



Accessibility Design Standards for Mobile-based systems

V2.2

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Background

This document has been produced to ensure that new systems and enhancements to systems developed within the Barclays Group are made accessible to all customers and staff and support Barclays' responsibilities under the Equality Act (EA 2010) and corresponding laws based on international guidelines globally.

These standards include requirements from the Web Content Accessibility Guidelines (WCAG) 2.1, mobile-specific requirements and best accessibility practice.

Purpose

This document is to be used within the lifecycle of a project or any enhancement to an existing system.

Designs should comply with all elements of the standards within this document.

There is a legal requirement to retain evidence of the activity to meet accessibility requirements therefore completed assessments must be stored to document compliance for each project/enhancement as evidence of the approach taken. If at any time you are unable to incorporate one or more of the standards you must provide evidence as to what approach was taken and the reasoning behind the decision not to comply.

This should also include any staff training systems or customer demonstration systems.

Policy

Whilst the reasonableness of adjustments will be determined by the Courts as case law is developed in the UK, the EHRC Code of Practice in the UK recommends that all reasonable steps are taken to ensure that systems are accessible to people with disabilities. In the case of service providers, the needs of disabled people at large should be anticipated and good practice measures introduced to meet those needs. Accessibility of websites is highlighted specifically in the Code. When designing systems and enhancements, Barclays will also have regard to its obligations towards vulnerable customers. As highlighted in [Barclays Customers in Vulnerable Circumstances Global Policy](#), physical and cognitive disabilities are amongst the circumstances which may result in a customer being especially susceptible to detriment.

In order for Barclays to meet its legal obligations in the countries in which it operates, it is a mandatory requirement for all designs to comply with these Standards. These requirements are regulatory and have been endorsed by Group Diversity and Inclusion. From the publication of this document it is the Barclays' policy that designs over time adopt adjustments to comply with all of the standards. These standards will be kept under review to ensure that they remain fit for purpose, in the light of legal, regulatory and/or technological developments.

Any areas of non-compliance must be identified and agreed by adopting an appropriate policy. It is recommended that non-compliance handling be based on appropriate Non-Financial Risk



assessment and acceptance of risk at appropriate levels of authority. This approach is embedded into the breach process followed in the Barclays Group.

Principle 1 - Perceivable non-text information

This principle covers the requirement to provide text alternatives for non-text content such as images, charts and graphs. There is also a requirement for labels to be associated with interface objects e.g. form fields.

1.1 Text alternatives for images **Content authors** **Developers**

Who is responsible	Requirement	WCAG 2.1
Content authors Developers	All images that convey important information or act as a link or a button are associated with a textual description in the code (via <i>AccessibilityLabel</i> in iOS, <i>android:contentDescription</i> in Android and <i>alt</i> in HTML).	1.1.1
Content authors	When images act as links or buttons, the text alternative describes their function (e.g. "Play video", "Add to favourites").	1.1.1
Content authors	Textual descriptions do <u>not</u> need to communicate the type of element (e.g. "image of", "button for" do <u>not</u> need to be included).	1.1.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/text-equivalents/alternatives-for-non-text-content>
- For iOS: https://developer.apple.com/library/content/documentation/UserExperience/Conceptual/iPhoneAccessibility/Making_Application_Accessible/Making_Application_Accessible.html#//apple_ref/doc/uid/TP40008785-CH102-SW5 ("Crafting Useful Labels and Hints" section)
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Labeling UI Elements" section)
- For websites: <https://www.w3.org/WAI/tutorials/images/>

1.2 Alternatives for complex images **Content authors** **Designers**

Who is responsible	Requirement	WCAG 2.1
Content authors Designers	Charts, graphs, diagrams and other complex images are described in text on the same page or in a page linked from the page containing the image.	1.1.1

Resources:

- <https://www.w3.org/WAI/tutorials/images/complex/>

1.3 Redundant content **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	Decorative, inactive and duplicated content that does not need to be conveyed to blind users (e.g. decorative images, content behind a pop-over, visible labels on forms) is hidden from screen readers (via <i>setIsAccessibilityElement</i> in iOS, <i>android:focusable</i> in Android, <i>alt=""</i> and <i>aria-hidden</i> in HTML).	1.1.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/text-equivalents/decorative-content>

1.4 Labels for form fields **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	All form fields are associated with a label in the code (via <i>AccessibilityLabel</i> in iOS, <i>android:labelFor</i> in Android and <i><label for></i> or <i>aria-label</i> in HTML).	1.3.1
Developers	The number of radio buttons in a group is identified in the code (via <i>accessibilityLabel</i> or <i>accessibilityHint</i> in iOS, <i>RadioGroup</i> in Android, <i><fieldset></i> in HTML) .	1.3.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/forms/labelling-form-controls>
- For iOS: https://developer.apple.com/library/content/documentation/UserExperience/Conceptual/iPhoneAccessibility/Making_Application_Accessible/Making_Application_Accessible.html#//apple_ref/doc/uid/TP40008785-CH102-SW5 ("Crafting Useful Labels and Hints" section)
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Labeling UI Elements" section)

- For websites: <https://www.w3.org/WAI/tutorials/forms/labels/>,
<https://www.w3.org/WAI/tutorials/forms/grouping/>

Principle 2 - Perceivable video and audio information

This principle covers the requirement to provide captions and transcripts for audio and video content. The desired approach is to use captioning for video and audio content with transcripts being additional to captions rather than replacing them.

2.1 Captions and text transcript **Content authors** **Designers**

Who is responsible	Requirement	WCAG 2.1
Content authors Designers	A text transcript is available (on the same page or on a page linked from the page containing the media) for any audio-only (e.g. podcasts), video-only (e.g. videos with no audio track) or multimedia content (e.g. videos with video and audio content).	1.2.1 , 1.2.3
Content authors Designers	Captions (closed or open) are available for any multimedia content whose audio track conveys important information.	1.2.2

Resources:

- <https://www.w3.org/TR/UNDERSTANDING-WCAG20/media-equiv-captions.html>
- <https://www.w3.org/TR/UNDERSTANDING-WCAG20/media-equiv-audio-desc.html>

2.2 Audio that plays automatically **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	Audio content does not start playing automatically, or stops after 3 seconds.	1.4.2
Designers	Alternatively, a keyboard accessible and clearly-labelled Pause button is available at the very beginning of the page.	1.4.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/audio-and-video/autoplay>

Principle 3 - Perceivable structure and presentation

This principle deals with the need to ensure that the structure of a page is clearly communicated to assistive technologies.

3.1 Headings **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	Headings are identified as headings in the code (via <i>UIAccessibilityTraitHeader</i> in iOS and <code><h1></code> - <code><h6></code> in HTML). Note: Text cannot be coded as a heading in Android Apps	1.3.1
Designers Developers	In HTML, headings are assigned the correct heading level (i.e. the main page heading is coded with <code><h1></code> , its subheadings are coded with <code><h2></code> , subheadings of any <code><h2></code> heading are coded with <code><h3></code> , etc.).	1.3.1
Developers	Text that does not represent a heading is not identified as a heading in the code.	1.3.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/structure/headings>

3.2 Screen title **Content authors** **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Content authors Designers Developers	A unique and descriptive title is displayed at the top of each screen and is read out by screen readers (implemented via the title property of <i>NavigationBar</i> in iOS, the <i>setTitle</i> method of <i>Activity</i> in Android and <code><title></code> in HTML).	2.4.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/structure/unique-pagescreen-titles>

3.3 Grouped items **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	Controls consisting of several items are announced as a single object by screen readers (e.g. a slider is announced as "slider" rather than an "up button", "down button" and "indicator"); The single items that constitute the control are hidden from screen readers.	-

Who is responsible	Requirement	WCAG 2.1
Designers Developers	When two or more adjacent items link to the same content (an adjacent image, title and topic), they are grouped into one actionable item only.	-

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/structure/grouped-elements>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/links/combining-repeated-links>
- For iOS: <https://developer.apple.com/documentation/objectivec/nsobject/1615143-shouldgroupaccessibilitychildren>
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Grouping Content" section)

Principle 4 - Perceivable and distinguishable information

All users – including those with visual and colour deficiencies - must be able to perceive and distinguish information on a website. This principle covers the requirement not to use colour alone to differentiate between elements, to use colours with a strong contrast ratio and to visually distinguish actionable items.

4.1 Use of colour **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	Colour alone is not used to convey information (e.g. to identify form fields with invalid entries or the current step in a step indicator) or to distinguish between areas of a map or graph; additional visual cues are used to provide the same information (e.g. icons, shapes, patterns, text).	1.4.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/colour-and-meaning>
- <https://www.deque.com/blog/inclusive-design-tips-presenting-information-multiple-ways/>
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Using Cues Other Than Color" section)

4.2 Actionable items **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	All actionable items (e.g. links, buttons, navigation items, swipe areas) are visually distinguished from static components (via underline, colour and weight variants, arrows, border, etc.).	-
Designers	When colour is used to identify actionable items, an additional visual cue is also provided.	1.4.1

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/actionable-elements>

4.3 Colour contrast **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	Text that is 18 points or larger has a contrast ratio with the background colour of at least 3; text that is smaller than 18 points has a contrast ratio with the background colour of at least 4.5.	1.4.3
Designers	Parts of graphical objects (e.g. icons) that convey information have a minimum contrast ratio of 3:1 with the adjacent colours.	1.4.11
Designers	The focus indicator and the border of buttons and form fields have a contrast ratio of at least 3:1 with the background colour.	1.4.11

Resources:

- <https://www.w3.org/WAI/WCAG21/Understanding/non-text-contrast.html>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/colour-contrast>
- <https://accessibility.blog.gov.uk/2016/06/17/colour-contrast-why-does-it-matter/>
- <http://juicystudio.com/services/luminositycontrastratio.php>
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Providing Adequate Color Contrast" section)

Principle 5 - Operable functionality via multiple input methods

The main consideration for this principle is to ensure that content can be accessed via multiple means (touch, Bluetooth keyboard, switch device, braille display, etc.). This should be done in a logical way - generally from the top left of the screen and ending up in the bottom right – and the keyboard focus should be visible.

5.1 Keyboard access **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	All actionable components receive the keyboard focus (implemented via <i>setIsAccessibilityElement</i> in iOS, <i>focusable</i> in Android and by using focusable elements or <i>tabindex="0"</i> in HTML).	2.1.1
Developers	All actionable components can be fully operated using the keyboard alone (achieved by using keyboard event handlers in HTML).	2.1.1
Developers	No item traps the keyboard focus; it is possible to move away from or dismiss any component (including modal components, on-screen keyboards, full screen media, menus and drawers) using the keyboard alone.	2.1.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/focus/focusable-elements>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/focus/keyboard-trap>

5.2 Focus visible **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	When actionable items are touched or receive the keyboard or screen reader focus, their visual appearance changes (e.g. a box appears around them, links become underlined, the colour of the text or of the background changes).	2.4.7

Who is responsible	Requirement	WCAG 2.1
Designers Developers	For items that have a default focus indicator, this is not disabled. For items that do not have a default focus indicator, a noticeable focus indicator is implemented.	2.4.7

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/visible-focus>
- <https://www.deque.com/blog/give-site-focus-tips-designing-usable-focus-indicators/>

5.3 Content order **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	Items receive the keyboard and screen reader focus in a logical order (in most cases this should be top-to-bottom and left-to-right).	1.3.2 , 2.4.3
Developers	When the default order of the content is logical, this is not overridden. When the order of the content is not logical by default, a logical order is specified in the code (via the <i>UIAccessibilityContainer</i> protocol in iOS and <i>nextFocusDown</i> , <i>nextFocusUp</i> , <i>nextFocusRight</i> and <i>nextFocusLeft</i> in Android).	1.3.2 , 2.4.3

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/focus/content-order>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/focus/focus-order>

5.4 Touch screen action triggers **Developers**

Who is responsible	Requirement	WCAG 2.1
Developers	Actionable items only get activated when users remove the finger from them, not when they first touch them (i.e. <i>touchesBegan:withEvent</i> in iOS, <i>ACTION_DOWN</i> in Android and <i>onTouchStart</i> in HTML do <u>not</u> trigger the action).	2.5.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/focus/user-interactions>

5.5 Complex gestures **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	Any action requiring users to use multi-point gestures (i.e. using multiple fingers) or path-based gestures (e.g. swiping, dragging) can also be completed using a single-point, non-path based gesture.	2.5.1

5.6 Orientation **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	The website or App can be used in any orientation (portrait and landscape).	1.3.4

5.7 Motion activation **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	For any action that can be completed by moving the device there is an alternative way to carry out the action which involves no motion.	2.5.4
Developers	Motion activation can be disabled by users.	2.5.4

Principle 6 - Operable timeouts

Timeouts may prevent users with a disability from completing actions on a website or App. This principle deals with this issue by requesting developers to inform users in advance of a timeout. The user should also be given the opportunity to extend this time, or where practical, to switch off the timeouts.

6.1 Timeouts **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	If it is necessary to implement timeouts (e.g. for security reasons), users are informed when a timeout is about to occur and are given the option to extend it.	2.2.1

Who is responsible	Requirement	WCAG 2.1
Designers	When a timeout occurs following user inactivity, the user is informed at the beginning of the process about how long they can be inactive for before a timeout occurs.	2.2.6

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/scripts-and-dynamic-content/timeouts>

Principle 7 – Controllable animations

This principle covers the requirement to ensure that animated content is not overly used and is controllable.

7.1 Animated content **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	Any content that scrolls, moves or blinks (e.g. carousels, news ticker) automatically stops after 5 seconds. Alternatively, users can easily pause or hide the animated content.	2.2.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/scripts-and-dynamic-content/controlling-media>

Principle 8 - Operable Navigation

This principle deals with the need for a consistent and useful navigation system. To ensure that users are able to navigate and find content, it is important that websites and Apps have clear and consistent design and navigation. Users should be able to confidently predict where interface elements can be found. Also, elements such as buttons, form controls and links should be large enough to be selected without the possibility of selecting adjacent controls.

8.1 Content prioritisation **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	The page is not cluttered (i.e. it only contains key content and functionality).	-

Who is responsible	Requirement	WCAG 2.1
Designers	Only few essential items are displayed at the top of the screen; all secondary items are displayed at the bottom of the screen or hidden in expandable sections.	-

8.2 Consistency between devices and within website/App **Content authors Designers**

Who is responsible	Requirement	WCAG 2.1
Content authors Designers	Items that appear on multiple pages (e.g. menu items, buttons) are positioned, styled and labelled consistently across the website or App. The same alt text is also used on all pages for a same image.	3.2.3 , 3.2.4
Content authors Designers	As much as possible, the same labels (e.g. button labels, links, headings) and alt text (for images) are used across the desktop website, mobile website, iOS and Android Apps.	-

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/editorial/consistent-labelling>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/consistency>

8.3 Login link **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	For pages containing a login link, this link is highly visible at the top of the page.	-

8.4 Size of touch target areas **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	The selectable area of actionable items is large enough for all users to select with ease.	2.5.5

Who is responsible	Requirement	WCAG 2.1
Designers	There is some empty space in between actionable items (e.g. in between links on a navigation menu), to reduce the chances of users selecting the wrong item.	2.5.5

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/touch-target-size>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/spacing>
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Making Touch Targets Large" section)

8.5 Step indicator **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	On pages that constitute a multi-step process, a step indicator indicates how many steps are in the process and which step the user is at (using text or icons associated with a textual description).	-

Resources:

- <https://www.w3.org/WAI/tutorials/forms/multi-page/>

8.6 Accessibility link **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	The website or App has an "Accessibility" link that loads a page containing useful instructions and information (e.g. how to turn on accessibility settings).	-

Principle 9 - Understandable content

This principle covers the requirement to write content that is easy to read and understand for all users. Ensuring that you use a clear typeface (i.e. non serif font) will make content easier to read by users. All Barclays Brand fonts comply with this principle. In addition to using clear fonts, it is important that the content itself is clear and concise and is written in an easy to understand way. Using simple language for information, instructions, prompts and outputs will allow all users to understand the content. As a financial services organisation, it's important that we have clear, jargon free content.

9.1 Text formatting **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	A sans-serif font is used for all text on the page; Barclays guidelines state that Expert Sans Light, Expert Sans Regular, Verdana and Arial should be used on Barclays websites.	-
Designers	Capitalisation and italic text are used sparingly.	-
Designers	Text is left aligned.	-

Resources:

- <http://webaim.org/techniques/fonts/#readability>

9.2 Text resizing **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	The content of the website or App can be resized by users (i.e. zoom and horizontal/vertical scrolling are not disabled in websites, and Apps support the device text resizing feature).	1.4.4
Designers Developers	All information and functionality remain available when the content is enlarged.	1.4.4

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/design/content-resizing>
- For iOS:
https://developer.apple.com/library/content/documentation/StringsTextFonts/Conceptual/TextAndWebiPhoneOS/CustomTextProcessing/CustomTextProcessing.html#//apple_ref/doc/uid/TP40009542-CH4-SW65 (“Text Styles” section)

9.3 Images of text **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	With the exception of text in logos, graphs and diagrams, the page does not contain any image of text; textual content is implemented as real text.	1.4.5

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/images/images-of-text>

9.4 Language **Content authors**

Who is responsible	Requirement	WCAG 2.1
Content authors	The language used on the page is as simple and clear as possible, taking into account the nature of the content and the website/App audience.	3.1.5
Content authors	Jargon is avoided as much as possible.	3.1.3
Content authors	Acronyms and abbreviations are used sporadically, and their full extension is displayed next to them the first time they are used on the page.	3.1.4

Resources:

- <http://webaim.org/techniques/writing/>

9.5 Instructions **Content authors**

Who is responsible	Requirement	WCAG 2.1
Content authors	Instructions to operate the website or App do not rely upon shape, size, visual location or sound. Examples of inaccessible instructions are "Press the square button to continue", "Press the button to the right to continue" and "A beeping sound indicates you may continue".	1.3.3

Resources:

- <https://www.w3.org/TR/2016/NOTE-WCAG20-TECHS-20161007/G96>

Principle 10 - Understandable and predictable behaviour

This principle deals with how dynamic components are conveyed to assistive technologies and how they behave. It should be clear to all users what the functionality of these components is, how to interact with them and what the result of this interaction is. No component should behave in an unexpected way.

10.1 Coding of user interface components **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	Interactive components are implemented using standard user interface controls when possible (e.g. iOS standard controls, Android standard widgets and standard HTML elements).	4.1.2

Who is responsible	Requirement	WCAG 2.1
Developers	When custom controls are used, their role (e.g. "button"), name (e.g. "play"), state (e.g. "disabled") and value (e.g. "50%" for a slider) are identified in the code (via <i>accessibilityLabel</i> , <i>UIAccessibilityTrait</i> and <i>accessibilityHint</i> in iOS, <i>contentDescription</i> in Android, and WAI-ARIA attributes in HTML).	4.1.2
Developers	When the state or value of custom controls changes, the state or value is updated in the code (e.g. from "disabled" to "enabled", from "50%" to "60%").	4.1.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/text-equivalents/roles-traits-and-properties>
- For iOS: https://developer.apple.com/library/content/documentation/UserExperience/Conceptual/iPhoneAccessibility/Making_Application_Accessible/Making_Application_Accessible.html#//apple_ref/doc/uid/TP40008785-CH102-SW5 ("Crafting Useful Labels and Hints" and "Identifying Appropriate Traits" sections)
- For Android: <https://developer.android.com/guide/topics/ui/accessibility/apps.html> ("Labeling UI Elements" section)
- For websites: <https://www.w3.org/TR/wai-aria-practices-1.1/>

10.2 Notifications Designers Developers

Who is responsible	Requirement	WCAG 2.1
Designers Developers	Important messages (e.g. error messages that appear while users fill in forms, a time out message displayed when a session is about to expiry) are conveyed to users via multiple means, such as text displayed on the screen, audio notifications and haptic feedback.	-

Who is responsible	Requirement	WCAG 2.1
Developers	When the content of a page is dynamically changed/removed/added and this change of content may not be obvious to blind users, notifications are included in the code (these notifications do not need to be visible on the screen).	4.1.3

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/notifications/inclusive-notifications>
- For websites: https://developer.mozilla.org/en-US/docs/Web/Accessibility/ARIA/ARIA_Live_Regions

10.3 Links **Content authors** **Developers**

Who is responsible	Requirement	WCAG 2.1
Content authors	All links accurately describe the content that they load; the page does not contain generic links such as "click here" and "read more".	2.4.4
Content authors Developers	If the page contains inaccurate or duplicated links (e.g. several "See details" links displayed under different credit card types), additional information on their purpose is included in the code (via <i>accessibilityLabel</i> and <i>accessibilityHint</i> in iOS, <i>contentDescription</i> in Android, and hidden text or <i>aria-label</i> or <i>aria-labelledby</i> in HTML).	2.4.4
Content authors	When links load content in a different format (e.g. a PDF document) or in a different App or website, this is clearly indicated at the end of the link (in text or via an icon associated with a textual description).	2.4.4

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/links/descriptive-links>
- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/links/links-to-alternative-formats>

Principle 11 – Understandable forms and instructions

Principle 11 covers the need to ensure that forms, instructions and error messages are clear and accurate. This will help users to avoid and correct mistakes.

11.1 Form field help text **Content authors** **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers	All form fields have a visible label.	3.3.2
Content authors	All labels clearly and precisely describe the data required from the users.	3.3.2
Designers	The labels of mandatory fields include an asterisk or the text "Required".	3.3.2
Content authors Designers Developers	Any additional help text around the data to enter (e.g. the expected format, example data) is displayed next to the field and associated with it in the code (via <code>accessibilityHint</code> in iOS, <code>android:hint</code> in Android and <code>aria-labelledby</code> or <code>aria-describedby</code> in HTML).	3.3.2

Resources:

- For websites: <https://www.w3.org/WAI/tutorials/forms/instructions/>

11.2 Label placement **Designers**

Who is responsible	Requirement	WCAG 2.1
Designers	Labels are displayed to the left or above text fields and drop-downs, and to the right of checkboxes and radio buttons.	3.3.2
Designers	There is not a lot of empty space between labels and fields.	3.3.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/forms/form-layout>

11.3 Virtual keyboard **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	When users are required to fill in form fields, the most appropriate type of virtual keyboard is displayed (implemented via <code>keyboardType</code> in iOS, <code>inputType</code> in Android and <code>type</code> in HTML5).	-

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/forms/form-inputs>

11.4 Focus management **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	While users interact with form controls, the focus does not move unexpectedly (i.e. the focus does not automatically move to the next field once the user has entered data in a text field, has checked a radio button or checkbox or has selected an option in a drop-down). Users have the control and move the focus to the next field when ready.	3.2.2

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/forms/managing-focus>

11.5 Error messages **Content authors** **Designers** **Developers**

Who is responsible	Requirement	WCAG 2.1
Designers Developers	When invalid data is entered in a form, error messages are displayed on the screen; screen reader users are informed of the presence of the error messages either as they appear on the screen or when they submit the form.	3.3.1
Designers Developers	The fields in error are highlighted (not using colour alone) and are identified as fields in error by screen readers (i.e. screen readers read out an error message when the users navigate back to the field).	3.3.1
Content authors	The error messages clearly and accurately explain the errors that have occurred and provide suggestions on how to fix them. When possible, suggestions for corrections are offered.	3.3.3

Resources:

- <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile/notifications/error-messages-and-correction>
- For websites: <https://www.w3.org/WAI/tutorials/forms/notifications/>

11.6 Review screen **Content authors** **Designers**

Who is responsible	Requirement	WCAG 2.1
Content authors Designers	On multi-page forms, a review screen showing all entered data and offering users the option to modify them (if possible) is provided before the data is submitted.	3.3.4

Resources:

- <https://www.w3.org/TR/WCAG20-TECHS/G98.html>