Connected TV Applications for TiVo

Lifetime VOD Bridge

Design Outline

11 Feb 2014

Overview

This app allows the viewer to jump quickly from a broadcast channel to a related VOD area through a VOD menu overlay. The viewer uses the overlay interface to browse the related VOD area while never leaving the channel.

The graphics and fonts of the design are customisable so that any channel branding may be used.

The app is launched from a red button prompt over a broadcast or barker channel. The app is quit hitting one of the bail keys (HOME, TV, GUIDE, MY SHOWS), pressing LEFT when on the top menu (channel level), pressing OK on an episode name, pressing the RED button, or after a timeout of 2 minutes.

The number of panels a viewer navigates through to content depends on the channel. Some channels have only 1 layer (eg. a list of episodes), others have 4 (eg. Category > Category > Series > Episode). Once the viewer has chosen an episode name in the app (by pressing OK) they will jump to the Buy Screen in the VOD area.

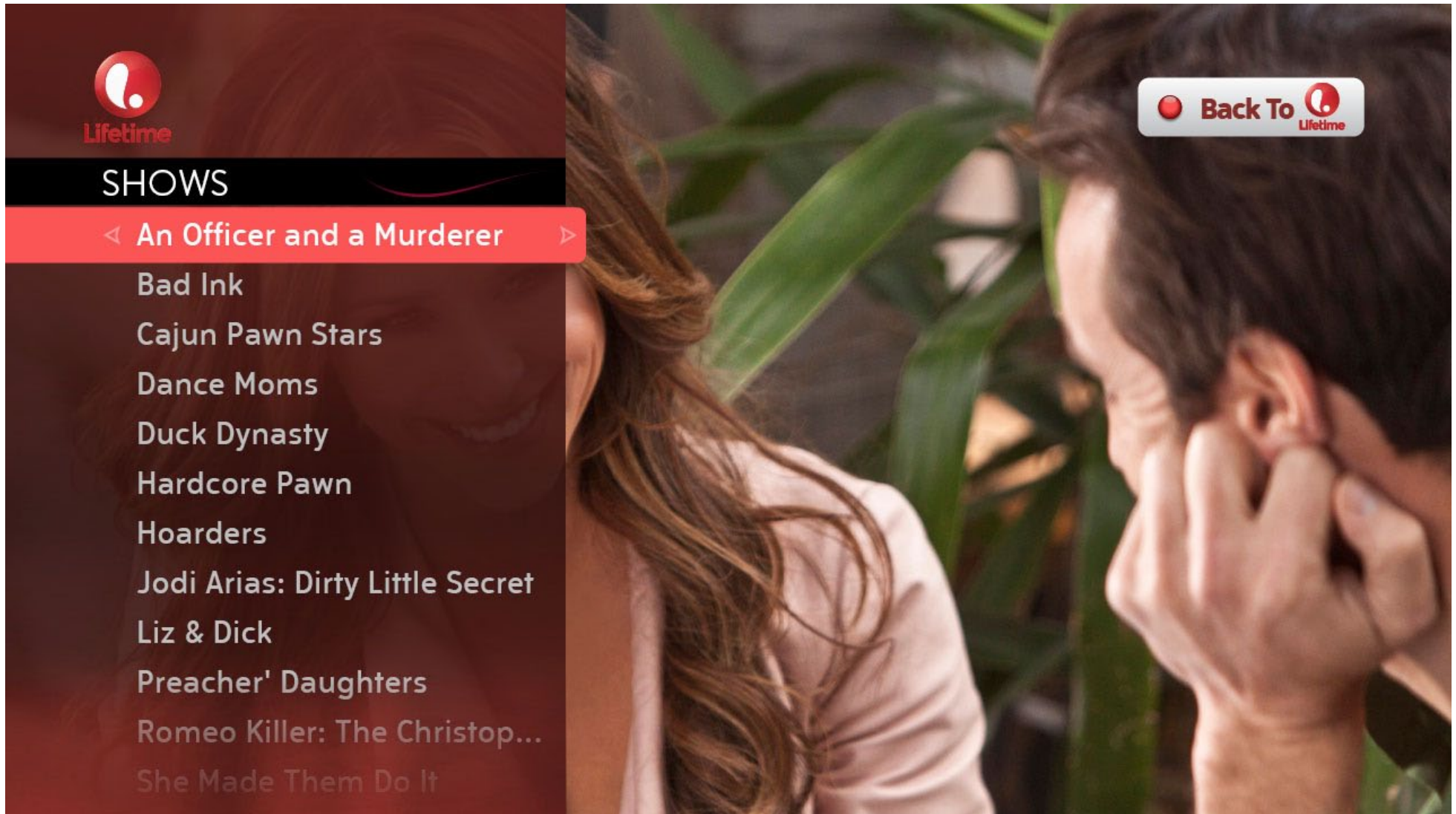The list menu is scrollable.
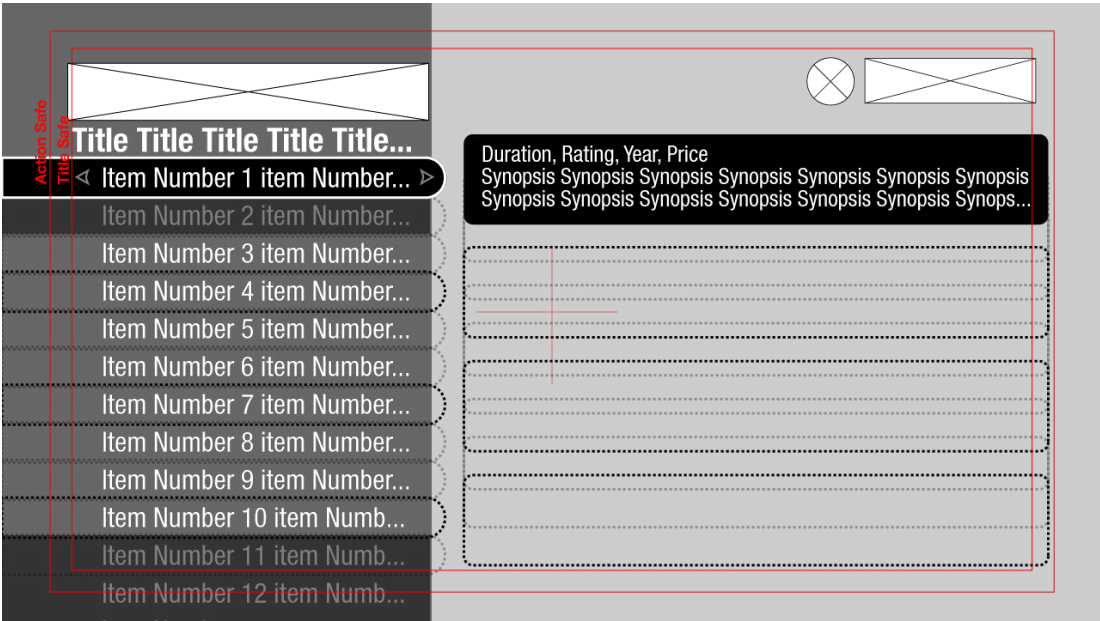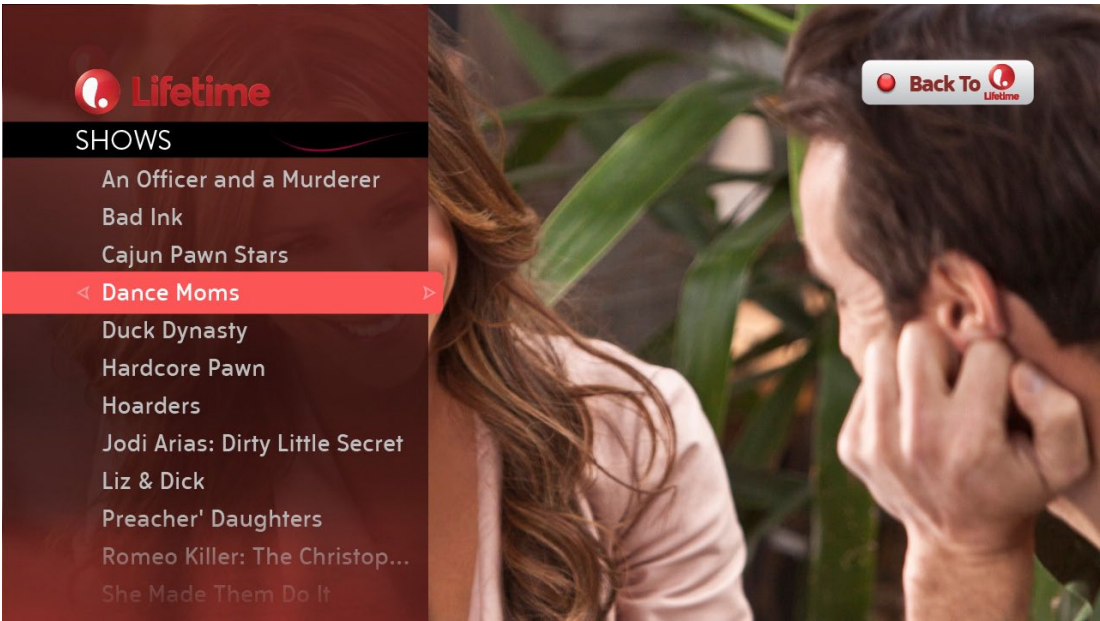
Example User Journey

When the user tunes in to the channel the status bar appears over the lower third.
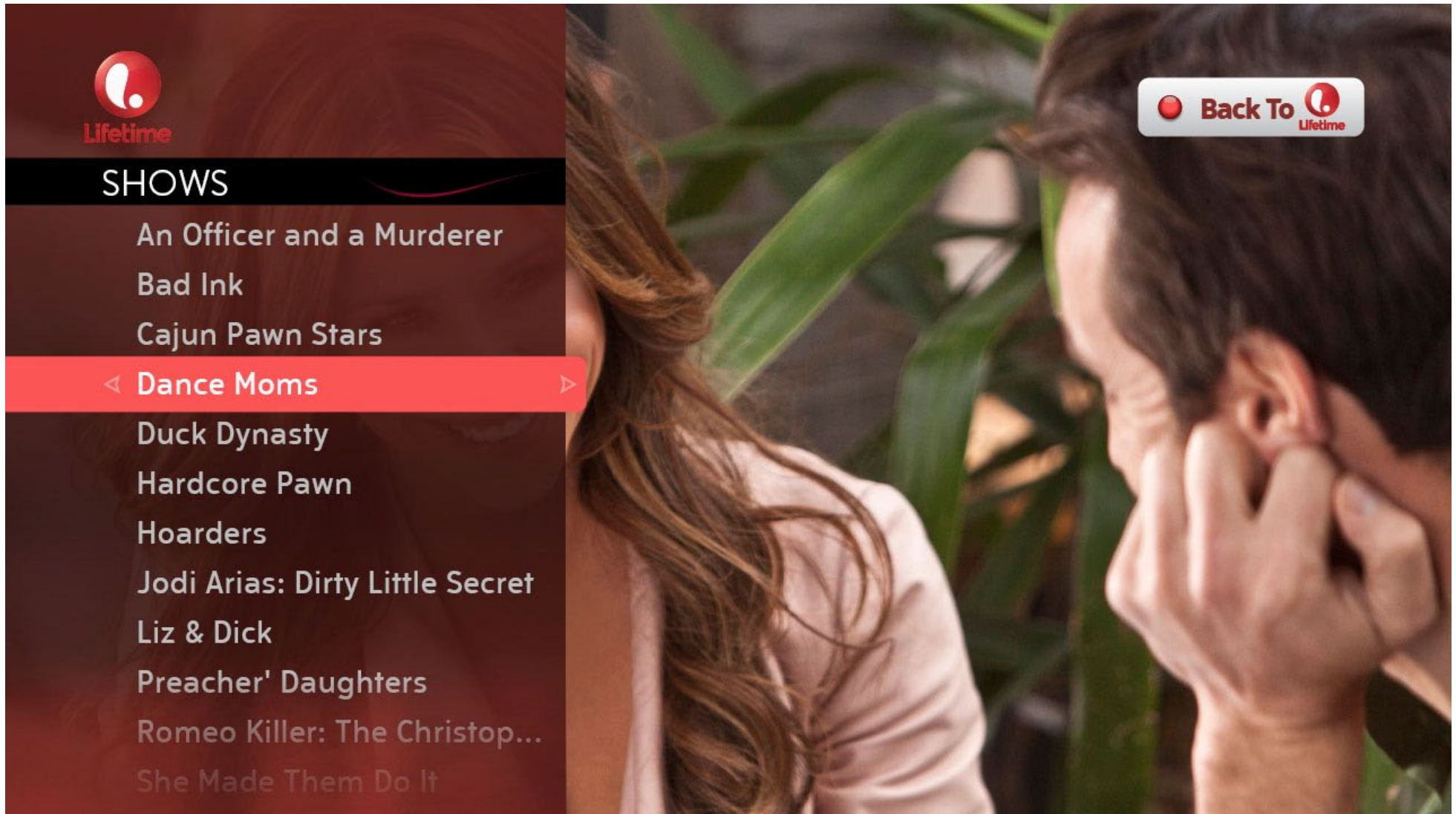
Example User Journey

After a timeout delay the status bar hides, and the red button prompt appears at upper right.

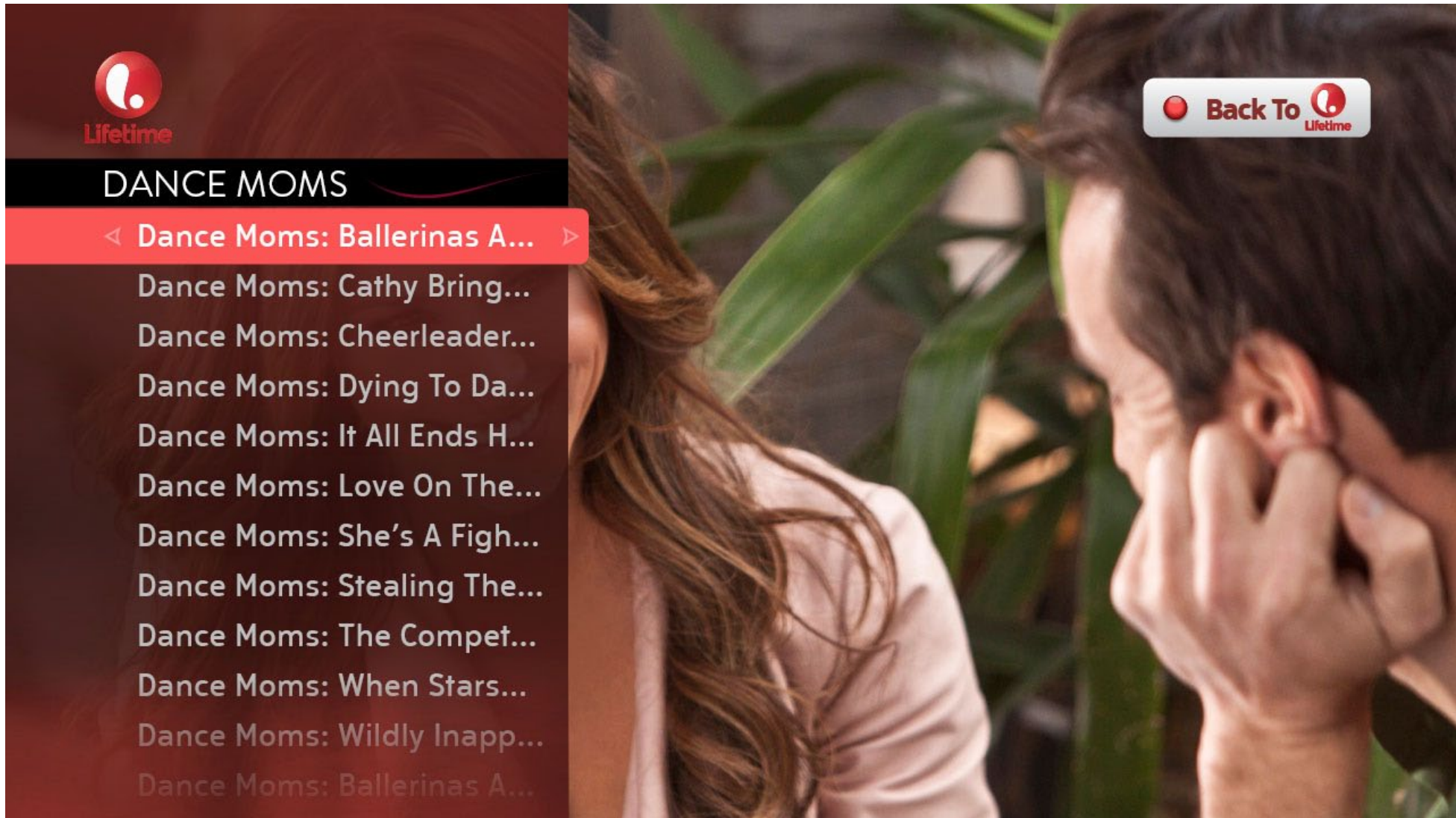## Example User Journey

RED button pressed. The VOD Bridge overlay appears (after a time delay during the load. A standard "Please Wait" graphic is visible during the delay). Note the red button prompt changes at upper right, telling the user the red button now toggles back to the live channel.

Example User Journey

DOWN pressed 3 times. Note the font colour changes when its in focus.

Example User Journey
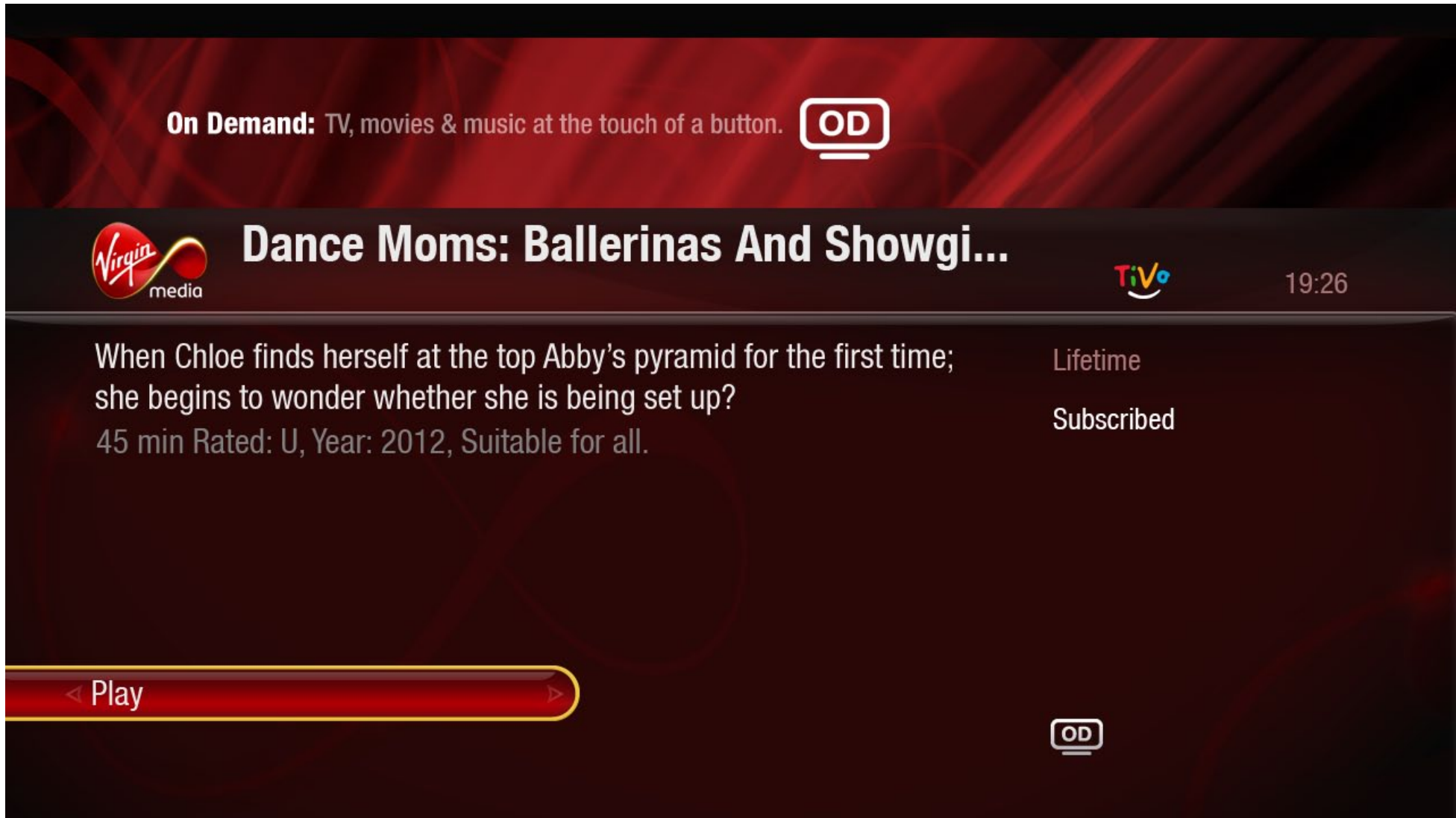

OK or RIGHT pressed on a show name. We now see a list of episodes, and the name of the show on the title bar.
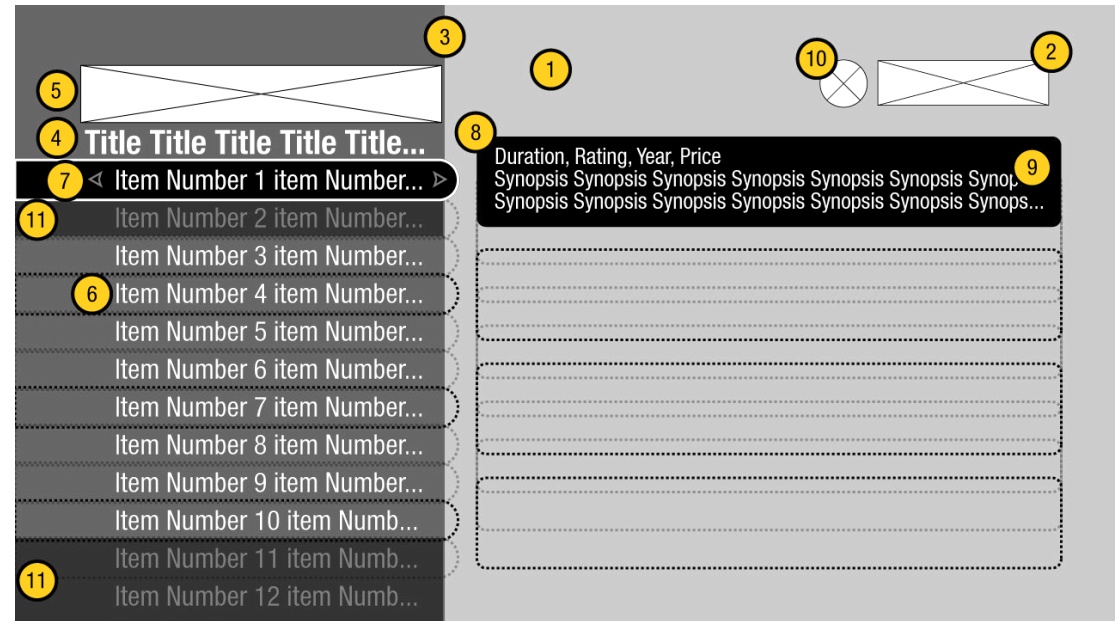
Example User Journey

If the user does not move the focus with the ARROW buttons while on an episode a synopsis appears after a short delay.
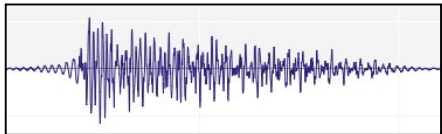
Example User Journey

If the user presses OK or RIGHT, they will be taken to the TiVo buy screen before proceeding to the show.

Interface Elements

1. Live TV channel plays in the background.
2. Red Button Prompt (200 x 52). 32 bit PNG. Consists of 2 graphics that swap: one prompting launch, one prompting a return to live TV (ie. quitting the app).
3. Overlay panel (500 x 720). 32 bit PNG.
4. Title header. Font, font size, and font colour are customisable. Title must be truncated with an elipsis if the line is wider than 400 pixels. This title can be hidden.
5. Header image (420 x 66). This element can be hidden. 32 bit PNG.
6. Text list. 12 lines per page, should scroll if list is over 11 lines. Scrolling paginates (as opposed to moving one line at a time) for quick navigation. Font, font size, and font colour (including colour change when in focus) are customisable.
7. Highlight (515 x 50). Is customisable.
8. Synopsis pop-up (680 x 105). 32 bit PNG. Appears when episode name is in focus, directly to the right of the highlight. Does not load if the user is navigating (ie. It should not interrupt navigation, as this will make the app seem unresponsive).
9. Synopsis. 3 lines, truncated with an elipsis if the 3 lines are wider than 650 pixels. Font, font size, and font colour are customisable. Synopsis includes video duration, age rating, entitlement/price info, and show description.
10. Play/Pause graphic (55 x 55). Appears for 1 second after remote control button press. Position is customisable (The graphic should be 20 pixels to the left of the prompt graphic).
11. Fade graphics (top 500 x 88, bottom 500 x 100). These are placed over the text to give the impression that the text list fades into the background. These are used to indicate that the list continues beyond what is visible, and can be scrolled up or down.

Sounds

Sounds	Description	
UPDOWN	This is the default sound indicating a remote control button press. Sounds a bit like a single strike on a wood block percussion instrument.	
SELECT	This sound indicates that the OK button was pressed. Sounds a bit like two strikes on a two toned wood block, rising in pitch.	
BONK	This sound indicates that a button press on the remote was received, but there is no action to perform. An example would be pressing DOWN at the right end of a menu. Sounds like a jarring timpani.	

Behaviours

Scrolling and paging of menu lists

A menu list is a column of selectable and evenly spaced rows of text. The visible list is the part of a list that fits vertically in a panel, and is made of slots. The slots that are at the top and bottom of the visible list is an unselectable area called the fade region, and those slots between the fade region is the selectable list (note that slot 1 is selectable only on the first page). If the menu list has more rows than the slots in the selectable list then the menu list must page so that the user can view and select all the menu items.

Scrolling is the movement of the focus a list item at a time by pressing UP or DOWN. Paging is traversing the menu list beyond the visible list through a single action (up to one selectable area of menu items at a time), either by using the CHAN UP or CHAN DOWN buttons, or by pressing UP on a topmost selectable slot when there are more menu items above or DOWN on a bottom-most selectable slot when there are more menu items below.

◁ Selection Slot 1 ▷	top fade
◁ Selection Slot 2 ▷	
◁ Selection Slot 3 ▷	
◁ Selection Slot 4 ▷	
◁ Selection Slot 5 ▷	selectable
◁ Selection Slot 6 ▷	list
◁ Selection Slot 7 ▷	
◁ Selection Slot 8 ▷	
◁ Selection Slot 9 ▷	
◁ Selection Slot 10 ▷	
◁ Selection Slot 11 ▷	
◁ Selection Slot 12 ▷	bottom fade

(visible list)

Element	Button	Action
Panel List Menu	OK or RIGHT	If the current menu item in focus is a link to an on-demand asset (eg. TV episode) then load the linked Buy Screen. Else if it is a link to a submenu then load it and move the focus to the first slot, and update the title bar to show the name of selected menu item.
	LEFT	If the current menu item in focus is a link to a supermenu then load it (restoring it to the state in which the user last left it) and move the focus to the parent item, and update the title bar to show name of the supermenu. If there is no supermenu, quit the app.
	DOWN	If the focus is on the last menu item, then BONK. Else if the current focus is on the bottommost slot on the selectable list and and there is at least another full selectable list to follow then redraw the visible list with the next menu item on the top slot of the selectable list. The menu item that was in focus is now seen in the top fade region, and the focus on slot 2. Else if the current focus is on the bottommost slot on the selectable list and and there is less than another full selectable list to follow then redraw the visible list so that the selectable list is full, with the last menu item on the bottommost selectable slot. The focus moves to the next menu item, which may be mid-panel. Else move the highlight one row down to the next menu item.
	UP	If the focus is on the first menu item, then BONK. Else if the current focus is on the topmost slot on the selectable list and and there is at least another full selectable list preceding it then redraw the visible list with the previous menu item on the bottommost slot of the selectable list. The menu item that was in focus is now seen in the bottom fade region. Else if the current focus is on the topmost slot on the selectable list and and there is less than another full selectable list preceding it then redraw the visible list so that the selectable list is full, with the first menu item on the topmost selectable slot. The focus moves to the previous menu item, which may be mid-panel. Else move the highlight one row up to the previous menu item.
	CHAN DOWN	If the focus is on the last menu item, then BONK. Else if the bottommost selectable slot is the last menu item then move the focus to the last menu item. Else if below the visible list is at least another full selectable list then redraw the visible list so that the menu item that was in the bottom fade region is now on the topmost slot of the selectable list. Else if below the visible list is less than another full selectable list then redraw the visible list so that the selectable list is full, with the last menu item on the bottom-most selectable slot. The focus moves to the menu item that was in the bottom fade region, which now may be mid-panel.
	CHAN UP	If the focus is on the first menu item, then BONK. Else if the topmost selectable slot is the first menu item then move the focus to the first menu item. Else if above the visible list is at least another full selectable list then redraw the visible list so that the menu item that was in the top fade region is now on the bottommost slot of the selectable list. Else if above the visible list is less than another full selectable list then redraw the visible list so that the selectable list is full, with the first menu item on the topmost selectable slot. The focus moves to the menu item that was in the top fade region, which now may be mid-panel.
	SKIP FORWARD	If the focus is on the last menu item then move to focus to the first menu item, redrawing the visible list if necessary so that the first menu item is on the topmost selectable slot. Else if the menu items are less than or equal to amount in the selectable list then move the focus to the menu last item on the bottommost selectable row. Else if the menu has more items than the selectable list then move the focus to the last menu item and redraw the visible list so that the last menu item is on the bottommost selectable slot.

Behaviours

Scrolling and paging of menu lists

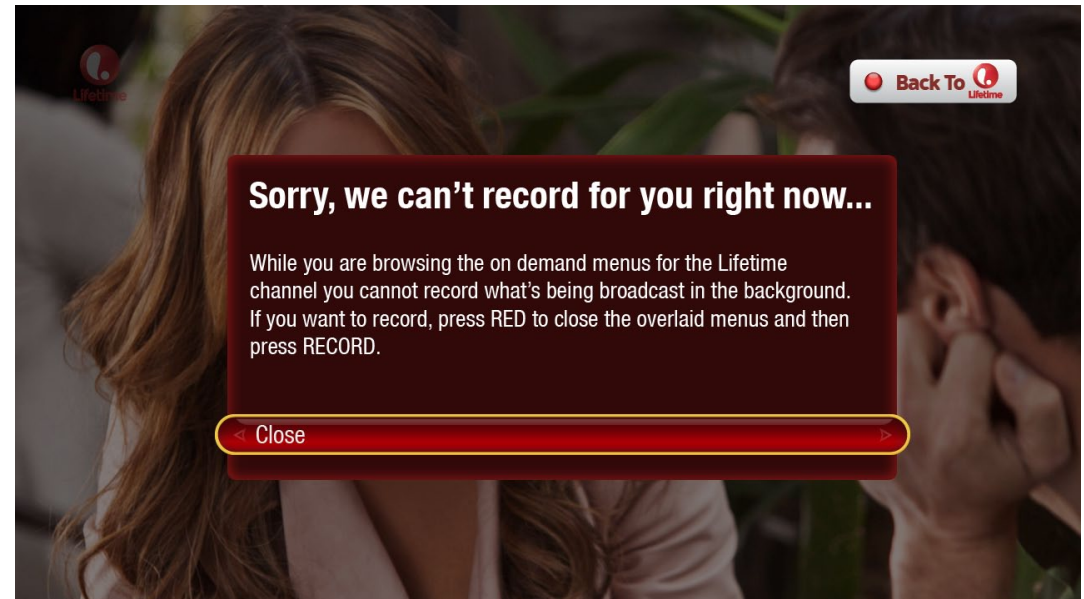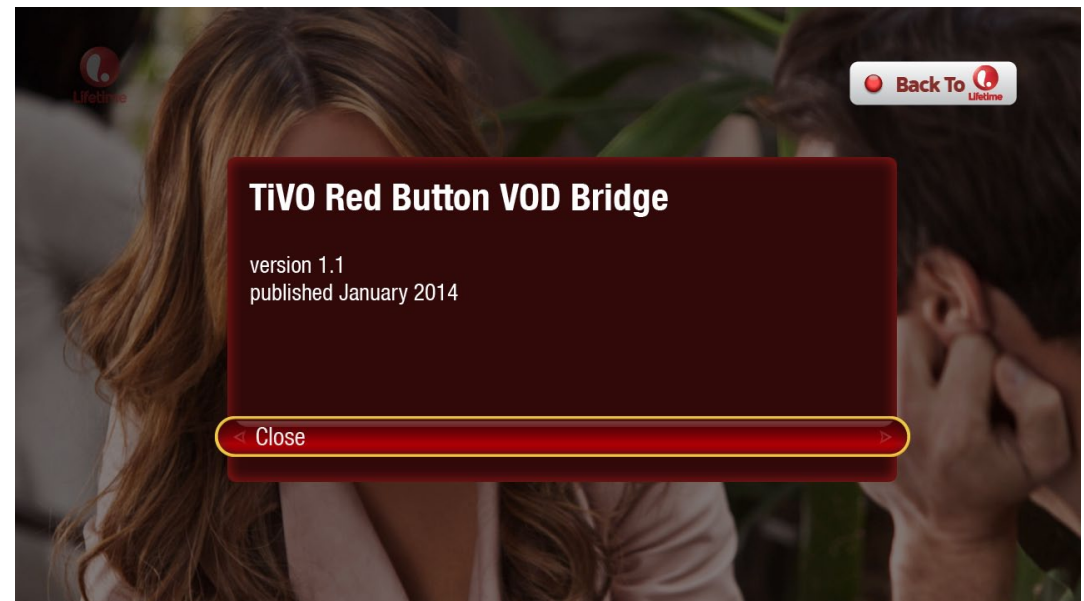| Element	Button	Action
Panel List Menu	SKIP BACK	If current menu item in focus is linked to a supermenu then load the topmost menu (the initial menu the app first loaded with). Else if the current menu item in focus is on the initial menu then quit the app.

Pause / Play Graphics
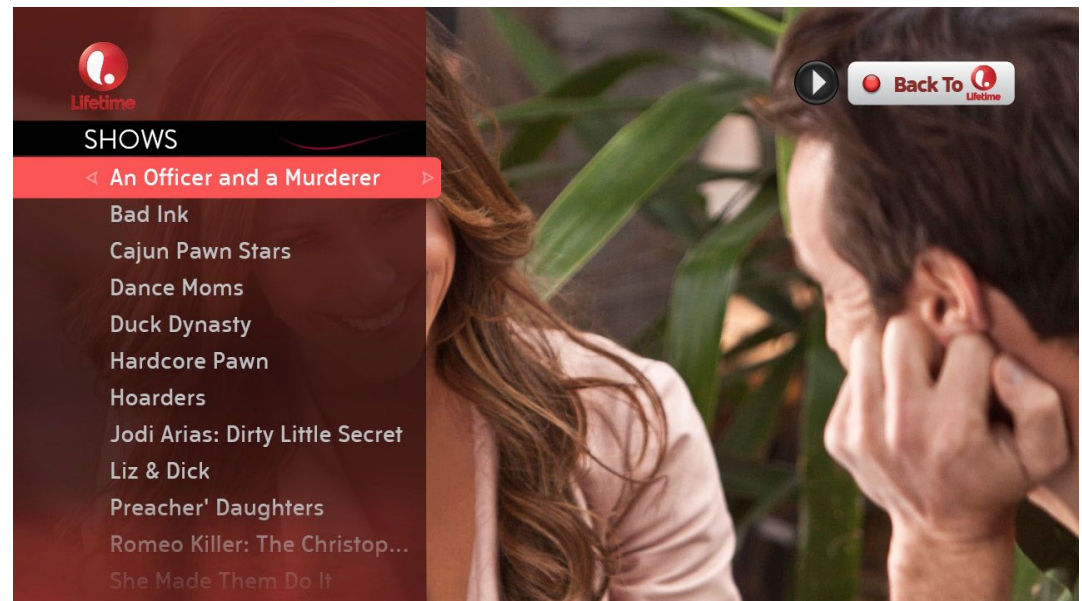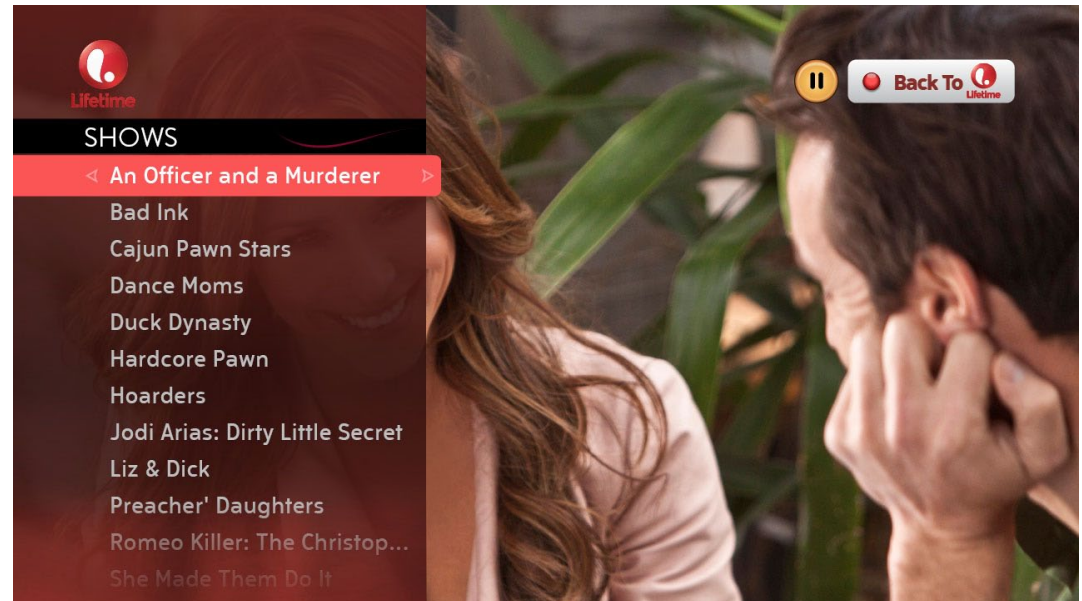
Pause and Play button graphics appear for 1 second to give user feedback that remote control buttons have been pressed. The user can still use these functions on the broadcast channel even while the VOD bridge overlay is visible.

Info Pop-up

RECORD pressed.

INFO pressed for 3 seconds.

The Info Pop-up appears when RECORD or INFO is pressed (nb. there is a delay of 3 seconds after pressing INFO, as the information shown is for developers and customer care, not generally for users). when the Pop-up appears there is a lightbox effect (ie. darkening) of the video and the side menu dissappears (to reduce clutter). The red button prompt remains on top of the dark wash. When the user presses RIGHT or OK the app returns to its previous state.