






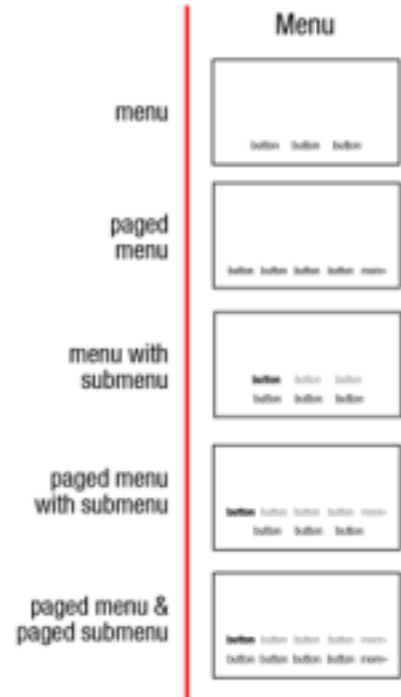

Features				
ID	Name	Description	Priority	Release
F1	Modularity	Screens can be arranged in any order and linked in any way desired. Different screens can be created from an arrangement of self-contained widgets. This is controlled by an XML file.	Must have	v1.0
F2	Scalability	The app can have any number of screens. The more content there is the more screens the app needs to display it.	Must have	v1.0
F3	Dynamic GUI Rendering	The layout of the screens and the way the app looks (eg. it's colours, fonts, and graphics) is driven by external sources (like data feeds, XML, CSS, and font files).	Must have	v1.0
F3.1	• Driven by content	The content from data feeds drives screen layouts, unless otherwise specified in XML or CSS files.	Must have	v1.0
F3.1.1	•• Video feed	Brightcove video platform serves the video	Must have	v1.0
F3.1.1.1	•• » Video assets	Should be 720p resolution, 1-2 Mb/s	Must have	v1.0
F3.1.1.2	•• » Video thumbnail images	120 x 65.	Must have	v1.0
F3.1.1.3	•• » Video descriptions	A title / short one line description of a video.	Must have	v1.0
F3.1.2	•• Slide feed	Slide show is mainly driven by a list of URL references in the XML	Must have	v1.0
F3.1.2.1	•• » Image assets	Should be 720p resolution.	Must have	v1.0
F3.1.2.2	•• » Slide thumbnail images	120 x 65.	Must have	v1.0
F3.1.2.3	•• » Slide descriptions	A title / short one line description of a slide or a slideshow.	Must have	v1.0
F3.1.3	•• Text feed	Text article are mainly driven by HTML text (including image URLs) in the XML config file.	Must have	v1.0
F3.1.3.1	•• » HTML text	Text blocks which include an image, a heading, and body text. Image and heading are optional.	Must have	v1.0
F3.1.3.2	•• » Inline image URLs	Reference to an inline image in the text block. Image should be less than 1120 x 360.	Must have	v1.0
F3.2	• Driven by XML	The structure of the entire app and the navigation buttons linking the screens are specified in an XML config file. The XML file also contains custom messages that aren't updated as often as the data feeds.	Must have	v1.0
F3.2.1	•• Screens	Each screen is defined by its screen type, its data feed source, and what custom menu items it has.	Must have	v1.0
F3.2.1.1	•• » Menu	Every screen has a set of on-screen buttons, some which are custom, some which appear automatically defined by its screen type. Custom menu items are listed in the XML.	Must have	v1.0
F3.2.1.2	•• » Carousel	Optional on a screen. Some screens will automatically have a carousel based on its screen type (eg. Media Player), but some may have custom ones defined in the XML (eg. Home Screen).	Must have	v1.0
F3.2.1.3	•• » Buttons	The names of the screen-to-screen navigation buttons (content selection buttons will not be defined by the XML).	Must have	v1.0
F3.2.1.4	•• » Button links	Defines what loads upon OK press on an on-screen button (it could load another screen, refresh part of a screen, or trigger a pop-up window).	Must have	v1.0
F3.2.1.5	•• » Tooltip messages	Message that describes what will happen when the OK button is pressed on an on-screen button (eg. "Press OK to watch the video now"). As the names of the buttons often need to be short this provides the user with extra information about what the button will do before they press it. Every button requires one.	Must have	v1.0
F3.2.2	•• Error messages	So that error messages can be updated from time to time the copy is editable in the XML.	Must have	v1.0
F3.2.3	•• Custom messages	Shorter messages not in a feed that appear in a pop-up window (eg. "About" messages).	Should have	
F3.3	• Dynamic styling	The formatting of the app is controlled by an external stylesheet. By changing these parameters each app can quickly have it's own unique look.	Must have	v1.0
F3.3.1	•• Custom colours	The colours of the text, buttons, and button focus defined by a CSS.	Must have	v1.0
F3.3.1.1	•• » Text	2 custom colours. One for normal body copy, another for emphasis in the body copy.	Must have	v1.0
F3.3.1.2	•• » Buttons	5 custom colours, one for each of the button states (see F5.1).	Must have	v1.0
F3.3.1.2	•• » Button focus	2 custom colours, one for each of the button focus states (normal and activated).	Must have	v1.0
F3.3.2	•• Custom fonts	3 possible custom fonts: header, body copy, and emphasis (eg. bold) that will be loaded at startup.	Must have	v1.0
F3.3.3	•• Bitmap Graphics URLs	Set of custom GUI bitmap graphics defined by a CSS.	Must have	v1.0
F3.3.3.1	•• » Logo	PNG. Maximum size of 600 x 360 pixel and 150 KB. This single file will be used throughout the app (eg. on the Loading screen, and at upper right on the Home Screen).	Must have	v1.0
F3.3.3.2	•• » Background	JPG. Background for graphical screens that will have text overlaying it (eg. List screens, Text screens).	Must have	v1.0
F3.3.3.3	•• » Upper fade	PNG. A copy of the upper sixth of background to be overlaid on a vertical list menu to create the impression that the top of the menu fades into the background.	Should have	
F3.3.3.4	•• » Lower fade	PNG. A copy of the lower sixth of background to be overlaid on a vertical list menu to create the impression that the bottom of the menu fades into the background.	Should have	
F3.3.3.5	•• » Main Menu Background	JPG. Background for Home screen / Main Menu only (a 'splash' page image with accomodation for a horizontal menu overlaid on the lower third).	Must have	v1.0
F3.3.3.6	•• » Upper third	PNG. Image to be overlaid on a slide or video to act as a background for text so that the text is legible.	Must have	v1.0
F3.3.3.7	•• » Lower third	PNG. Image to be overlaid on a slide or video to act as a background for interactive widgets so they are easy to see over slide or video.	Must have	v1.0
F3.3.3.8	•• » Main Menu Carousel Items	JPG. The carousel on the Home screen / Main Menu often needs custom images to populate it as they sometimes cannot be defined in a data feed.	Should have	
F3.3.4	•• Vector corner radius	This parameter affects the appearance of the button focus, the now playing icon, and all the remote control button hints. This is a quick way to change the appearance from 'hard' to 'soft' by adjusting the roundness of the corners of all the GUI vector graphics in Flash.	Should have	
F3.3.5	•• Button spacing	by default horizontal and vertical menus, as well as carousels, should automatically adjust their positions based on the button sizes. But occassionally a widget containing buttons may need manual adjustments, and this parameter would allow for a manual override of the button spacing.	Should have	v1.0
F3.3.6	•• Text block layout	Layout of the element within the text block defined by a CSS.	Must have	v1.0
F3.3.6.1	•• » Alignment	3 settings: Left, Centre, and Right. Alignment settings will move all elements (image, header, and body text) into position.	Must have	v1.0
F3.3.6.2	•• » Inline image URL	reference to the image inside a text block that the text will wrap around.	Must have	v1.0
F3.3.6.3	•• » Inline image padding	Amount of space in pixels between image and the text wrapping around it. Often it takes fine tuning to get even spacing along the bottom and sides of the image, so that's why this parameter is useful.	Must have	v1.0
F3.3.6.4	•• » Text block width	Width of the text block in pixels. The height is determined by the text (and image, if present).	Must have	v1.0
F3.3.6.5	•• » Text block position	[x,y] position coords of the upper left corner of the text block.	Should have	v1.0
F4	Output Features	The app displays content and system messages.	Must have	v1.0
F4.1	• Content display	The app displays full-screen content such as video, slides, or text from data feeds.	Must have	v1.0
F4.1.1	•• Full-screen video	Could be a video promo (see F3.1.1.1).	Must have	v1.0
F4.1.1.1	•• » Single video	(for source see F3.1.1). Triggering a single video will load a simpler layout in the Media Player screen. For example there will be no carousel to browse a video playlist, as there's no playlist.	Must have	v1.0
F4.1.1.2	•• » Video Playlist	Play a playlist of full-screen videos (see F3.1.1).	Must have	v1.0

F4.1.1.3	• • » Video progress	Visual indicators of what the current time is on the playing video.	Must have	v1.0
F4.1.1.3.1	• • • » Timeline	An animated progress bar representing the current time.	Must have	v1.0
F4.1.1.3.2	• • • • » Number indicator	A set of numbers showing the current time, in the form 0:00 / 0:00. The number before the slash is the current time, and the number after is the total running time of the video. Any time less than 60 seconds shows a leading zero in the minute position.	Must have	v1.0
F4.1.1.4	• • » Playing video info	(see F3.1.1.3)	Must have	v1.0
F4.1.2	• • Full-screen slides	Could be pictures of a product (see F3.1.2.1).	Must have	v1.0
F4.1.2.1	• • » Single slide	(see F3.1.2)	Must have	v1.0
F4.1.2.2	• • » Slideshow	(see F3.1.2)	Must have	v1.0
F4.1.2.3	• • » Slideshow progress	A set of numbers showing the current slide on display, in the form 0 / 0. The number before the slash is the current slide, and the number after is the total number of slides in the slideshow.	Must have	v1.0
F4.1.2.4	• • » Playing slide info	(see F3.1.2.3).	Must have	v1.0
F4.1.3	• • Full-screen text blocks	Can be a block of text only, or a block of text with inline pictures (eg. a screen showing "Terms & Conditions", or a product page showing a picture of the product with some accompanying text).	Must have	v1.0
F4.1.3.1	• • » Single text block	Has 3 parts: an inline image, a header, and body text. The first 2 are optional in a text block.		v1.0
F4.1.3.2	• • » Small text block	If text blocks have a very short height and width (TBD) appear in a pop-up window (to avoid having a lot of empty space on a full screen).	Could have	
F4.1.3.3	• • » Multi-page text	If text blocks are taller than the content area on the screen then the block becomes viewable as multiple pages and the page control buttons appear at the bottom of the screen. If there are multiple text blocks (ie. multiple articles) a 'Next' button appears so that the user can skip from article to article.	Must have	
F4.2	• System messages	Messages not generated from content selection.	Must have	v1.0
F4.2.1	• • Loading	At startup of the app this message appears on its own screen (with a logo, see F3.3.3.1) with a black background. Otherwise a loading message is overlaid on the current state if the load time is taking over 2 seconds to reassure the user.	Must have	v1.0
F4.2.2	• • Error messages	A message in a pop-up window that tells the user there is a technical problem.	Must have	v1.0
F4.2.2.1	• • • » General	General miscellaneous technical error.	Must have	v1.0
F4.2.2.2	• • • » Network problem	Message that the network is down.	Should have	
F4.2.2.3	• • • » Missing data	Message that the network is okay, but the expected data isn't there.	Should have	
F4.2.3	• • Item number indicator	If there is a set of items where the whole set can't be seen at a glance then an item indicator informs the user where their focus is in the set. This comes in the form 0 / 0, where the number before the slash is the current item in focus, and the number after is the total number of items in the set. (one example is F4.1.2.3. Can also append a tooltip when focus is on a Main Menu carousel).	Should have	v1.0
F4.2.4	• • Remote control sounds	The app makes sounds that acknowledge the user's button presses. Usually these will be TiVo's default sounds, but these can be changed to something more brand appropriate for a client (therefore custom sounds must be loaded at start up of the app).	Should have	
F4.2.4.1	• • • » Updown	Indicates a remote control button press. TiVo default sounds like a strike on a wood block.	Should have	
F4.2.4.2	• • • » Select	Indicates that the OK button was pressed. TiVo default sound like two strikes on a two toned wood block.	Should have	
F4.2.4.3	• • • » Bonk	Indicates a remote control button press was received, but there is no action to perform. TiVo default sounds like a timpani strike.	Should have	
F4.3	• Screen saver	Static graphics on the screen for extended periods may cause screen burn on some TVs. After a timeout of 15 minutes, if a video isn't playing, the screen goes to black shows a logo that jumps to a new position on the screen every 3 seconds.	Could have	
F5	Input Features	The user navigates through the app, selects content, and controls the content using on-screen buttons and the remote control.	Must have	v1.0
F5.1	• On-screen buttons	These are used in concert with the ARROW and OK buttons on the remote control to execute actions. The ARROW buttons allow the user to change focus from button to button on the screen, and the OK button performs the action of the on-screen button in focus.	Must have	v1.0
F5.1.1	• • Types	3 types: text buttons, remote control buttons, and image buttons.	Must have	v1.0
F5.1.1.1	• • • » Text buttons	Interactive buttons that in their normal states look like evenly spaced words or phrases grouped in rows or columns.	Must have	v1.0
F5.1.1.2	• • • » Remote control buttons	On-screen buttons that show remote control button icons on them. These can be triggered with the ARROW and OK buttons on the remote (just like the other on-screen buttons) but they also react to the remote control buttons that share their icons. When these special remote control buttons are used (eg. SKIP FORWARD) the focus will jump to the matching on-screen button (if not there already), and then flash it's activated state (the on-screen keyboard, F5.1.3.4, is the exception to this behaviour).	Must have	v1.0
F5.1.1.3	• • • » Image buttons	Interactive buttons that in their normal states look like evenly spaced photographs or graphics grouped in rows or grids.	Must have	v1.0
F5.1.2	• • States	5 states: normal, focused, activated, active, and inactive. Each have their own colours (see F3.3.1.2).	Must have	v1.0
F5.1.2.1	• • • » Normal	Indicates the button is not in focus.	Must have	v1.0
F5.1.2.2	• • • » Focused	Indicates the button is in focus. Text buttons and Remote Control buttons have a filled in coloured box behind them, and image buttons have thick coloured strokes to indicate focus.	Must have	v1.0
F5.1.2.3	• • • » Activated	Indicates that the OK button press on the remote control has been received by the app. The colour change is a quick 1 second flash. Text buttons and Remote Control buttons swap colours with their focus, and the focus of an image button flashes a different colour to indicate it's been activated.	Must have	v1.0
F5.1.2.4	• • • » Active	Indicates it's turned on while not in focus (eg. when displaying a submenu, the parent button is active).	Should have	
F5.1.2.5	• • • » Inactive	Indicates it's turned off while not in focus (eg. when displaying a submenu, the buttons that are not the parent are inactive).	Should have	
F5.1.3	• • Groupings	4 groupings of on-screen buttons: menu, carousel, media controller, and on-screen keyboard.	Should have	v1.0
F5.1.3.1	• • • » Menu	A row or column of text buttons.	Must have	v1.0
F5.1.3.1.1	• • • • » Menu Row	Horizontal menu. The menu buttons space themselves evenly on the screen based on their widths. If the width of the menu row is narrower than the safe area then the buttons remain static, horizontally centered, and the focus moves left and right. If the width of the menu is wider than the safe area then the focus remains at the center of the widget while the buttons move left and right. If there is another interactive element on screen (eg. a carousel above the menu) and the user can move the focus away from the menu and the menu is wider than the safe area, the menu is split into horizontally centered pages. Additional buttons labelled "More..." and "...More" allow navigation between the pages.	Must have	v1.0
F5.1.3.1.2	• • • • • » Submenu	An additional horizontal menu that appears under a parent button. This allows for more complicated menu structures without having to navigate to new screens. When a submenu appears the parent button shows its active state (see F5.1.2.4). The submenu appears when the user presses OK or DOWN on the parent button. The submenu disappears when the user presses UP on any of the submenu buttons.	Should have	
F5.1.3.1.3	• • • • • » List Menu	Vertical menu in a column. The menu buttons space themselves evenly on the screen based on their heights. The buttons show LEFT and RIGHT arrow button hints at the left and right sides when in focus. Pressing LEFT steps back in the history stack, pressing OK or RIGHT executes the button action. If the height of the list menu is within the screen safe area the buttons remain static, vertically centered, and the focus moves up and down. If the height of the list menu is taller than the safe area then the focus remains at center screen and the buttons scroll up and down. The buttons fade if they go off the top or bottom of the screen (see F3.3.3.3 and F3.3.3.4).	Should have	
F5.1.3.2	• • • » Carousel	A row of image buttons. The carousel items space themselves evenly on the screen based on the button widths. If the width of the carousel is narrower than the safe area then the buttons remain static, horizontally centered, and the focus moves left and right. If the width of the carousel is wider than the safe area then the focus remains at the center of the widget while the carousel buttons move left and right, wrapping around infinitely.	Must have	v1.0
F5.1.3.3	• • • » Media controller	A row that includes a back button (linking back to the previous screen in the history stack), media transport buttons (see F5.4), and an optional link button (linking to a new screen related to the media that's playing).	Must have	v1.0
F5.1.3.4	• • • • » On-screen keyboard	Widget for text input. Users can use the multitap method and type with the number buttons on the remote, or use the ARROW and OK buttons on the remote in conjunction with on-screen keyboard to type.	Could have	

Jigsaw-specifications - Features

F5.2	• Screen-to-screen navigation	Some text buttons are dedicated to linking content selection screens together, or linking back from a content display screen (eg. that plays a video) to a content selection screen (eg. the Main Menu screen).	Must have	v1.0
F5.3	• Content selection	Some buttons, widgets, and full screens are dedicated to browsing and selecting the display of full-screen video, images, and text.	Must have	v1.0
F5.4	• Media control	The user can play, pause, and skip assets in video playlists and slideshows. The user can also fast forward and rewind video streams.	Must have	v1.0
F5.4.1	•• Pause / Play button	Toggles between play and pause.	Must have	v1.0
F5.4.2	•• Skip buttons	Skips forward or back to the next asset in a video playlist or slideshow.	Must have	v1.0
F5.4.3	•• Scan buttons	Jumps forward or back at 5% increments of a video's total run time.	Must have	v1.0
F5.5	• Text Input	The user enters text using the remote control, either through the multitap method using the number buttons, or the arrow and OK buttons and an on-screen keyboard.	Could have	
F6	History	A stack recording which screens have been visited and their most recent states (ie. what was last in focus when a screen was exited). This is so that when the user presses OK on an on-screen 'Back' button the user will go back one step in the history.	Must have	v1.0
F7	DAX Reporting	The app records user activity for analytics.		v1.0
F7.1	• app opens			v1.0
F7.2	• duration per visit			v1.0
F7.3	• app closes			v1.0
F7.4	• video streams			v1.0
F7.5	• number of unique users			v1.0
F8	Deep linking to TiVo VOD area	on-screen buttons can link to VOD assets on TiVo		

Functional Specifications - Summary									
ID	Purpose	Screen	If the content is...	If the author sets...	Screen element	When...	And if the user...	Then...	Release
CONTENT DISPLAY									
S1	of video	Video Playback							v1.0
S1.1			A single video						v1.0
S1.12				No link from the video					v1.0
S1.30				A link from the video					
S1.41			Multiple videos						v1.0
S1.66				No link from the video					v1.0
S1.88				A link from the video					
S1.100	of slides	Image Gallery							v1.0
S1.101			A single slide						v1.0
S1.108				No link from the slide					v1.0
S1.114				A link from the slide					
S1.123			Multiple slides						v1.0
S1.144				No link from the slide					v1.0
S1.159				A link from the slide					
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Slide Display</p> </div> <div style="text-align: center;"> <p>Video Display</p> </div> </div>									
S2	of text blocks	Text Screen							v1.0
S2.1			a text block shorter than the screen content window (a single page)						v1.0
S2.2				No link from the screen					v1.0
S2.5				A link from the screen					
S2.9			multiple text blocks all shorter than the screen content window (multiple articles, single pages)						v1.0
S2.10				the pages names					v1.0
S2.16			a text block taller than the screen content window (one article, multiple pages)						v1.0
S2.17				the navigation as a menu					v1.0
S2.22				the navigation as a carousel					
S2.36			multiple text blocks (multiple articles)						

			<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Single Item</p> <p>Menu</p>  <p>Single text block with a back button</p> </div> <div style="text-align: center;"> <p>with link</p>  <p>Single text block with link button</p> </div> <div style="text-align: center;"> <p>Menu</p>  <p>Multiple text pages with page tab navigation</p> </div> <div style="text-align: center;"> <p>Carousel</p>  <p>Multiple text pages with carousel navigation</p> </div> <div style="text-align: center;"> <p>with link</p>  <p>Multi-page text article with link to others</p> </div> </div>							
S3	of very short text messages	Pop-up window								v1.0
S3.1			a text message							v1.0
S3.4			a text message with a short list menu							
	CONTENT SELECTION									
S4	of all the main content display screens in the app	Home Screen								v1.0
S4.4			the main menu buttons							v1.0
S4.23			the menu menu buttons and a main carousel							v1.0
			<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Menu</p>  </div> <div style="text-align: center;"> <p>Menu & Carousel</p>  <p>static carousel wrapping carousel</p> </div> </div>							
S5	of secondary content	List Screen								
	SYSTEM MESSAGING									
S6	of app loading	Loading Screen								v1.0

Functional Specifications - All									
ID	Purpose	Screen	If the content is...	If the author sets...	Screen element	When...	And if the user...	Then...	Release
STYLING									
S0	colours, fonts, shared graphics	All screens							v1.0
S0.1			[n/a]	the text copy colours	body text	a text article displays on screen	[n/a]	most of the text displays using this colour. It must be legible on over the background.	v1.0
S0.2					emphasis text			some of the text might need to be emphasised using a different colour (eg. to make a website URL stand out on the screen).	v1.0
S0.3				the button text colours	button text	[n/a]	[n/a]		v1.0
S0.4					• normal colour	a text button is not in focus	moves the focus off of an on-screen button using the ARROW buttons	a text button shows its normal state colour. This must stand out clearly on the background.	v1.0
S0.5					• focused colour	a text button is in focus	moves the focus to an on-screen button using the ARROW buttons	a text button changes it's colour to the focused state. This must stand out clearly over the focus graphic colour.	v1.0
S0.6					• activated colour	a text button is in focus	presses OK	a text button changes it's colour to the activated state for one second. This colour is the same as the focus graphic focused state colour [S0.9]	v1.0
S0.7					• active colour	a text button is 'on' but not in focus	presses OK on a button that's related to another on-screen element (eg. subbutton, a tab) and then moves the focus off it using the ARROW buttons.	a text button shows its active state colour. This colour must be different from the normal state of the buttons to stand out amongst them.	v1.0
S0.8				the focus graphic colours	focus graphic	[n/a]	[n/a]		v1.0
S0.9					• focused colour		presses the ARROW buttons on the remote	the focus graphic moves around the screen to selectable on-screen buttons. What moves around the screen must be a colour that stands out. It often should be a bright colour.	v1.0
S0.10					• activated colour	a text button is in focus	presses OK	the focus graphic colour changes to the activated state for one second. This colour is the same as the text button focused colour [S0.5]	v1.0
S0.11				the fonts	normal font	the app loads	[n/a]	the app will display most textual elements in one font.	v1.0
S0.12					emphasis font			the app will display a special font for emphasis (eg. a title in bold).	v1.0
S0.13					font sizes		[n/a]		v1.0
S0.14					• text button size			the app will display all on-screen text buttons in this size.	v1.0
S0.15					• tooltip text size			the app will display all on-screen tooltips in this size.	v1.0
S0.16					• body copy text size			the app will display all body copy text in text blocks in this size.	v1.0
S0.17					• body header text size			the app will display all header text in text blocks in this size.	v1.0
S0.18					• media player text size			the app will display all information text on the Video Playback and Image Gallery screens in this size.	v1.0
S0.19				shared graphics		the app loads	[n/a]		v1.0
S0.20					Logo			the app loads the logo for display on the loading screen, the Home Screen, Text Screen (product screen), and List Screens	v1.0
S0.21					Home Screen Background	the Home Screen loads		the app displays this image as a background on the Home Screen	v1.0
S0.22					Background	a Text Screen (Product screen) or List Screen loads		the app displays this image as a background.	v1.0
S0.23					Upper third	a Media Player screen (Video Playback or Image Gallery) loads		the app displays this on the upper third over the content as a background to information text.	v1.0
S0.24					Lower third			the app displays this on the lower third over the content as a background for the interactive controls.	v1.0
S0.25					Upper fade	a List Screen loads		the app displays this on the upper third over the list to make it look as though the text fades away as it goes off the top of the screen.	
S0.26					Lower fade			the app displays this on the lower third over the list to make it look as though the text fades away as it goes off the bottom of the screen.	
CONTENT DISPLAY									
S1	of video	Video Playback							v1.0
S1.1			A single video						v1.0
S1.2					Video player (component)	the screen first loads	[n/a]	a "Please Wait..." message shows until the chosen video plays.	v1.0
S1.3						the video playhead reaches the end		exit the Media Player screen and step back to the last screen in the history.	v1.0
S1.4					Overlay Interface (Media Controls component)	the screen first loads		the overlay shows.	v1.0
S1.5						the overlay has been visible for 3 seconds		the overlay hides. An UP arrow button hint is then seen near the bottom of the screen for a further 2 seconds (indicating to the user that pressing UP will show the overlay again). The content is then viewed unobstructed in leanback mode.	v1.0
S1.6						the overlay is visible	presses UP, LEFT, RIGHT, OK, CH UP, CH DOWN	visibility timer resets (ie. overlay stays visible).	v1.0
S1.7							presses OK	button in focus flashes its activated state for 1 second.	v1.0
S1.8							presses DOWN	the overlay hides [see S1.5]	v1.0

S1.9						presses PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	visibility timer resets, then the focus jumps to the on-screen version of that button (nb. STOP is equivalent to PAUSE in this case), the activated state of the on-screen button for 1 second, and the action of that remote control button is executed (eg. the PAUSE button will pause the playback). The behaviour is the same as if OK was pressed while an on-screen button was in focus (see [S1.20 - S1.28]).	v1.0
S1.10					the overlay is hidden	presses UP, DOWN, LEFT, RIGHT, OK, CH UP, CH DOWN	the overlay shows.	v1.0
S1.11						presses PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	the overlay shows, then [S1.9].	v1.0
S1.12				No link from the video				v1.0
S1.13				• Upper third	the video starts playing	[n/a]	upper third shows	v1.0
S1.14					the video is showing but the upper third is not visible	presses INFO	upper third shows	v1.0
S1.15					the upper third is visible for 3 seconds	[n/a]	upper third hides	v1.0
S1.16				• Video info text	the upper third is visible		show path name and video title	v1.0
S1.17				• Lower third	the overlay is visible	presses LEFT	focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.	v1.0
S1.18						presses RIGHT	focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.	v1.0
S1.19				• Back button	in focus	presses OK	exit the Video Playback screen and step back to the last screen in the history.	v1.0
S1.20				• Media Transport (Trick play controls)				v1.0
S1.21				• » Rewind	in focus while video is playing	presses OK	reverse the video, progress bar, and time indicator by 10 seconds and continue playing.	v1.0
S1.22					in focus while video is paused		reverse the video, progress bar, and time indicator by 10 seconds time and stay paused.	v1.0
S1.23					in focus while video is at less than 10 seconds from the start		play the video from the beginning.	v1.0
S1.24				• » Pause / Play	in focus while video is playing	presses OK	pause video, progress bar, and time indicator, and toggle the on-screen button symbol to the play icon.	v1.0
S1.25					in focus while video is paused		run video, progress bar, and time indicator, and toggle the on-screen button symbol to the pause icon.	v1.0
S1.26				• » Fast Forward	in focus while video is playing	presses OK	advance the video, progress bar, and time indicator by 5% of the total running time.	v1.0
S1.27					in focus while video is paused		Advance the video, progress bar, and time indicator by 5% of the total running time and stay paused.	v1.0
S1.28					in focus while video is at less than 10 seconds from the end		BONK.	v1.0
S1.29				• Time indicator	the overlay is visible	[n/a]	display to the right of the media transport buttons (eg. 0:00 / 0:00, elapsed / duration)	v1.0



S1.30				A link from the video				
S1.31					[n/a]	[n/a]	presses GREEN	exit the Media Player screen and go to the screen linked to the video.
S1.32				Overlay Interface (Media Controls component)	the overlay is hidden	[n/a]		the green button hint appears in the same spot as the link button (ie. the green button hint is on at all times and pressing GREEN on the remote will execute the link at any time).
S1.33				• Upper third	[S1.13 - S1.15]			behaves same as [S1.13 - S1.15].
S1.34				• Video info text	the upper third is visible			Show path name, video title, and time indicator
S1.35				• Lower third	the lower third becomes visible			the green button tooltip balloon, pointing to the green button hint, shows for 5 seconds.
S1.36					the overlay is visible	presses LEFT		[S1.17]
S1.37						presses RIGHT		[S1.18]
S1.38				• Back button	in focus	presses OK		exit the Media Player screen and step back to the last screen in the history.
S1.39				• Media Transport (Trick play controls)	[S1.20 - S1.28]	[S1.20 - S1.28]	[S1.20 - S1.28]	[S1.20 - S1.28]
S1.40				• Link Button	in focus	presses OK		exit the Video Playback screen and go to the screen linked to the video.

S1.41			Multiple videos						v1.0
S1.42				Video player (component)	the screen first loads	[n/a]	a "Please Wait..." message shows until the first video plays in the playlist.		v1.0
S1.43					a video ends		the next video plays, the upper third shows with the next video description, the progress bar resets, the time indicator resets showing the next video's total running time, the 'now showing' icon is now on the next thumbnail on the carousel (the next video in the playlist).		v1.0
S1.44				Overlay Interface (Media Controls component)	the screen first loads	[n/a]	the overlay shows, with the carousel in focus.		v1.0
S1.45					the overlay has been visible for 3 seconds		the overlay hides [see S1.5]		v1.0
S1.46					the overlay is visible	presses LEFT, RIGHT, OK, CH UP, CH DOWN	visibility timer resets.		v1.0
S1.47						presses OK	the button in focus flashes its activated state for 1 second.		v1.0
S1.48						presses PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	visibility timer resets, then the focus jumps to the on-screen version of that button (nb. STOP is equivalent to PAUSE in this case), the activated state of the on-screen button for 1 second, and the action of that remote control button is executed (eg. the PAUSE button with pause the video). The behaviour is the same as if OK was pressed while an on-screen button was in focus (see [S1.75 - S1.86]).		v1.0
S1.49					the overlay is visible, focus is on the menu	presses UP	visibility timer resets (ie. overlay stays visible), and lower third switches to carousel view.		v1.0
S1.50						presses DOWN	the overlay hides [see S1.5]		v1.0
S1.51					the overlay is visible, focus is on the carousel	presses UP	visibility timer resets (ie. overlay stays visible).		v1.0
S1.52						presses DOWN	visibility timer resets (ie. overlay stays visible), and lower third switches to menu view (showing transport controls)		v1.0
S1.53					the overlay is hidden	presses UP, LEFT, RIGHT, OK, CH UP	the overlay shows, revealing the last screen state.		v1.0
S1.54						presses PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	the overlay shows, switching to the menu (if not already the most recent screen state), then [S1.9].		v1.0
S1.55				• Lower third carousel	the screen first loads	[n/a]	the focus and the 'now showing' icon is on the thumbnail of the first video in the playlist.		v1.0
S1.56					the focus in on the carousel	presses LEFT, RIGHT	the focus changes to the adjacent thumbnail. The alpha of the new thumbnail changes to 100%, and the info text below the carousel updates with the text associated with the thumbnail now in focus.		v1.0
S1.57						presses OK	The video associated with the thumbnail in focus starts playing and the description on the upper third updates accordingly.		v1.0
S1.58						presses DOWN	the lower third switches to menu with the focus on the play/pause button.		v1.0
S1.59					the focus in on the thumbnail of the video that is currently playing	[n/a]	the thumbnail has a 'now showing' icon over it. The info text below the carousel changes from its normal to its emphasis colour.		v1.0
S1.60					the carousel width is less than the screen width		the carousel is horizontally centered, with the thumbnails of the playlist arranged left to right.		v1.0
S1.61						presses LEFT	the focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.		v1.0
S1.62						presses RIGHT	the focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.		v1.0
S1.63					the carousel width is more than the screen width	[n/a]	the carousel thumbnails scroll and wrap. Initially the first thumbnail of the first video in the playlist is centred, the second is to the right, and so on until the thumbnails go off the right edge the screen. The first thumbnail that goes fully beyond the right edge of the screen is placed to the left of the left edge of the screen, wrapping, placed so that the last thumbnail is left of centre.		v1.0
S1.64						presses LEFT	the thumbnail to the left of the one in focus scrolls to the centre and gets focus.		v1.0
S1.65						presses RIGHT	the thumbnail to the right of the one in focus scrolls to the centre and gets focus.		v1.0



S1.66				No link from the video					v1.0
S1.67				• Upper third	a video starts playing	[n/a]	upper third shows		v1.0
S1.68					a video is showing but the upper third is not visible	presses INFO	upper third shows		v1.0
S1.69					the upper third visible for 3 seconds	[n/a]	upper third hides		v1.0
S1.70				• • Video info text	the upper third is visible		show path name and video title		v1.0

S1.71					• Lower third menu	the menu is visible	presses LEFT	focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.	v1.0
S1.72							presses RIGHT	focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.	v1.0
S1.73							presses UP	the lower third switches to carousel.	v1.0
S1.74					• • Back button	in focus	presses OK	exit the Media Player screen and step back to the last screen in the history.	v1.0
S1.75					• • Media Transport				v1.0
S1.76					• • » Skip Back	in focus and the current time on the video is less than 5 seconds	presses OK	skip to the previous video in the playlist. The new video plays, the upper third shows the new video description, the progress bar resets, the time indicator resets showing the new video's total running time, the 'now showing' icon is now on the thumbnail to the left (the prior video in the playlist).	v1.0
S1.77						in focus and the current time on the video is greater than 5 seconds		skip to the beginning of the current video. The progress bar and the time indicator resets.	v1.0
S1.78					• • » Rewind	in focus while video is playing	presses OK	reverse the video, progress bar, and time indicator by 5% of the total running time and continue playing.	v1.0
S1.79						in focus while video is paused		reverse the video, progress bar, and time indicator by 5% of the total running time and stay paused.	v1.0
S1.80						in focus while video is at less than 5% of its running time		BONK.	v1.0
S1.81					• • » Pause / Play	in focus while video is playing	presses OK	pause video, progress bar, and time indicator, and toggle the on-screen button symbol to the play icon.	v1.0
S1.82						in focus while video is paused		run video, progress bar, and time indicator, and toggle the on-screen button symbol to the pause icon.	v1.0
S1.83					• • » Fast Forward	in focus while video is playing	presses OK	advance the video, progress bar, and time indicator by 5% of the total running time.	v1.0
S1.84						in focus while video is paused		Advance the video, progress bar, and time indicator by 5% of the total running time and stay paused.	v1.0
S1.85						in focus while video is at greater than 95% of its running time		BONK.	v1.0
S1.86					• • » Skip Forward	in focus	presses OK	skip to the next video (see [S1.43]).	v1.0
S1.87					• • Time indicator	the overlay is visible	[n/a]	display to the right of the media transport buttons.	v1.0



S1.88					A link from the video				
S1.89						[n/a]	[n/a]	presses GREEN	exit the Media Player screen and go to the screen linked to the video.
S1.90					Overlay Interface	the overlay is hidden	[n/a]		the green button hint appears in the same spot as the link button (ie. the green button hint is on at all times and pressing GREEN on the remote will execute the link at any time).
S1.91					• Upper third	[S1.13 - S1.15]			behaves same as [S1.13 - S1.15].
S1.92					• • Video info text	the upper third is visible			Show path name, video title, and time indicator
S1.93					• Lower third menu	the menu is visible			the green button tooltip balloon, pointing to the green button hint, shows for 5 seconds.
S1.94								presses LEFT	[S1.71]
S1.95								presses RIGHT	[S1.72]
S1.96								presses UP	[S1.73]
S1.97					• • Back button	in focus		presses OK	[S1.74]
S1.98					• • Media Transport	[S1.75 - S1.86]		[S1.75 - S1.86]	[S1.75 - S1.86]
S1.99					• • Link Button	in focus		presses OK	exit the Media Player screen and go to the screen linked to the video.

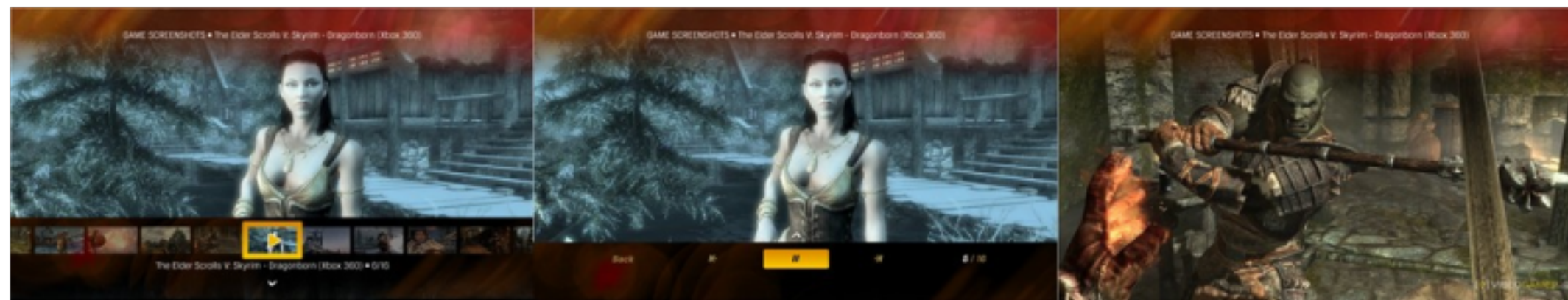
ID	Purpose	Screen	If the content is...	If the author sets...	Screen element	When...	And if the user...	Then...	
	CONTENT DISPLAY								
S1.100	of slides	Image Gallery							v1.0
S1.101			A single slide						v1.0
S1.102					Slideshow (component)	the screen first loads	[n/a]	a "Please Wait..." message shows until the first slide plays in the gallery.	v1.0
S1.103					Overlay Interface	the screen first loads		the overlay shows. There is neither progress bar nor slide indicator numbers.	v1.0
S1.104						the overlay has been visible for 3 seconds		the overlay hides [see S1.5]	v1.0

S1.105					the overlay is visible	presses UP, LEFT, RIGHT, OK, CH UP, CH DOWN, PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	visibility timer resets (ie. overlay stays visible).	v1.0
S1.106						presses OK	button in focus flashes its activated state for 1 second.	v1.0
S1.106.1						presses DOWN	the overlay hides [see S1.5]	v1.0
S1.107					the overlay is hidden	presses UP, DOWN, LEFT, RIGHT, OK, CH UP, CH DOWN, PLAY, PAUSE, STOP, FFWD, RWD, SKIP FWD, SKIP BACK	the overlay shows.	v1.0
S1.108				No link from the slide				v1.0
S1.109				• Upper third	the upper third is hidden	presses INFO	upper third shows	v1.0
S1.110					the upper third is visible for 3 seconds	[n/a]	upper third hides	v1.0
S1.111				•• Slide info text	the upper third is visible	[n/a]	show path name and slide title	v1.0
S1.112				• Lower third	the lower third is visible		the back button is horizontally centred.	v1.0
S1.113				•• Back button	in focus	presses OK	exit the Image Gallery screen and step back to the last screen in the history.	v1.0



S1.114				A link from the slide				
S1.115						presses GREEN	exit the Media Player screen and go to the screen linked to the slide.	
S1.116				Overlay Interface	the overlay is hidden	[n/a]	the green button hint appears in the same spot as the link button (ie. the green button hint is on at all times and pressing GREEN on the remote will execute the link at any time).	
S1.117				• Upper third	the upper third is hidden	presses INFO	Upper third shows	
S1.118					the upper third is visible for 3 seconds	[n/a]	Upper third hides	
S1.119				•• Slide info text	the upper third is visible	[n/a]	Show path name and slide title	
S1.120				• Lower third	the lower third is visible		the back button and link button are placed touching the text safe areas (back button on the left, link button on the right).	
S1.121				•• Back button	in focus	presses OK	exit the Media Player screen and step back to the last screen in the history.	
S1.122				•• Link Button	in focus	presses OK	exit the Media Player screen and go to the screen linked to the video.	
S1.123			Multiple slides					v1.0
S1.124				Slideshow (component)	the screen first loads	[n/a]	a "Please Wait..." message shows until the first slide plays in the gallery.	v1.0
S1.125					a slide has been visible for 5 seconds		the next slide plays, the upper third shows with the next slide description, the slide number indicator updates, the 'now showing' icon is now on the thumbnail to the right on the carousel (the next slide in the slideshow).	v1.0
S1.126				Overlay Interface	the screen first loads	[n/a]	the overlay shows, with the carousel in focus. There is no progress bar.	v1.0
S1.127					the overlay has been visible for 3 seconds		the overlay hides [see S1.5]	v1.0
S1.128					the overlay is visible	presses LEFT, RIGHT, OK, CH UP, CH DOWN, RWD, FWD	visibility timer resets.	v1.0
S1.129						presses OK	the button in focus flashes its activated state for 1 second.	v1.0
S1.130						presses PLAY, PAUSE, STOP, SKIP FWD, SKIP BACK	visibility timer resets, then the focus jumps to the on-screen version of that button (nb. STOP is equivalent to PAUSE in this case), the activated state of the on-screen button for 1 second, and the action of that remote control button is executed (eg. the PAUSE button with pause the slideshow). The behaviour is the same as if OK was pressed while an on-screen button was in focus.	v1.0
S1.131					the overlay is visible, focus is on the menu	presses UP	visibility timer resets (ie. overlay stays visible), and lower third switches to carousel view.	v1.0
S1.132						presses DOWN	the overlay hides [see S1.5]	v1.0
S1.133					the overlay is visible, focus is on the carousel	presses UP	visibility timer resets (ie. overlay stays visible).	v1.0
S1.134						presses DOWN	visibility timer resets (ie. overlay stays visible), and lower third switches to menu view (showing transport controls)	v1.0

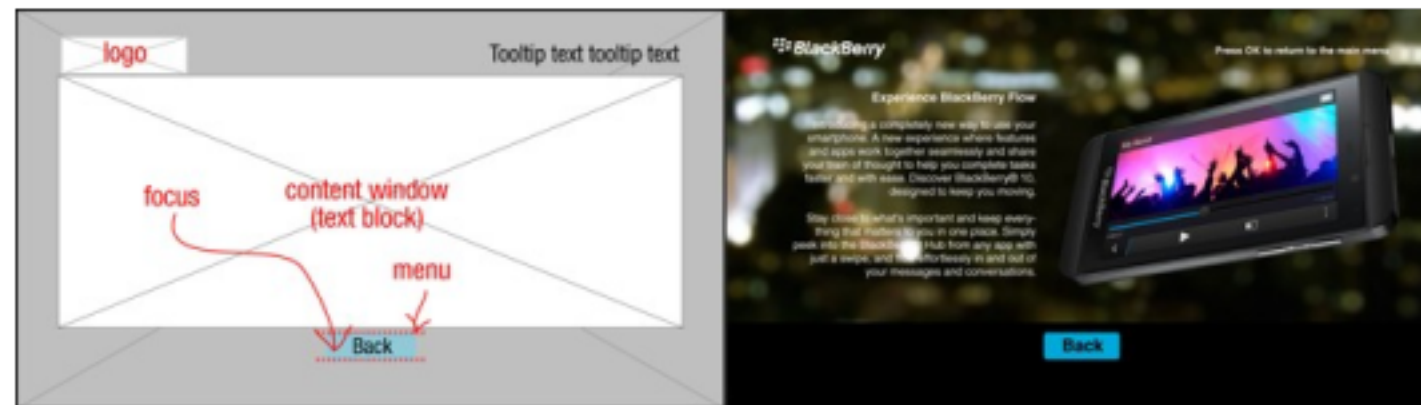
S1.135					the overlay is hidden	presses UP, LEFT, RIGHT, OK, CH UP	the overlay shows, revealing the last screen state.	v1.0
S1.136						presses PLAY, PAUSE, STOP, SKIP FWD, SKIP BACK	the overlay shows, switching to the menu (if not already the most recent screen state), then [S1.9].	v1.0
S1.137				• Lower third carousel	the screen first loads		the focus and the 'now showing' icon is on the thumbnail of the first slide in the slideshow.	v1.0
S1.138					the focus in on the carousel	presses LEFT, RIGHT	the focus changes to the adjacent thumbnail. The alpha of the new thumbnail changes to 100%, and the info text below the carousel updates with the text associated with the thumbnail now in focus.	v1.0
S1.139						presses OK	The slide associated with the thumbnail in focus displays and the description on the upper third updates accordingly.	v1.0
S1.140						presses DOWN	the lower third switches to menu with the focus on the play/pause button.	v1.0
S1.141					the focus in on the thumbnail of the slide that is currently showing	[n/a]	the thumbnail has a 'now showing' icon over it. The info text below the carousel changes from its normal to its emphasis colour.	v1.0
S1.142					the carousel width is less than the screen width	[S1.60-S1.62]	[S1.60-S1.62]	v1.0
S1.143					the carousel width is more than the screen width	[S1.63-S1.65]	[S1.63-S1.65]	v1.0
S1.144				No link from the slide				v1.0
S1.145				• Upper third	the slideshow starts playing a slide is showing but the upper third is not visible	[n/a]	upper third shows	v1.0
S1.146					the upper third visible for 3 seconds	presses INFO	upper third shows	v1.0
S1.147						[n/a]	upper third hides	v1.0
S1.148				• • Slide info text	the upper third is visible		show path name and slide title	v1.0
S1.149				• Lower third menu	the menu is visible	presses LEFT	focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.	v1.0
S1.150						presses RIGHT	focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.	v1.0
S1.151						presses UP	the lower third switches to carousel.	v1.0
S1.152				• • Back button	in focus	presses OK	exit the Media Player screen and step back to the last screen in the history.	v1.0
S1.153				• • Media Transport				v1.0
S1.154				• • » Skip Back	in focus	presses OK	skip to the previous slide in the slideshow. The upper third shows the new slide description, the slide number indicator updates accordingly, and the 'now showing' icon is now on the thumbnail to the left (the prior slide in the slideshow).	v1.0
S1.155				• • » Pause / Play	in focus while the slideshow is playing	presses OK	pause the slideshow, and toggle the on-screen button symbol to the play icon.	v1.0
S1.156					in focus while the slideshow is paused		continue playing the slideshow, and toggle the on-screen button symbol to the pause icon.	v1.0
S1.157				• • » Skip Forward	in focus	presses OK	skip to the next slide in the slideshow. The upper third shows the new slide description, the slide number indicator updates accordingly, and the 'now showing' icon is now on the thumbnail to the right (the next slide in the slideshow).	v1.0
S1.158				• • Slide number indicator	the overlay is visible	[n/a]	display to the right of the media transport buttons.	v1.0



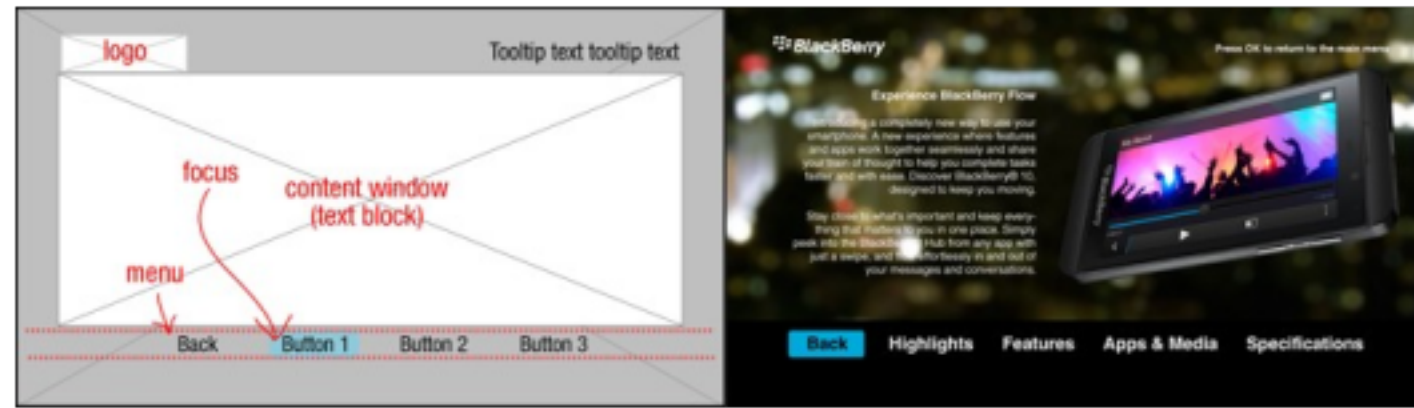
S1.159				A link from the slide				
S1.160					[n/a]	[n/a]	presses GREEN	exit the Media Player screen and go to the screen linked to the slide.
S1.161				Overlay Interface	the overlay is hidden	[n/a]		the green button hint appears in the same spot as the link button (ie. the green button hint is on at all times and pressing GREEN on the remote will execute the link at any time).
S1.162				• Upper third	the slideshow starts playing	[n/a]		upper third shows
S1.163					the upper third is not visible	presses INFO		upper third shows
S1.164					the upper third is visible for 3 seconds	[n/a]		upper third hides
S1.165				• • Slide info text	the upper third is visible			show path name, slide title, and slide number indicator
S1.166				• Lower third menu	the menu is visible			the green button tooltip balloon, pointing to the green button hint, shows for 5 seconds.
S1.167							presses LEFT	[S1.149]
S1.168							presses RIGHT	[S1.150]

S1.169							presses UP	[S1.151]	
S1.170					• • Back button	in focus	presses OK	[S1.152]	
S1.171					• • Media Transport	[S1.154 - S1.157]	[S1.154 - S1.157]	[S1.154 - S1.157]	
S1.172					• • Link Button	in focus	presses OK	exit the Media Player screen and go to the screen linked to the video.	

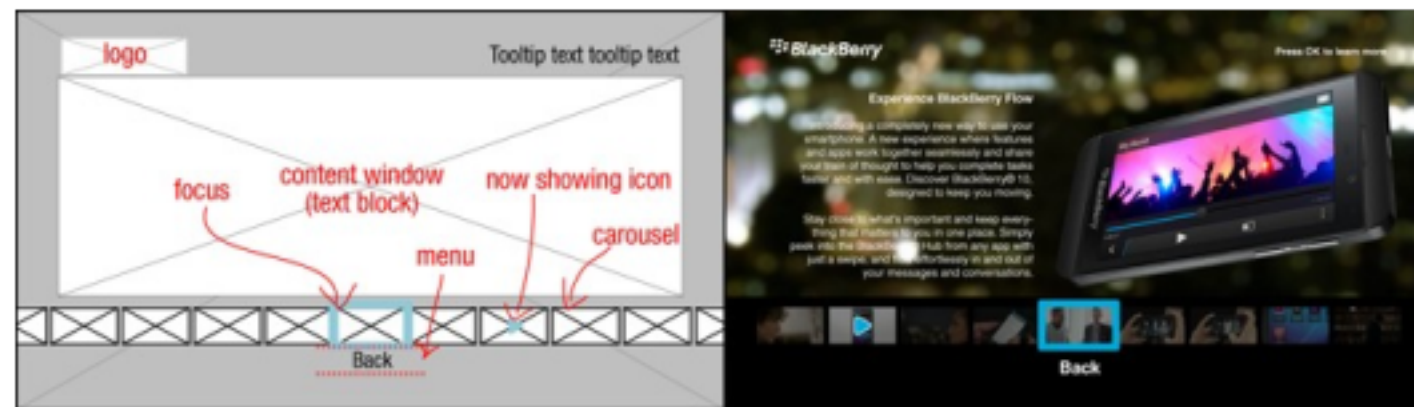
ID	Purpose	Screen	If the content is...	If the author sets...	Screen element	When...	And if the user...	Then...	
S2	of text blocks	Product							v1.0
S2.0.1			[n/a]	[n/a]	Background			display the logo and scale down to fit in the logo area (this is the same file seen at 100% scale on the Loading Screen).	v1.0
S2.0.2					Logo	the URL exists	[n/a]	the tooltip message updates with an instruction associated with the button in focus (eg. "Press OK to watch the latest videos").	v1.0
S2.0.3					Tooltip	a button is in focus	[n/a]	all element in the text block align to the left.	v1.0
S2.0.4				alignment of the text block	text block	alignment is set to left	[n/a]	all element in the text block align to centre (if there is an image, the image is stacked on top).	v1.0
S2.0.5						alignment is set to centre		all element in the text block align to the right.	v1.0
S2.0.6						alignment is set to right		the image changes its size and the text wraps accordingly.	v1.0
				the scale of the image (in percent) in the text block		[n/a]	[n/a]		v1.0
S2.1			a text block shorter than the screen content window at a height of 460 pixels (a single page)						v1.0
S2.2				No link from the screen					v1.0
S2.3					Menu	the screen first loads		the back button is horizontally centred.	v1.0
S2.4					• Back button	in focus	presses OK	exit the Text Screen and step back to the last screen in the history.	v1.0



S2.5				A link from the screen					
S2.6					Menu	the screen first loads		the menu buttons are horizontally centred.	
S2.7					• Back button	in focus	presses OK	exit the Text Screen and step back to the last screen in the history.	
S2.8					• Link button	in focus	presses OK	exit the Text Screen and go to the linked screen.	
S2.9			multiple text blocks all shorter than the screen content window (multiple articles, single pages)						v1.0
S2.10				the pages names					v1.0
S2.11					Menu	the screen first loads		the menu buttons are horizontally centred.	v1.0
S2.12						in focus	presses LEFT	focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.	v1.0
S2.13							presses RIGHT	focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.	v1.0
S2.14					• Back button	in focus	presses OK	exit the Text Screen and step back to the last screen in the history.	v1.0
S2.15					• Custom page tab buttons	in focus	presses OK	load the corresponding page in the screen content window.	v1.0

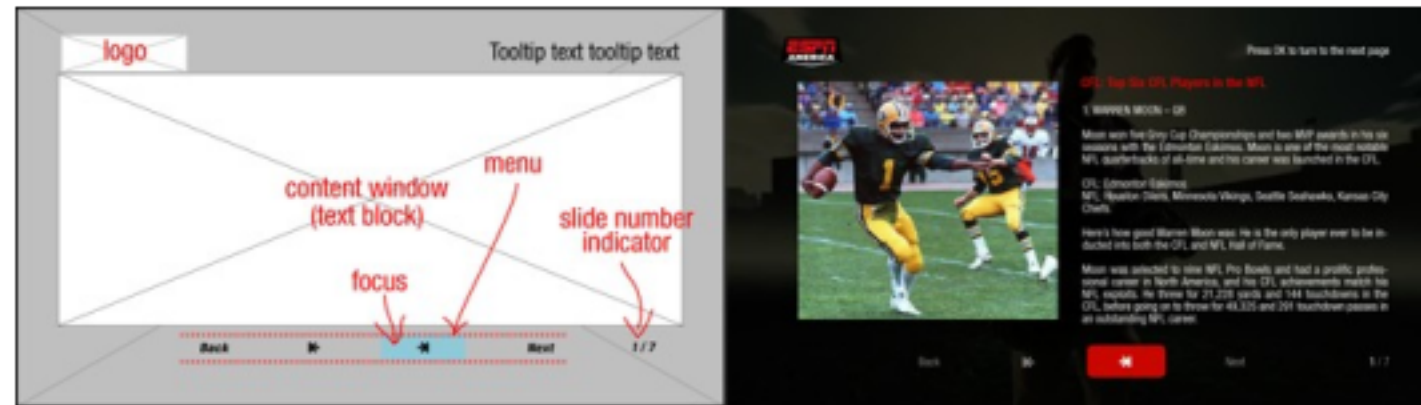


S2.16			a text block taller than the screen content window (one article, multiple pages)				
S2.17				the navigation as a menu			
S2.18					Menu	[S2.10 - S2.13]	[S2.10 - S2.13]
S2.19					• Back button	in focus	presses OK
S2.20					• Page tab buttons	the screen first loads	
S2.21						in focus	presses OK
S2.22				the navigation as a carousel			
S2.23					Carousel	the screen first loads	[n/a]
S2.24						the focus in on the carousel	presses LEFT, RIGHT
S2.25							presses OK
S2.26							presses DOWN
S2.27						the carousel width is less than the screen width	
S2.28							presses LEFT
S2.29							presses RIGHT
S2.30						the carousel width is more than the screen width	[n/a]
S2.31							presses LEFT
S2.32							presses RIGHT
S2.33					Menu	[S2.10 - S2.13]	[S2.10 - S2.13]
S2.34					• Back button	in focus	presses UP
S2.35							presses OK



S2.36			multiple text blocks (multiple articles)				
S2.37					Menu	the screen first loads	
S2.38						in focus	presses LEFT
S2.39							presses RIGHT

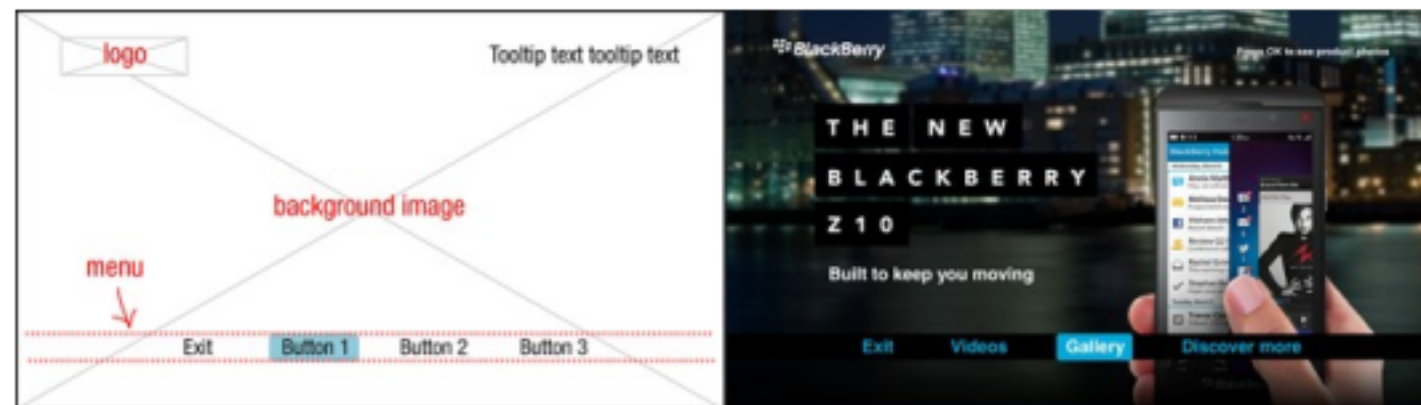
S2.40						the text block loads and the current article is only one page.	[n/a]	the menu shows 'back' and 'next' buttons.
S2.41					• Back button	in focus	presses OK	exit the Text Screen and step back to the last screen in the history.
S2.42					• Next button	in focus	presses OK	the next text block loads in the screen content window. If the text block is a multiple page article then the menu adds page skip buttons to the menu. If this button is pressed on the last article the first article loads.
S2.43						the text block loads and the current article is multiple pages.	[n/a]	the menu shows 'back,' 'skip back,' skip forward,' and 'next' buttons.
S2.45					• Skip back	in focus	presses OK	the text block shifts down the height of the content window (ie. goes back a page). If already at the topmost position then display the bottom of the text block. The page number indicator adjusts accordingly.
S2.46					• Skip forward	in focus	presses OK	the text block shifts up the height of the content window (ie. goes forward a page). If already at the bottommost position then display the top of the text block. The page number indicator adjusts accordingly.
S2.47					• Page number indicator	the current article has multiple pages	[n/a]	display to the right of the media transport buttons near the text safe border, showing the total number of pages created by the loaded text block.



S3	of very short text messages	Pop-up window						
S3.1			a text message					
S3.2					Menu			
S3.3					• Continue button		presses LEFT, OK, RIGHT	the pop-up window is dismissed.
S3.4			a text message with a short list menu					
S3.5					Menu	the screen first loads	[n/a]	the list menu is positioned starting from the bottom up.
S3.6					• Custom button	in focus	presses LEFT	the pop-up window is dismissed.
S3.7							presses OK, RIGHT	the app executes the action linked to the button.

ID	Purpose	Screen	If the content is...	If the author sets...	Screen element	When...	And if the user...	Then...
CONTENT SELECTION								
S4	of all the main content display screens in the app	Home Screen						
S4.1.1			[n/a]	an image URL	Background	the URL is valid	[n/a]	Image is displayed on stage behind all other elements.
S4.1.2						the extension is not .jpg or .png		the background is black.
S4.1.3						the size is not 1280 x 720		the background is black.
S4.1.4				a background colour		there is not a valid hex code (eg. #FFFFFF)		the background is black.
S4.2.1				the logo to 'off'	Logo	[n/a]	[n/a]	the logo hides
S4.2.2				the logo to 'on'		the URL exists	[n/a]	display the logo and scale down to fit in the logo area.
S4.3					Tooltip	an on-screen button is in focus	[n/a]	the tooltip message updates with an instruction associated with the on-screen button in focus (eg. "Press OK to watch the latest videos"). (get exact pixel width)
S4.3.1						the tooltip width is greater than 850 pixels		the tooltip message is truncated with an elipsis [...]
S4.4				the text menu buttons				
S4.5					Menu	the screen first loads	[n/a]	the focus is on the second button (to the right of the exit button).
S4.6						the menu width is less than 1120 pixels		the menu is horizontally centred, with the text menu buttons arranged left to right.
S4.7						the menu width is more than 1120 pixels	[n/a]	the menu is split into pages with each page horizontally centred. Extra buttons are automatically added called 'More»' and «More" to make the pages accessible (eg. the menu row on the first page will end with the button "More»", and following menu row on the next page will begin with the button «More." The menu row on middle pages will begin with "«More" and end with "More»").
S4.8							presses LEFT	the focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.
S4.9							presses RIGHT	the focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.

S4.10					• Exit button	in focus	presses OK	exit the app.	v1.0
S4.11					• Custom button	in focus	presses OK	the app executes the action linked to the button (usually loads a content display screen).	v1.0
S4.12						in focus and it also has an associated submenu	presses OK, DOWN	the button's submenu appears. The parent button row moves up, the parent button shows its active state, and the other buttons in the parent row show their inactive state. The submenu appears below the parent button, horizontally centred, with the first subbutton in focus.	
S4.13					• leading 'More»' button	in focus	presses OK, RIGHT	the next page of menu buttons loads, with the first button labled "«More" in focus.	v1.0
S4.14					• trailing '«More' button	in focus	presses OK, LEFT	the previous page of menu buttons loads, with the last button int he row labled "More»" in focus.	v1.0
S4.15					• • Submenu	the submenu is visible and in focus	presses UP	the submenu hides and the focus moves back to the parent button, returning the main menu row to its prior state before the submenu appeared.	
S4.16						the submenu width is less than 1120 pixels	[n/a]	[S4.6]	
S4.17						the submenu width is more than 1120 pixels		[S4.7]	
S4.18					• • » Custom subbutton	in focus	presses LEFT	[S4.8]	
S4.19							presses RIGHT	[S4.9]	
S4.20							presses OK	[S4.11]	
S4.21					• • » leading 'More»' subbutton	in focus	presses OK, RIGHT	[S4.13]	
S4.22					• • » trailing '«More' subbutton	in focus	presses OK, LEFT	[S4.14]	



S4.23					the menu menu buttons and a main carousel				v1.0	
S4.24					the carousel parameters	Carousel	the screen first loads	[n/a]	the focus is on the first item in the carousel.	v1.0
S4.25							the focus in on the carousel	presses LEFT, RIGHT	the focus changes to the adjacent thumbnail. The alpha of the new thumbnail changes to 100%.	v1.0
S4.26								presses OK	the app executes the action linked to the button (usually loads a content display screen).	v1.0
S4.27								presses DOWN	the focus moves to the second button on the main menu.	v1.0
S4.28							the carousel width is less than the screen width		the carousel is horizontally centered, with the thumbnails of the playlist arranged left to right.	v1.0
S4.29								presses LEFT	the focus moves to the next selectable item to the left. If the focus is already on the leftmost menu item, then BONK.	v1.0
S4.30								presses RIGHT	the focus moves to the next selectable item to the right. If the focus is already on the rightmost menu item, then BONK.	v1.0
S4.31							the carousel width is more than the screen width	[n/a]	the carousel thumbnails scroll and wrap. Initially the first item in the carousel is centred, the second is to the right, and so on until the thumbnails go off the right edge the screen. The first thumbnail that goes fully beyond the right edge of the screen is placed to the left of the left edge of the screen, wrapping, placed so that the last thumbnail is left of centre.	v1.0
S4.32								presses LEFT	the thumbnail to the left of the one in focus scrolls to the centre and gets focus.	v1.0
S4.33								presses RIGHT	the thumbnail to the right of the one in focus scrolls to the centre and gets focus.	v1.0
S4.34						Menu	in focus	presses UP	the focus moves to the central thumbnail on the carousel.	v1.0
S4.35							[S4.5 - S4.22]	[S4.5 - S4.22]	[S4.5 - S4.22]	v1.0
S5	of secondary content	List Screen								
S5.1			[n/a]	[n/a]	Background					
S5.2					Logo	the URL exists		[n/a]	display the logo and scale down to fit in the logo area (this is the same file seen at 100% scale on the Loading Screen).	
S5.3					Menu	the screen first loads		[n/a]	the focus is on the first item in the menu.	
S5.4								presses LEFT	exit the List Screen and step back to the last screen in the history.	
S5.5								presses OK, RIGHT	the app executes the action linked to the button (usually loads a content display screen).	
S5.6							the menu height is less than 600 pixels		the menu is vertically centred, with the text menu buttons arranged top to bottom.	
S5.7								presses UP	focus moves to the next selectable item above. If the focus is already on the topmost menu item, then BONK.	
S5.8								presses DOWN	focus moves to the next selectable item below. If the focus is already on the bottommost menu item, then BONK.	

S5.9						the menu height is more than 600 pixels		the list menu scrolls. Initially the first menu item is centred, the second is below, and so on until the menu items go off the bottom edge the screen.	
S5.10							presses UP	the menu item above the one in focus scrolls to the centre and gets focus.	
S5.11							presses DOWN	the menu item below the one in focus scrolls to the centre and gets focus.	
	SYSTEM MESSAGING								
S6	of app loading	Loading Screen							v1.0
S6.1			[n/a]	[n/a]	[n/a]	the application first loads	[n/a]	the Loading Screen displays. When the following screen has rendered this screen is removed from view.	v1.0
S6.2					Logo	the logo file is larger than 600 x 360	[n/a]	the app gives an error message telling the author its too big.	v1.0
S6.3					Loading message	the message is blank in the XML file	[n/a]	the app shows the default message "loading..."	v1.0
S6.4						the message is wider than 1160 pixels		the app reverts to the default message "loading..."	v1.0

