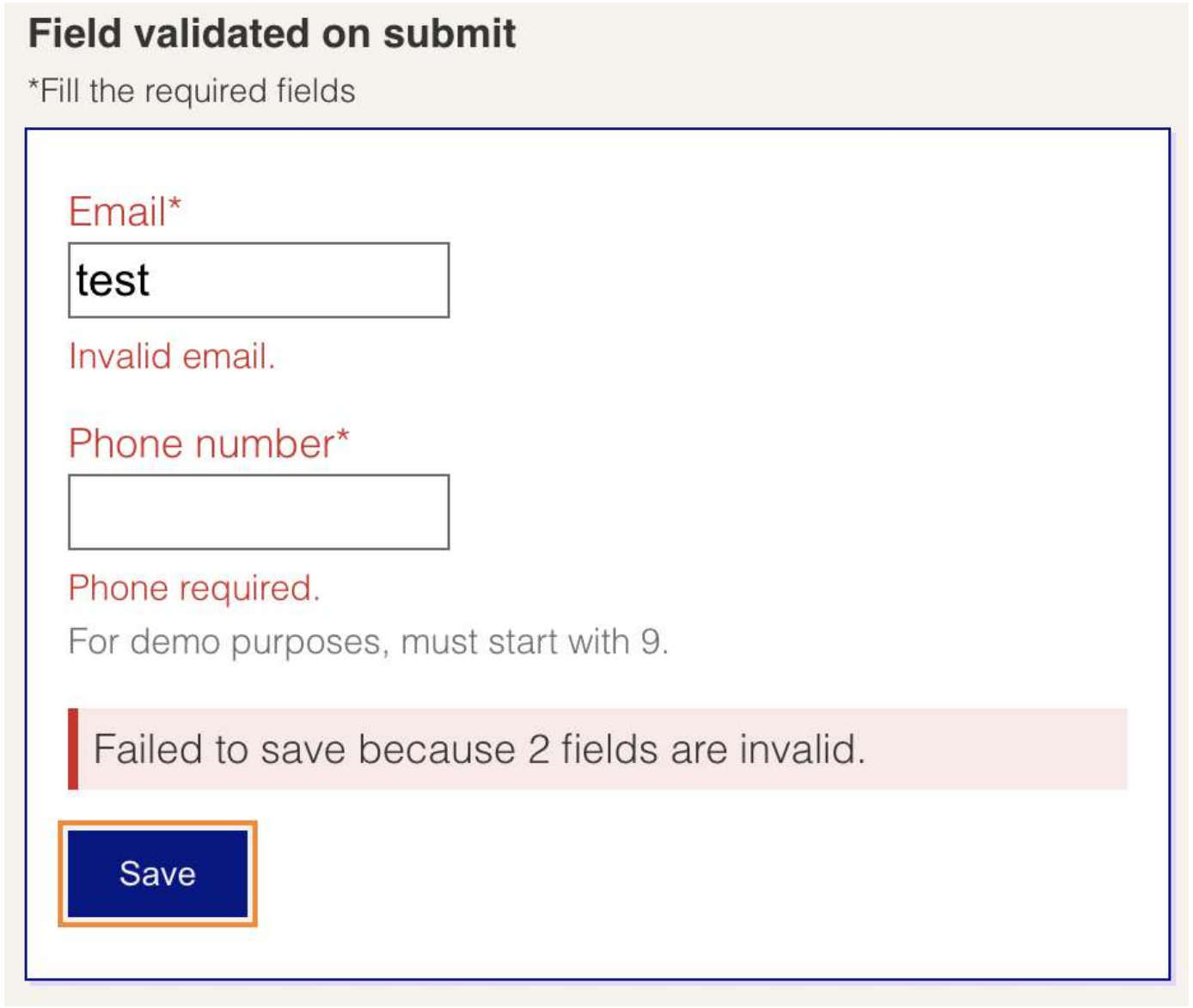


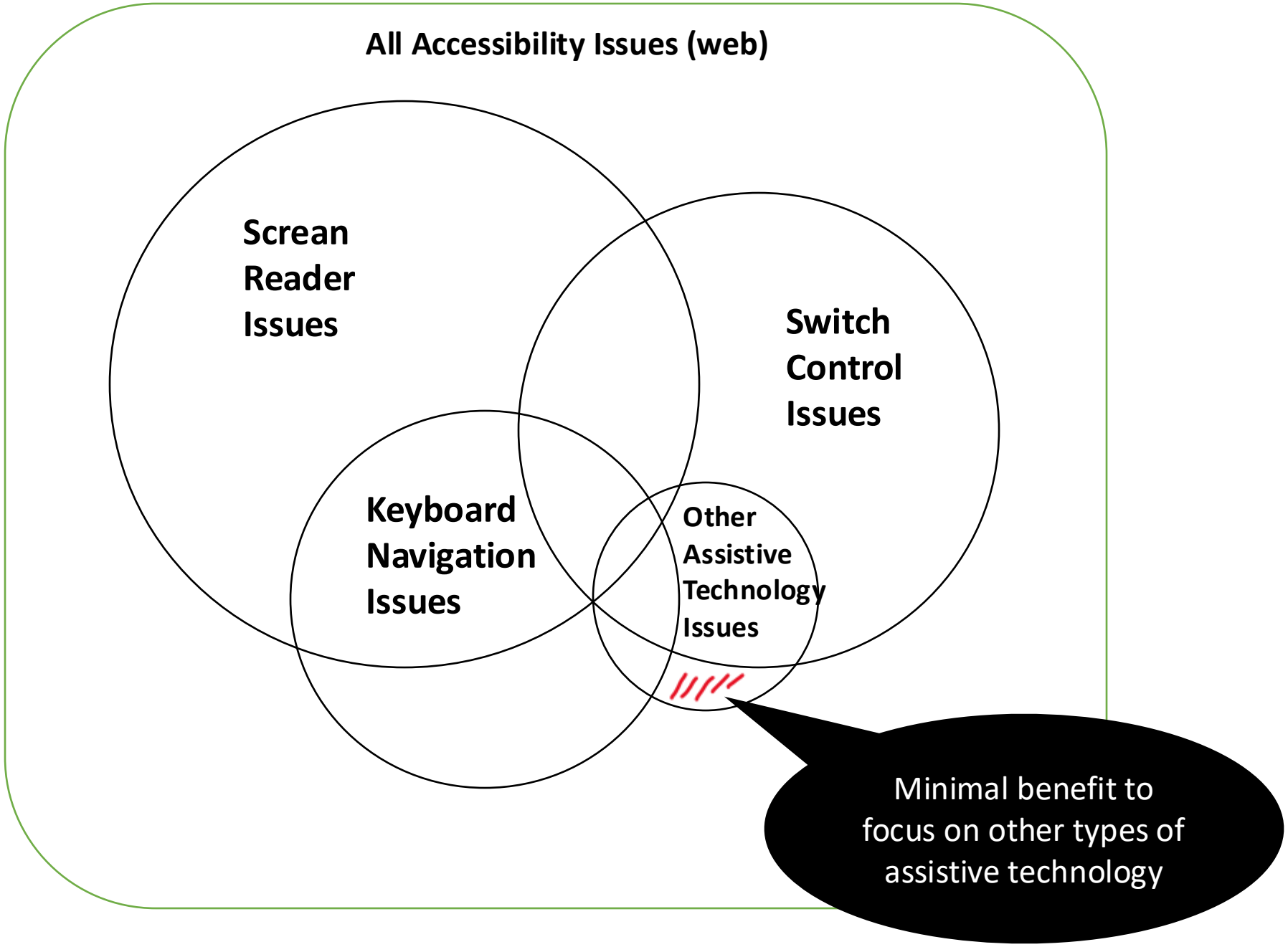
WHEN WE DESIGN
FOR DISABILITIES

... WE MAKE THINGS
BETTER FOR EVERYONE

sketchplanations

Form Accessibility




All Accessibility Issues (web)
Screan Reader Issues
Switch Control Issues
Keyboard Navigation Issues
Other Assistive Technology Issues
Minimal benefit to focus on other types of assistive technology

Label not linked to input

*Fill the required fields

Email*

Phone number*

Phone number must start with 06.

Save

<label>
<input t

<label f
<input i

Label linked to input

*Fill the required fields

Email*

Phone number*

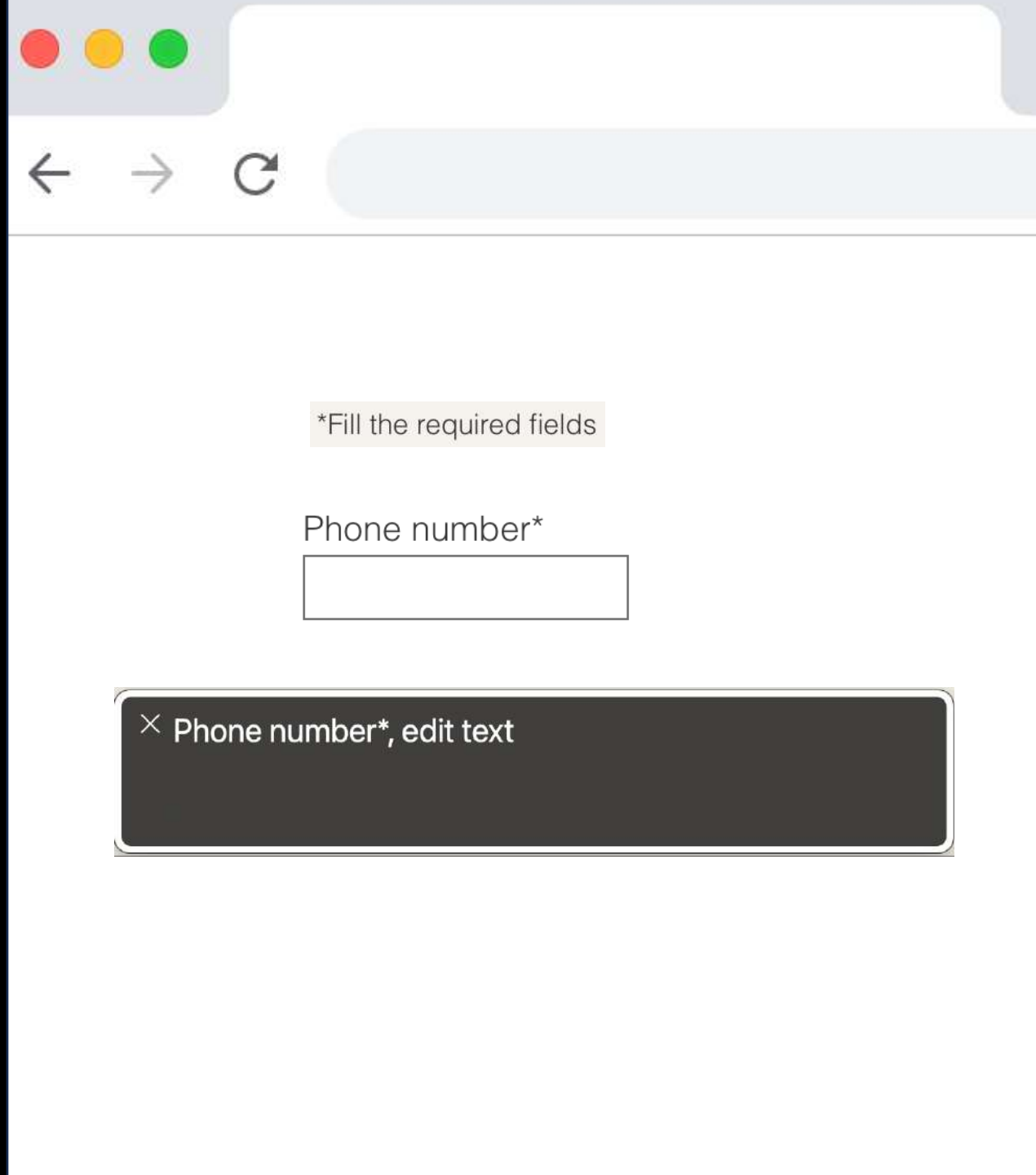
For demo purposes, must start with 06.

Save

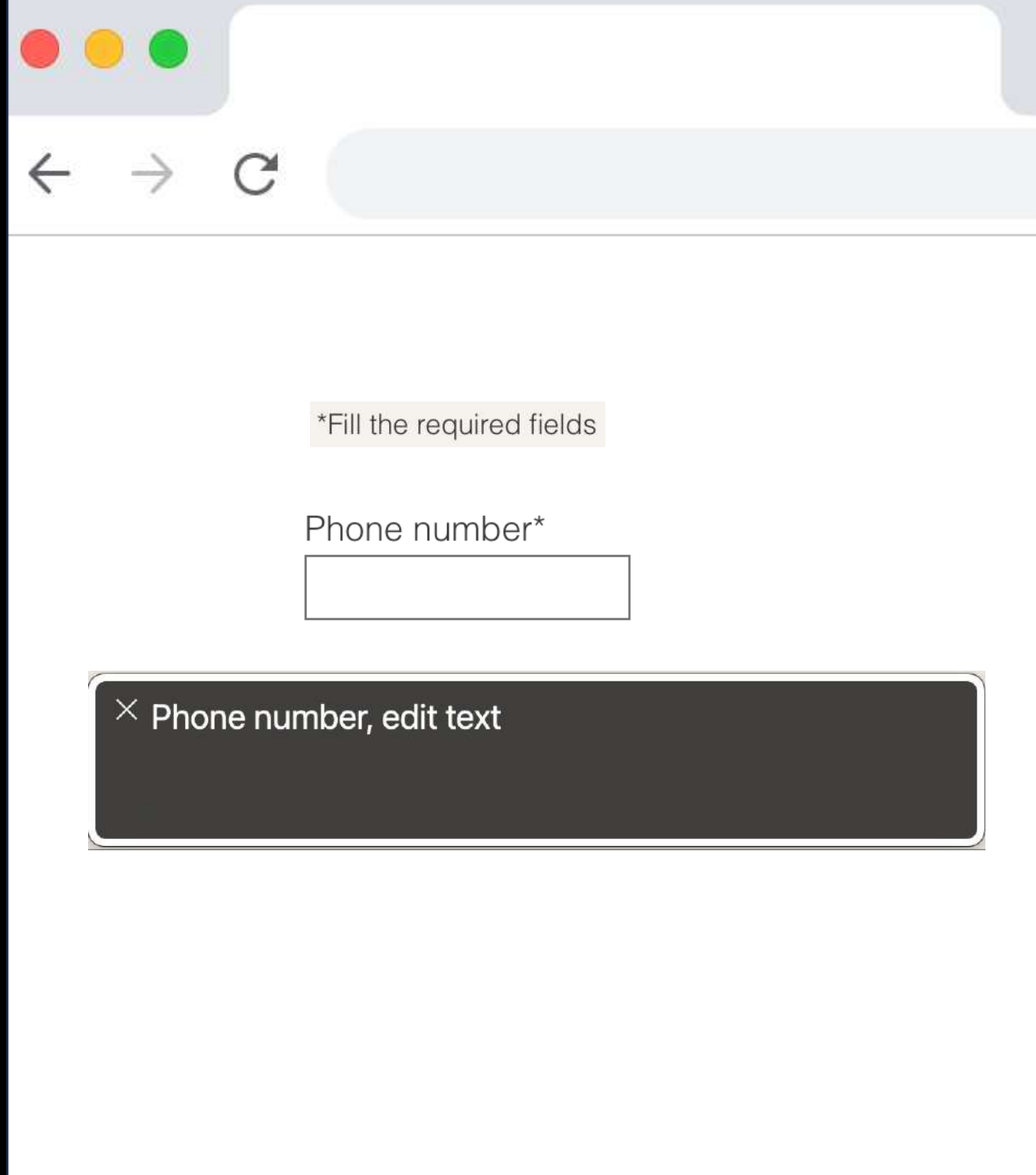
Wake up

Sleep

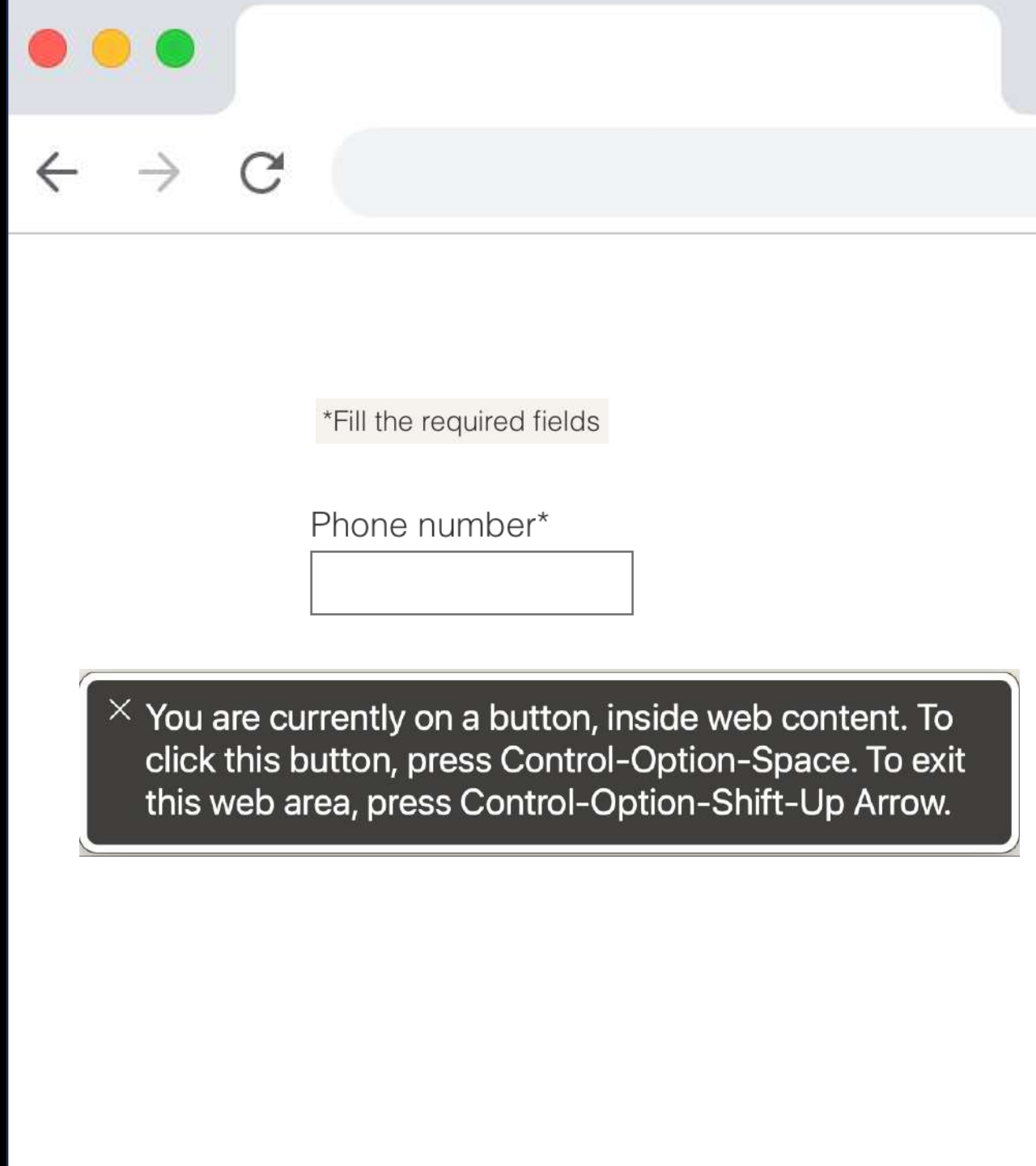
```
<label for="phone">Phone number*</label>
<input id="phone" type="phone"/>
```



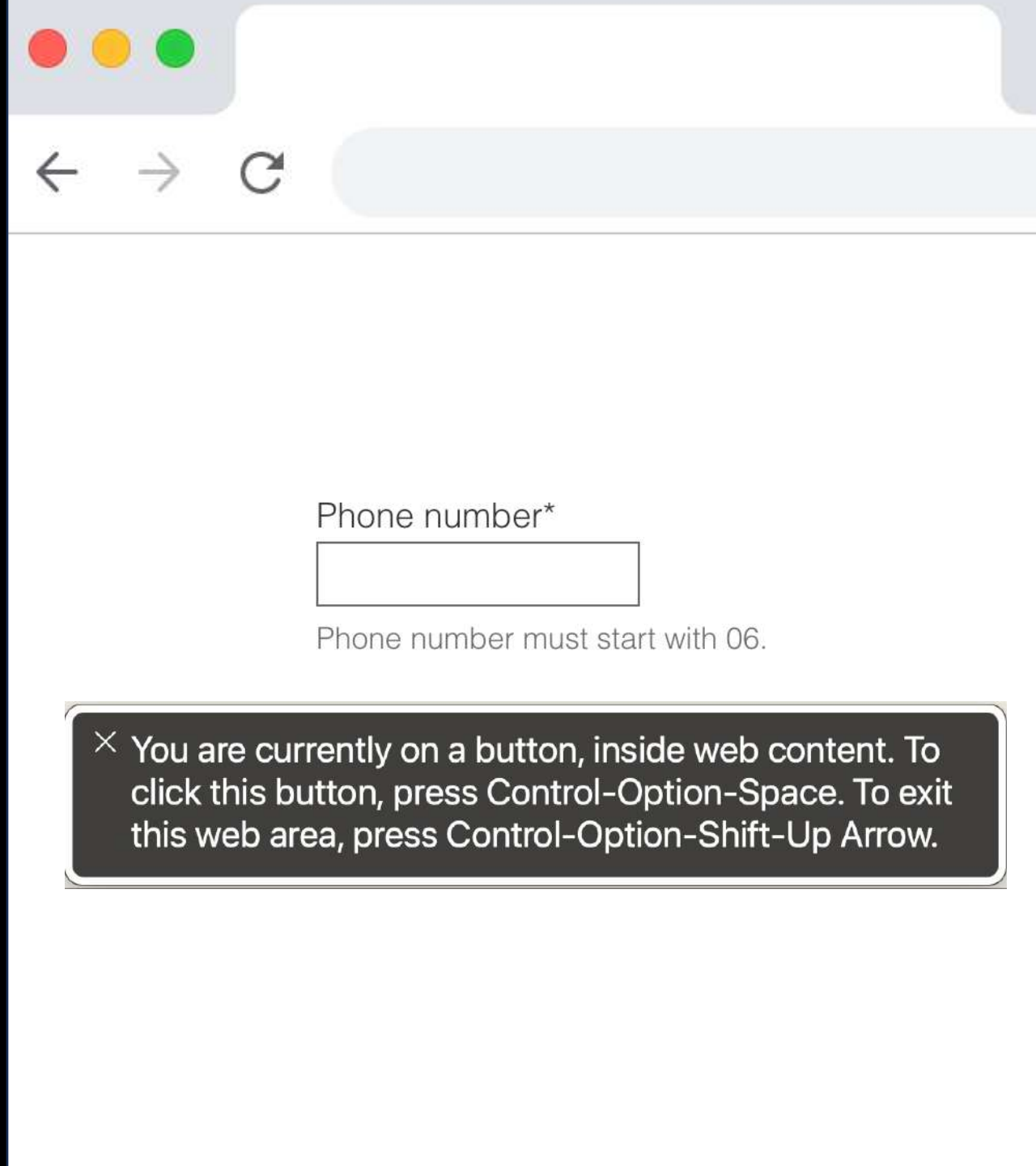
```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input type="phone" id="phone"/>
```



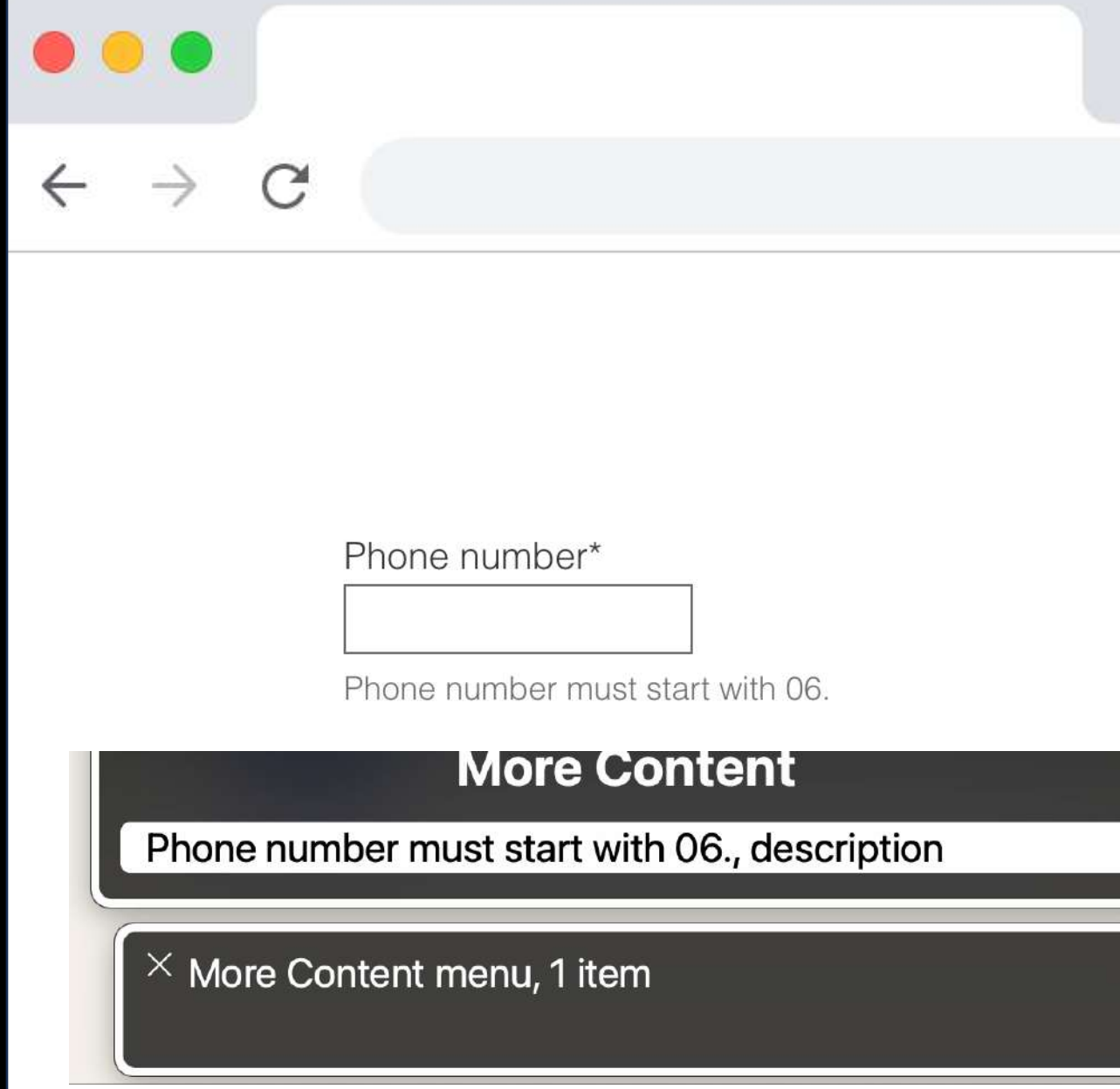
```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input type="phone" id="phone" aria-required="true"/>
```



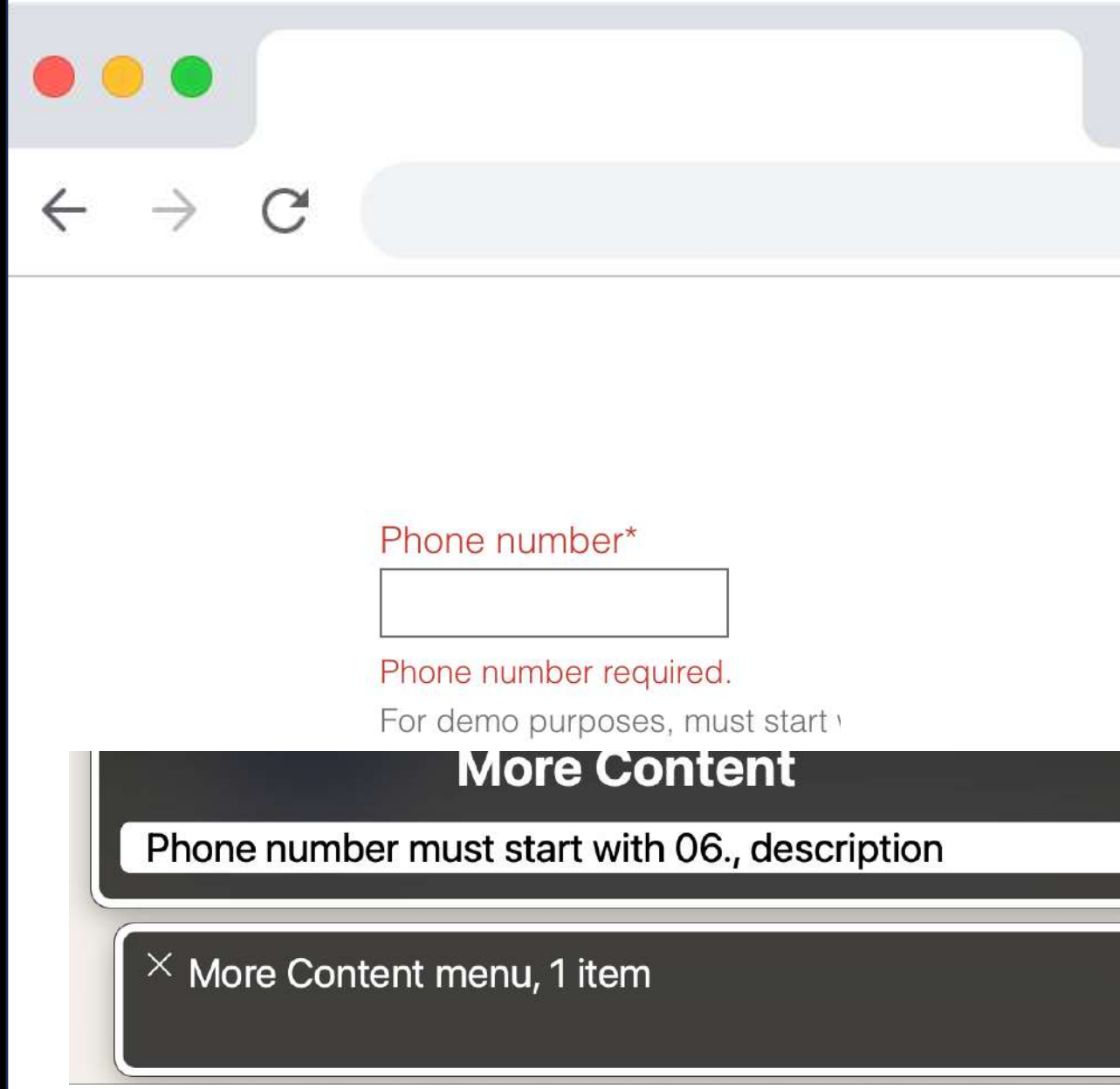
```html
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
/>

<p>Phone number must start with 06.</p>
```



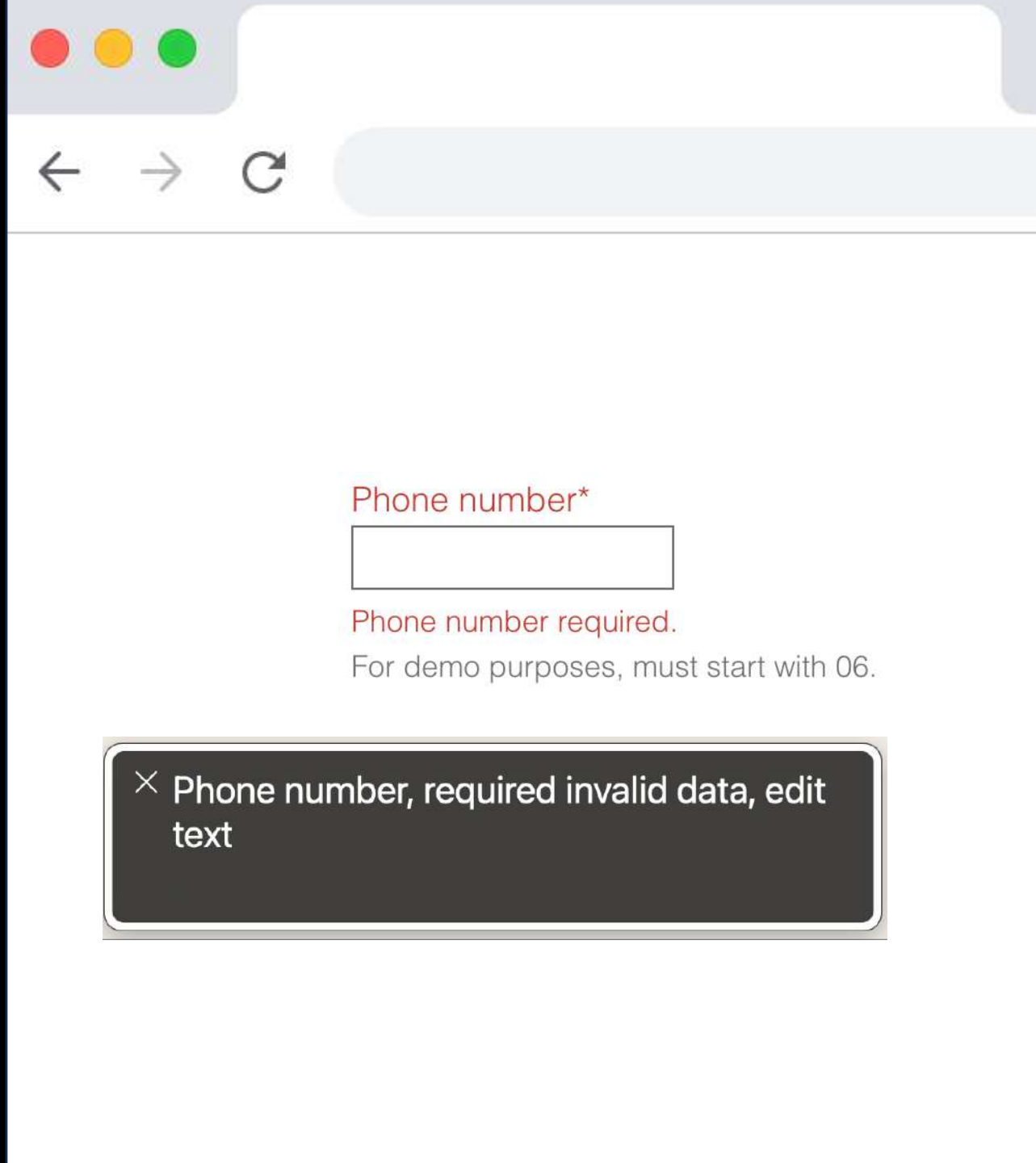
```html
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-describedby="phoneHint"
/>

<p id="phoneHint">Phone number must start with 06.</p>
```



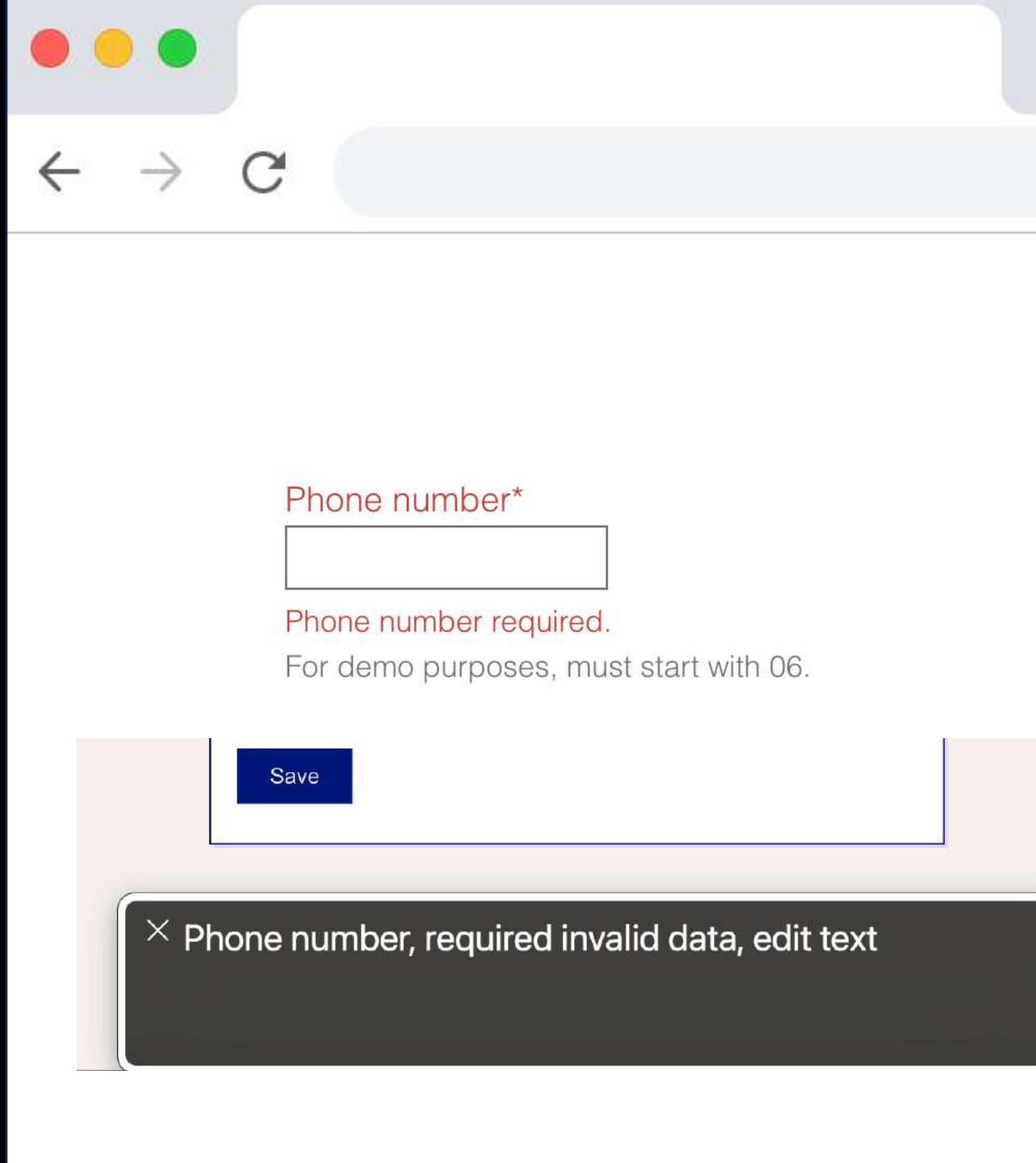
```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-describedby="phoneHint"
/>

<p>Phone number required.</p>

<p id="phoneHint">Phone number must start with 06.</p>
```



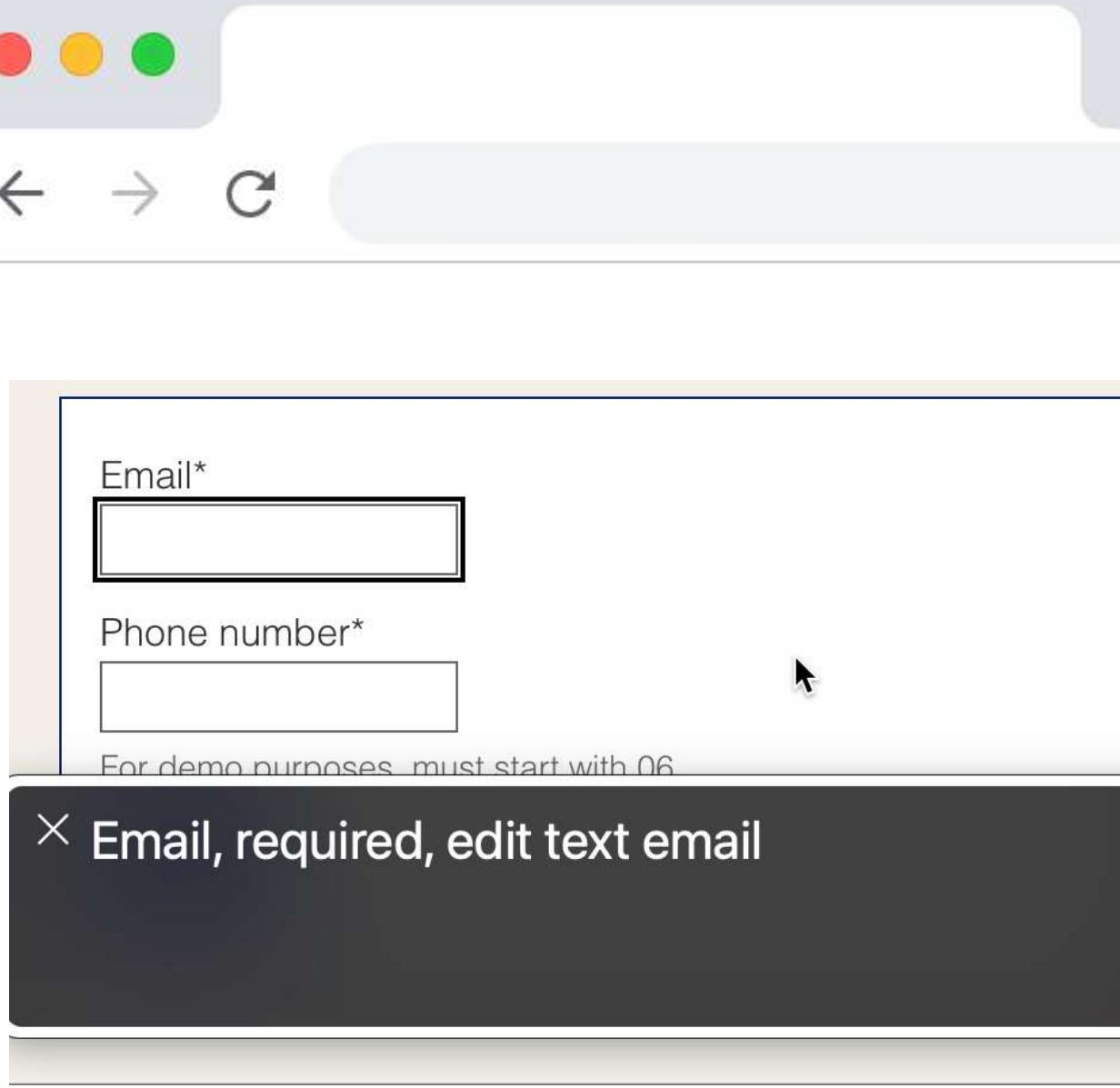
```html
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-invalid="true"
  aria-describedby="phoneHint"
/>

<p>Phone number required.</p>

<p id="phoneHint">Phone number must start with 06.</p>
```



```
<label for="phone">
 Phone number<span aria-hidden="true">*</span>
</label>
<input
 type="phone"
 id="phone"
 aria-required="true”
 aria-invalid="true"
 aria-describedby="phoneHint phoneError"
/>

<p id="phoneError">Phone number required.</p>

<p id="phoneHint">Phone number must start with 06.</p>
```



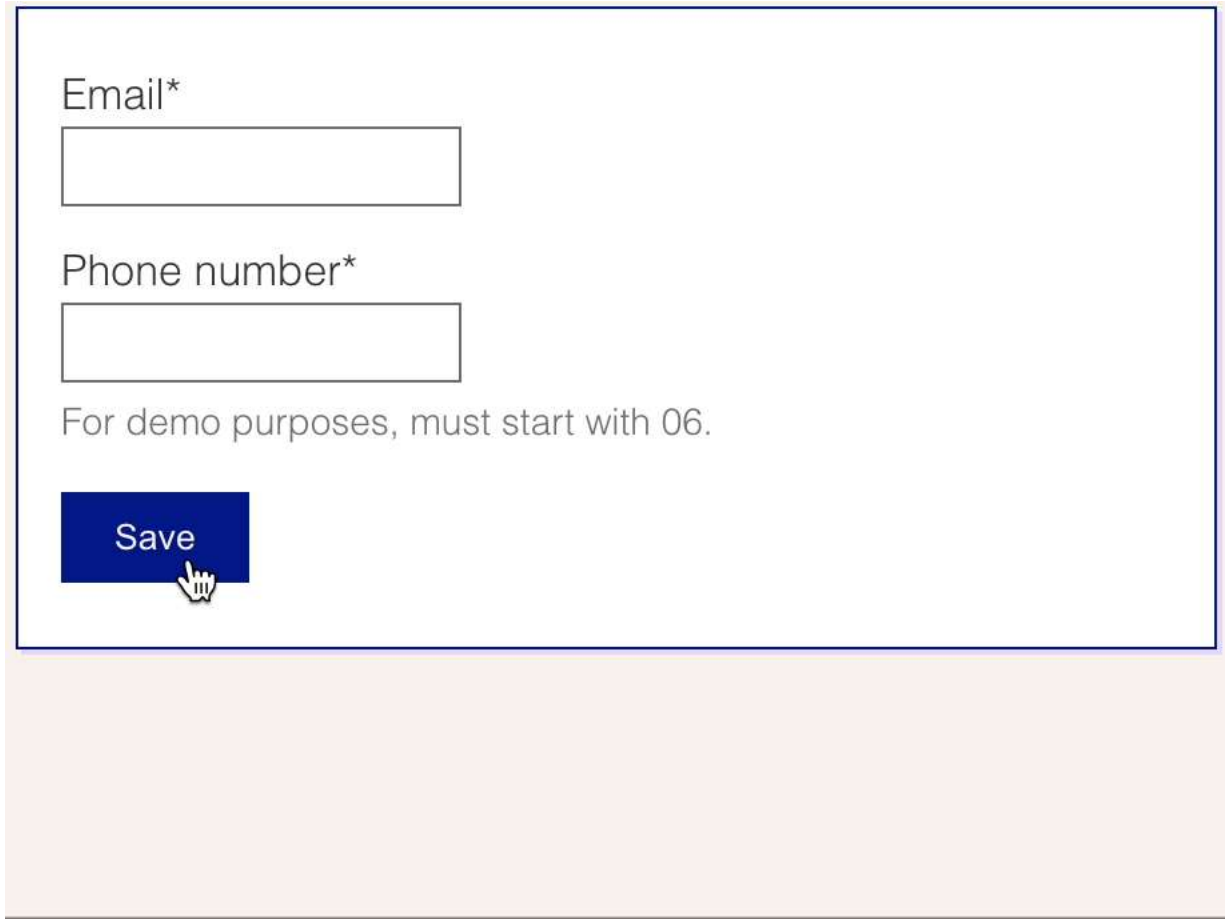
```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true”
  aria-invalid="true"
  aria-describedby="phoneHint phoneError"
/>

<p id="phoneError" aria-live="assertive">
  Phone number required.
</p>

<p id="phoneHint">Phone number must start with 06.</p>
```



Moment of validation

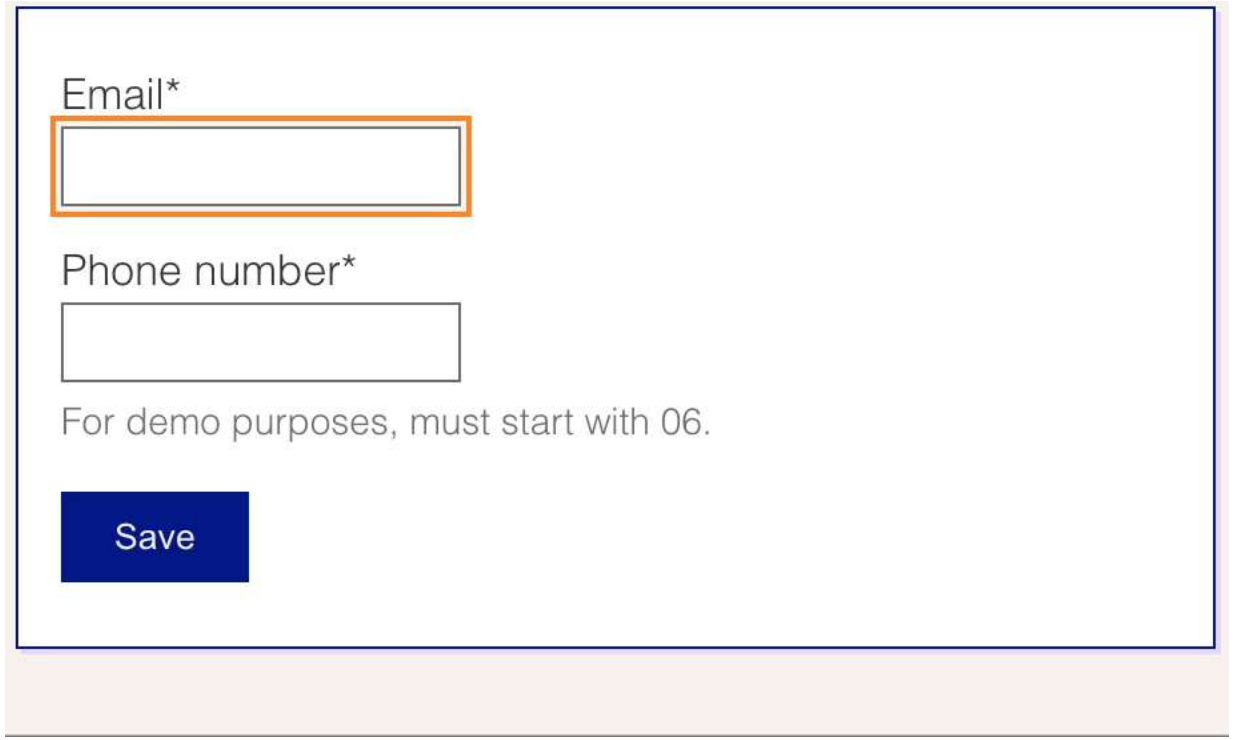
(Please don’t disable the save button)

OnSubmit



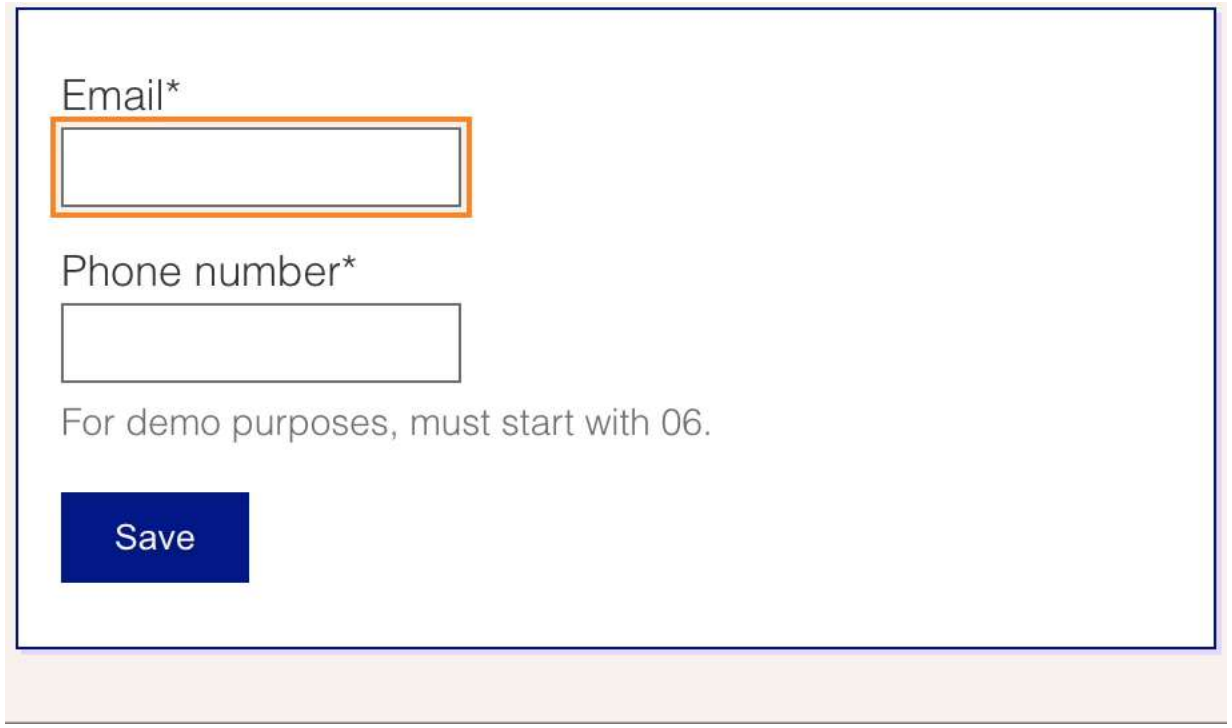
Moment of validation

OnBlur



Moment of validation

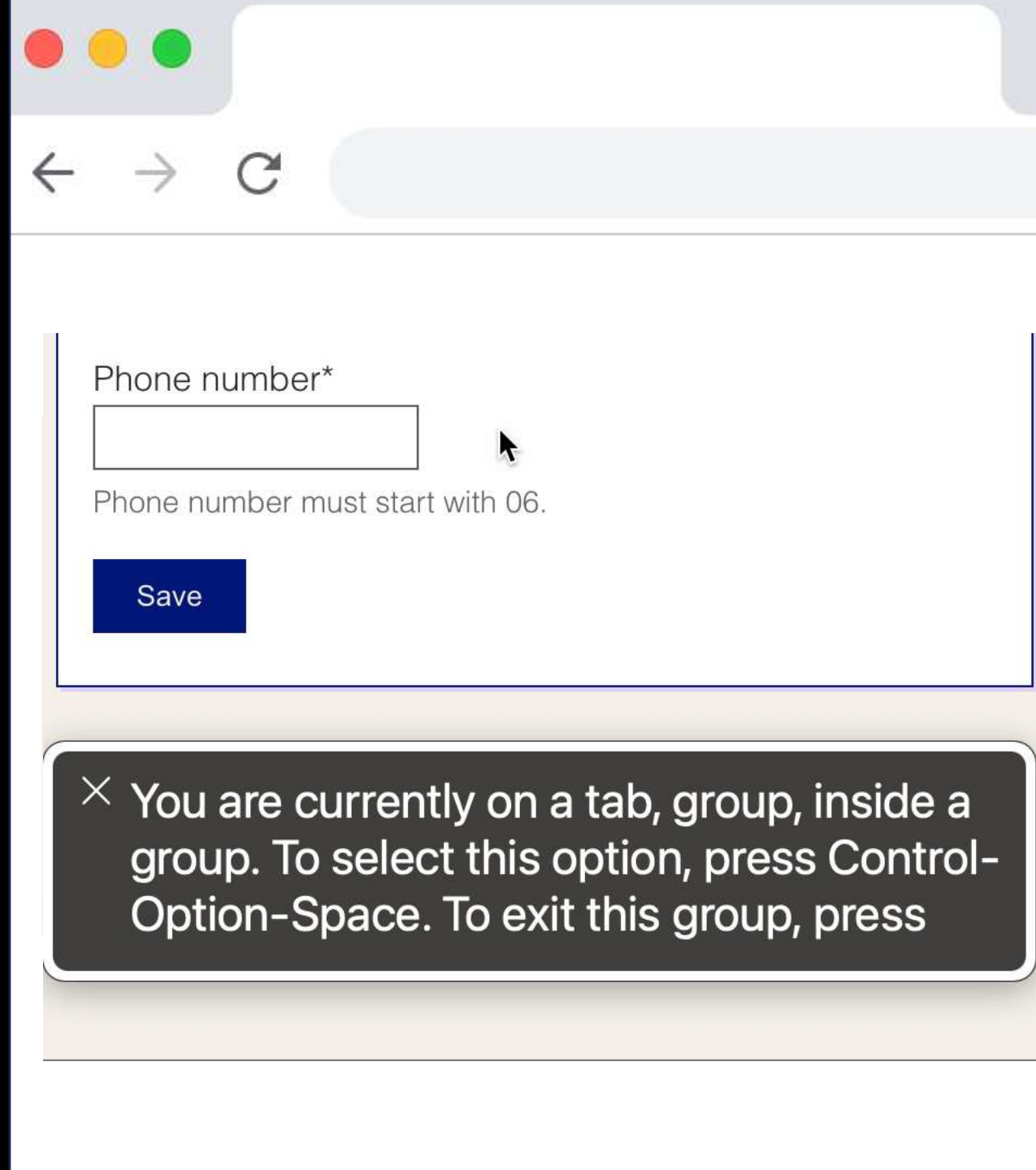
OnChange



OnBlur + OnSubmit

- User gets notified while filling in the form
- User gets summary of error after submit
- Best of both worlds
- Best for medium/large forms

```html
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true”
  aria-invalid="true"
  aria-describedby="phoneHint phoneError"
/>

<p id="phoneError" aria-live="assertive">
  Phone number required.
</p>

<p id="phoneHint">Phone number must start with 06.</p>

<div class="form-feedback">
  <p aria-live="assertive">
    Failed to save because 2 fields are invalid.
  </p>
  <p aria-hidden="true">
    Failed to save because 2 fields are invalid.
  </p>
</div>
```



Wrapping up

- **for**: To connect labels to inputs.
- **aria-hidden**: To hide elements to the screen reader.
- **aria-required**: To mark a field as required.
- **aria-invalid**: To mark the field as invalid.
- **aria-describedby**: To connect the description and error message to the input.
- **aria-live**: To announce dynamic error messages.
- **Moment of validation strategy**

Fin. Questions?

Your duty as a web creator is to ensure everyone can enjoy the web.