

ACCESSIBLE
MODALS

What are modal
windows?

A **modal window** is a window that forces the user to interact with it before they can go back to using the parent page.

Generally, modal windows are designed to sit **over the top of the parent page.**

In some cases, the parent page is greyed out so that users can **visually focus on the modal window only.**

Modal windows are sometimes called **modal dialogs** because they often display a dialog box.

Modeless windows are secondary windows that stay active on the user's screen until dismissed.

Modeless windows **can be minimised or hidden** behind other windows.

A modeless window will **allow the user to continue working** with the application while the modeless window is still open.

Common problems with modals

Screen reader users are sometimes **not informed** that an action will trigger a modal.

Screen reader users are sometimes **not made aware of the purpose of the modal** or what actions they need to perform within the modal.

Some modals are **not keyboard-only friendly**.

Some modals allow keyboard-only users to **TAB outside of the modal window while the modal is still active**. This can be very confusing and disconcerting.

Screen reader users are sometimes **sent to the top of the parent page** after a modal window has been closed.

The modal and other content

When a modal is not in use, we need to hide it so that is not seen by sighted users or **announced to Screen Readers.**

```
<div  
  style="display:none"  
>  
  ...  
</div>
```

When a modal window is triggered, we need to **change the value**.

```
<div  
  style="display:block"  
>  
  ...  
</div>
```

When the modal window becomes active,
all other content should be **hidden from**
Assistive Technologies.

```
<!-- all other content -->  
<div  
  aria-hidden="true"  
>  
  ...  
</div>
```

Defining the modal role

We need to inform screen reader users that this modal window is a “**modal dialog**”.


```
<div
  style="display:block"
  role="dialog"
>
  ...
</div>
```

Defining focus

When the modal is triggered, focus should **initially be set on the modal window itself**, rather than elements inside the modal.

This is important because it allows authors to **provide a label for the modal.**

If we set focus on an element inside the window, **the label will not be announced** to Assistive Technologies.

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Choose account

Initial focus

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

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dolor sit amet, consectetur adipiscing elit, sed diam nonummy.

Initial focus

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Providing a label

We need to **provide a label for the modal dialog**, so Assistive Technologies can announce its purpose.

This is achieved using the `aria-labelledby` attribute and **pointing this to a matching `id` value.**

The id attribute can be placed **on the first heading** inside the modal.

```
<div
  style="display:block"
  role="dialog"
  aria-labelledby="modal-label"
>
  <h1 id="modal-label">Choose account</h1>
</div>
```

In some circumstances, authors may need to **provide a more detailed description** of the purpose of the modal dialog.

This is achieved using the `aria-`
`describedby` attribute and **pointing this**
to a matching `id` value.

```
<div
  style="display:block"
  role="dialog"
  aria-labelledby="modal-label"
  aria-describedby="modal-description"
>
  <h1 id="modal-label">Choose account</h1>
  <p id="modal-description">Description here</p>
</div>
```

Keystrokes

When the modal is triggered, users should not be able to **TAB** outside the modal.

TAB

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Users should be able to **move forward**
and cycle through focusable elements
using **TAB** keystrokes.

TAB



Choose account

Account name

Account no.

Account type

☐

Option 1

☐

Option 2

Submit

Choose account

Account

TAB

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Choose account



Account name

TAB

Account type

☐

Option 1

☐

Option 2

Submit

Choose account

Account name

Account no.

Account type

TAB

☐

Option 1

☐

Option 2

Submit

Choose account

Account name

Account no.

Account type

TAB

☒

Option 1

☐

Option 2

Submit

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

TAB

Submit

TAB



Choose account

Account name

Account no.

Account type

☐

Option 1

☐

Option 2

Submit

Users should be able to **move backwards and cycle through focusable elements** using **TAB** keystrokes.

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

SHIFT + TAB

Submit

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

SHIFT + TAB

Choose account

Account name

Account no.

SHIFT + TAB

☐ Option 1

☐ Option 2

Submit

Choose account

Account name

SHIFT + TAB

Account type

☐ Option 1

☐ Option 2

Submit

Choose account



SHIFT + TAB

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

SHIFT + TAB



Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

SHIFT + TAB

Submit

Users should be able to **submit any form actions** using the **ENTER** or **SPACEBAR** keystrokes.

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

ENTER

Submit

Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

SPACEBAR

Submit

Users should be able to **close the modal** using the **ENTER** or **SPACEBAR** keystrokes.

ENTER



Choose account

Account name

Account no.

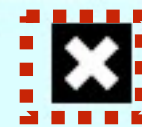
Account type

☐ Option 1

☐ Option 2

Submit

SPACEBAR



Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Users should be able to **move through radio button options** using the **UP ARROW** or **DOWN ARROW** keystrokes.

Choose account

Account name

Account no.

Account type

▲▼

Option 1



Option 2

Submit

DOWN ARROW

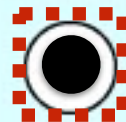
Choose account

Account name

Account no.

Account type

UP ARROW



Option 1



Option 2

Submit

Users should be able to **move through**
select options using the **UP ARROW** or
DOWN ARROW keystrokes.

Choose account

Account name

Account no.

DOWN ARROW

☐ Option 1

☐ Option 2

Submit

Choose account

Account name

Account no.

UP ARROW

☐ Option 1

☐ Option 2

Submit

Users should be able to **escape and close the modal** using the **ESC** keystroke.

ESC



Choose account

Account name

Account no.

Account type

☐ Option 1

☐ Option 2

Submit

Adding meaning to
important actions

As screen reader users focus on the “Close” function, they should be **informed that closing will take them back to the parent page.**

ENTER



Choose account

Account name

Account no.

Account type

☐

Option 1

☐

Option 2

Submit

“Leave form and return to bank balance information”

After modal dialog
closes

When the modal window is closed, **if users are being taken back to the parent page:**

Focus

**Focus should be placed on the
relevant component** of the parent page.

The most common practice is to move focus **back to the element that invoked the dialog.**

The user should not be **thrown back to the top of the parent page** unless there is a good reason!

Informing users

The user **should be informed** about the action that have just completed.

Otherwise they may **assume that nothing has happened** and try to do the same action again.

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Heading here	Another heading
Another thing here	
<div>Focus</div> <div>Add your bank balance</div>	\$1,200.34

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“Bank balance \$1200.34 added to bank information table”