# **UX Document**

October 26, 2010

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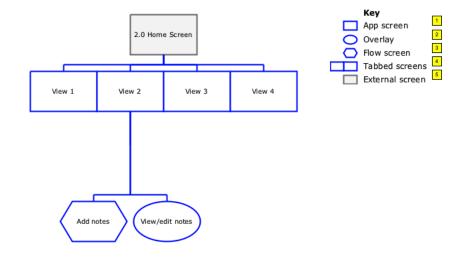
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# **Pages**



# IA diagram

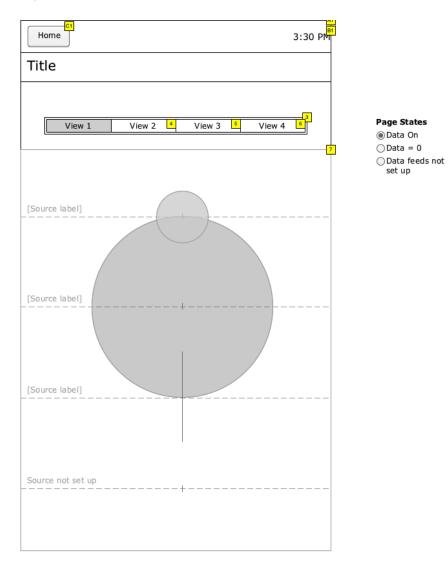
# **USER INTERFACE**



Footnote	Label	Description
1	App screen	App screens are the default screen type in the system.
2	Overlay	Overlays appear on top of app screens. Closing the overlay returns the user to the app screen they had been on previously.
3	Flow screens	Flow screens have a special layout, focused on getting the user to continue or cancel the flow.
4	Tabbed screens	Users can switch between tabbed screens using the tabs that are always present on the screens.
5	External screen	External screens are not part of this application and are described more fully in the documentation for their respective applications.

# View 1

# **USER INTERFACE**



# **OBJECT TABLE**

Footnote	Label	Interactions	Description	Behaviors
1	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Data visualization state to On		

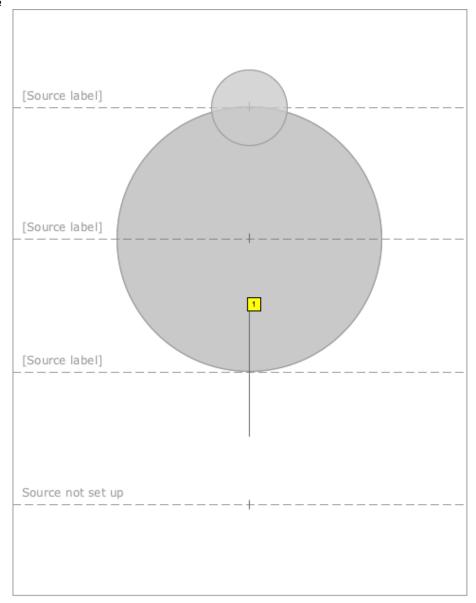
2

Footnote	Label	Interactions	Description	Behaviors
2	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Data visualization state to Off		
3	View toggle buttons			View 1 is default view on first time use. On return to the app, view is stateful.
4		OnClick: Case 1: Open View 2 in Current Window		
5		OnClick: Case 1: Open View 3 in Current Window		
6		OnClick: Case 1: Open View 4 in Current Window		
7	Data visualization		Displays live data viz.	Circles grow/shrink according to data feed. Scale needs to be set across all circles to the maximum likely data reading. Refreshes every minute with animation.
8	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Data visualization state to not set up		
A1	Screen			
B1	Current Time	OnClick: Case 1: Open Link in Current Window		
C1	Home button	OnClick: Case 1: Open Link in Current Window	Always appears on app screens.	Returns user to home screen

# **DATA VISUALIZATION**

#### ON

#### **User Interface**



- 10,000 11		
Footnote	Label	Description
1	Data off	Indicates when data for this source is 0 or not available.

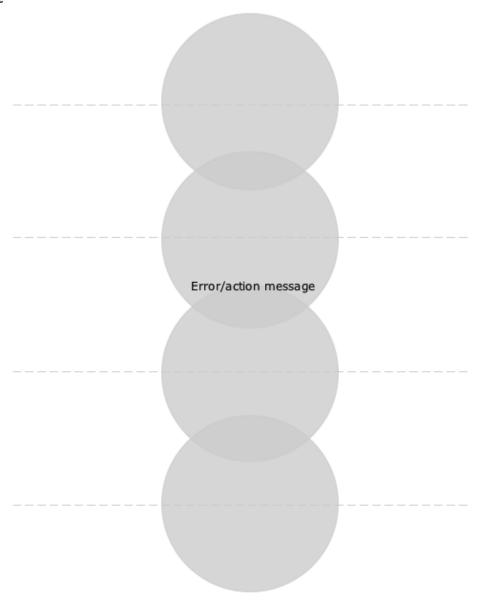
OFF

User	Interface
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[Source label]	
[Source label]	
[Source label]	
[Source label]	

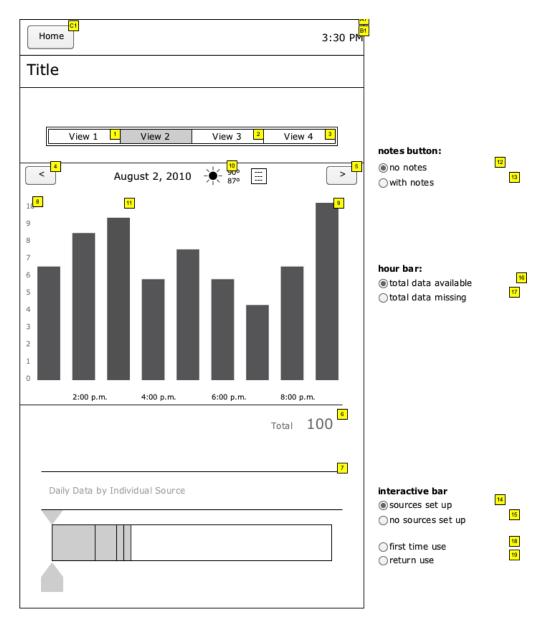
# NOT SET UP

#### **User Interface**



# View 2

#### **USER INTERFACE**



Footnote	Label	Interactions	Description	Behaviors	Notes/Questions	Assumptions
1		OnClick: Case 1: Open View 1 in Current Window				

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions	Assumptions
2		OnClick: Case 1: Open View 3 in Current Window				
3		OnClick: Case 1: Open View 4 in Current Window				
4	Previous Day Button			Allows navigation between the last 10 days.  Loads previous day view to same segment of timeline as current day is displayed. Disabled if no available previous day.  Updates Interactive Segmented Bar to new day view.		
5	Next Day Button			Allows navigation between the last 10 days.  Loads next day view to same segment of timeline as current day is displayed. Disabled if no available next day.  Updates Interactive Segmented Bar to new day view.		
6	Total data for the day		Displays the total data for the day.	If it's the current day, displays a running total, updated every hour.		
7	Interactive Segmented Bar		Displays the source breakdown for the day displayed. If the current day is displayed, the segmented bar updates hourly. Size of each segment is the source's percentage of the total data.	The width of the bar does not change. The set width always represents the total data for the day.  Slider Handle: Default position is off the scale to the left. When slid across the bar, the selected source is displayed and highlights in the bar chart above.  If data updates while the slider is pointing to an source, the slider stays with the segment as long as the user isn't interacting with it.  Whole Bar: Is tappable. Where ever it is tapped, the slider moves to that position and the corresponding source label is displayed. This helps the discoverability of the interaction.		

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions	Assumptions
8	Scale				The vertical scale will need to be matched to the user's individual data feed. A set number of scaling models should be available to choose from.  Initial scale setting The maximum is determined by taking the user's last year's data for the month, divided by the # of days in the month, divided by the segments of the day, plus 100%. That number is matched to the closest scale model.  Adjusting scale The scale should checked daily and adjusted. It should be adjusted upwards if any segment of the day exceeds the maximum scale. Likewise, it should be adjusted downwards if all existing segments of all days fall below 50% of the scale applies the same scale to all archived day views.	
9	View 2 Chart		Displays data, in hourly segments, for the day displayed.	Default View/Statefullness Rules For Current Day: If current day is displayed, displays part of day that information has been collected for. At the beginning of the day, bars fill in starting at the left had side of the chart. Once the bars have reached the right hand side of the screen, each new hour bar is placed right aligned and visible. Older bars go off the screen to the left and can be viewd by scrolling.  For Archived Days: Default view is of the last viewed time on any day view. If there is no last viewed time default to 6am aligning to the left of the screen.  Swiping: Horizontal swiping on the bars, scrolls through the current day. Only the bars, and the timeline scroll.	Days begin and end at 12:00 midnight.  Day views are archived for 12 months from installation date.	
10	Weather stamp		Displays weather for the day displayed			Integrated weather service

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions	Assumptions
11	Hour bar		Displays total data for an hour.			
12	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Notes button state to no notes				
13	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Notes button state to with notes				
14	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Interactive Segmented Bar state to off, highlights state to off				
15	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Interactive Segmented Bar state to no smart plugs, highlights state to off				
16	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Hour bar state to With data				
17	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Hour bar state to Without data				
18	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Interactive Segmented Bar state to 1st time use, highlights state to off				

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions	Assumptions
19	Panel state (NOT PART OF UI)	OnClick: Case 1: Set Interactive Segmented Bar state to off, highlights state to off				
A1	Screen					
B1	Current Time	OnClick: Case 1: Open Link in Current Window				
C1	Home button	OnClick: Case 1: Open Link in Current Window	Always appears on app screens.	Returns user to home screen		

#### **NOTES BUTTON**

NO NOTES

**User Interface** 



Object Table

Footnote	Interactions	
1	OnClick: Case 1: Open Add notes in Current Window	

WITH NOTES

**User Interface** 



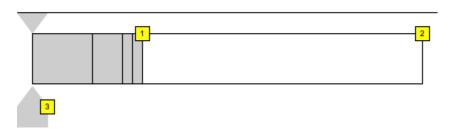
	Object it	abic .
Footnote Interactions		Interactions
	1	OnClick:
		Case 1:
		Open View/edit notes in Current Window

# INTERACTIVE SEGMENTED BAR

OFF

#### **User Interface**

Daily Data by Individual Source

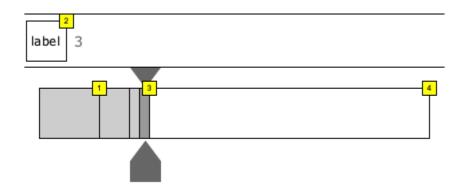


#### **Object Table**

Footnote	Label	Interactions	Description	Behaviors
1	Segment	OnClick: Case 1: Set Interactive Segmented Bar state to highlights Set highlights state to on	CLICK IN PROTOTYPE TO SEE SOURCE LABEL AND HIGHLIGHTS	
2	"Other" data	OnClick: Case 1: Set Interactive Segmented Bar state to "Other" Set highlights state to off	The area on the right represents the remainder of the total data that is not from tracked sources.	CLICK IN PROTOTYPE TO DISPLAY "OTHER" LABEL.
3	Slider		Draggable to select sources along the bar.	

#### **HIGHLIGHTS**

# **User Interface**



	- <b> </b>			
Footpoto	Label	Interactions	Description	Dobaviors
Footnote	Label	Interactions	Description	Behaviors

Footnote	Label	Interactions	Description	Behaviors
1		OnClick: Case 1: Set Interactive Segmented Bar state to off, highlights state to off	CLICK IN PROTOTYPE TO TURN OFF SOURCE LABEL AND HIGHLIGHTS	
2	Source Label/Link	OnClick: Case 1: Open Link in Current Window		
3	Highlighted Segment			Highlights when selected. If segment is smaller than 10 pixels, expands to 10 pixels when slider touches the outside boundary. Shrinks again when slider exits outside boundary.  If data updates while a segment is highlighted, the slider remains with the segment as long as the user isn't actively dragging it.
4		OnClick: Case 1: Set Interactive Segmented Bar state to "Other" Set highlights state to off		

#### NO SMART PLUGS

#### **User Interface**

"OTHER"

**User Interface** 

Set up your data sources to see individual amounts. Other sources



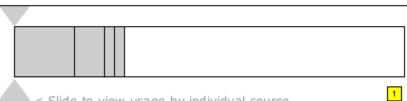
#### **Object Table**

Object it			
Footnote	Label	Interactions	Description
1		OnClick: Case 1: Set Interactive Segmented Bar state to off, highlights state to off	CLICK IN PROTOTYPE TO TURN OFF SOURCE LABEL AND HIGHLIGHTS
2	segment	OnClick: Case 1: Set Interactive Segmented Bar state to highlights Set highlights state to on	CLICK IN PROTOTYPE TO SEE SOURCE LABEL AND HIGHLIGHTS

# 1ST TIME USE

#### **User Interface**

Daily Data by Individual Source



< Slide to view usage by individual source

#### **Object Table**

Footnote	Label	Behaviors
1	Instructional text	Appears on all interactive bars until the user drags the pointer on any of them. Then disappears.

# **HOUR BAR**

#### WITH DATA

#### **User Interface**



#### WITHOUT DATA

#### **User Interface**



#### **Object Table**

Footnote	Label	Description	Behaviors
1	Missing data	Indicates that total data is missing for the hour	Data from individual sources can still be represented upon interaction with the Interactive Segmented Bar.

#### **HIGHLIGHTS**

OFF

ON

**User Interface** 



Footnote	Label	Description	Behaviors
1	No Data available	Indicates no data was available from the selected source for the hour.	
2	Data = 0	Absence of a highlight indicates the selected source's data = 0 during the time period.	
3	Source Highlights	Shows the percentage of total data the selected source contributed each hour.	If a sources data is than the percentage required to draw a 2 pixel line, don't show any highlight.

# Add notes

# **USER INTERFACE**

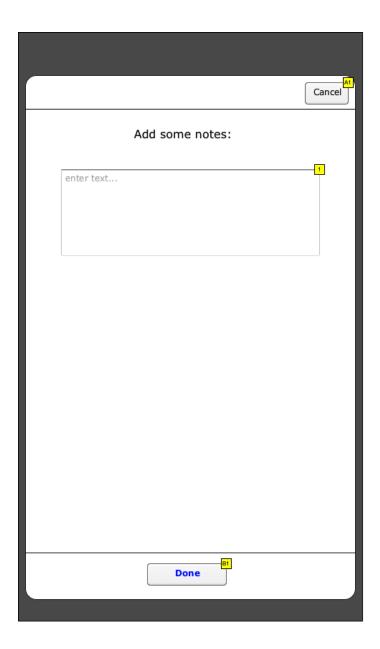


Footnote	Label
1	Screen

# **EDIT TEXT NOTES SCREEN**

#### SOFT KEYBOARD CLOSED

#### **User Interface**

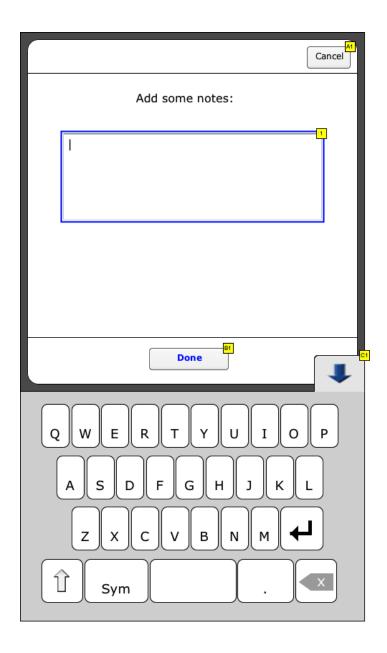


	object table				
Footnote	Label	Interactions	Behaviors		
1 Text OnClick: field Case 1: Set Edit text notes screen state to Soft keyboard opened		Case 1: Set Edit text notes screen state to Soft	If arriving on this screen from 13.10 to edit notes, previously entered notes appear in text field.		
2		OnFlowCancelClick: Case 1: Open Back in Current Window			

Footnote	Label	Interactions	Behaviors
3		OnFlowDoneClick: Case 1: Open Back in Current Window	
A1		OnClick: Case 1: Raise OnFlowCancelClick	
B1		OnClick: Case 1: Raise OnFlowDoneClick	

# SOFT KEYBOARD OPENED

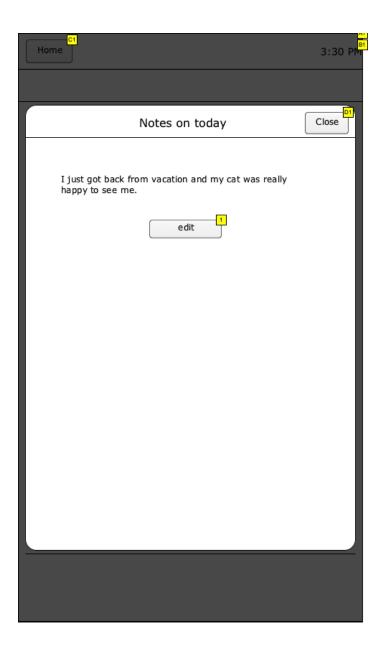
#### **User Interface**



Footnote	Label	Interactions	Behaviors
1	Text field	OnLostFocus: Case 1: Set Edit text notes screen state to Soft keyboard closed	If arriving on this screen from 13.10 to edit notes, previously entered notes appear in text field.
2		OnFlowCancelClick: Case 1: Open Back in Current Window	
3		OnFlowDoneClick: Case 1: Open Back in Current Window	
4		OnCloseKeyboardClick: Case 1: Set Edit text notes screen state to Soft keyboard closed	
A1		OnClick: Case 1: Raise OnFlowCancelClick	
B1		OnClick: Case 1: Raise OnFlowDoneClick	
C1	Close button	OnClick: Case 1: Raise OnCloseKeyboardClick	Closes the virtual keyboard.

# View/edit notes

# **USER INTERFACE**

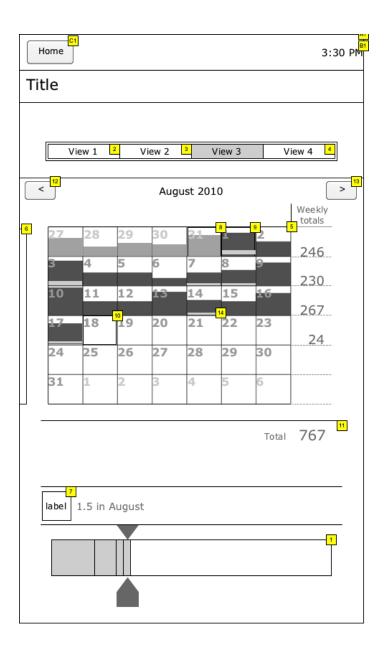


Footnote	Label	Interactions	Description	Behaviors
1	Edit button	OnClick: Case 1: Open Add notes in Current Window		

Footnote	Label	Interactions	Description	Behaviors
2		OnOverlayCloseClick: Case 1: Open Back in Current Window		
A1	Screen			
B1	Current Time	OnClick: Case 1: Open Link in Current Window		
C1	Home button	OnClick: Case 1: Open Link in Current Window	Always appears on app screens.	Returns user to home screen
D1		OnClick: Case 1: Raise OnOverlayCloseClick		

# View 3

#### **USER INTERFACE**



Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
1	Interactive Segmented Bar			Follows behaviors for Day View segmented bar except displays month's total or running total.	

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
2		OnClick: Case 1: Open View 1 in Current Window			
3		OnClick: Case 1: Open View 2 in Current Window			
4		OnClick: Case 1: Open View 4 in Current Window			
5	Month View		Displays the daily data over the course of a month.	Grid can have either 5 or 6 week rows. Updates once a day	Scale: Max scale = the View 1 scale x 24 (hours).  Weeks begin on Monday so Saturday and Sunday can be seen together at the end of the week.  When a week contains the last day of the month, the total is carried over to the new month view that is created on the 1st day of the next month.
6	Previous month		If a previous month exists, the edge displays.	Horizontal swiping brings previous/next months into view.	
7		OnClick: Case 1: Open Link in Current Window			
8	Non-current Month Calendar Day		Displays a day's consumption from the previous month	If aggregate data exists for the day, leads to the archived day view.	
9	Current month view calendar day		Displays consumption for day in current month view.	If data exists for the day, leads to archived day view.	
10	Current month future day			No action on tap	
11	Total data		Displays the total data for the month displayed.	If it's the current month, displays a running total, updated every day.	
12	Previous Month Button			Duplicates horizontal swiping interaction. Allows navigation between up to 12 months.  Disabled if no available previous month.  Updates Interactive Segmented Bar to new month view.	

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
13	Next Month Button			Duplicates horizontal swiping interaction. Allows navigation between up to 12 months.  Disabled if no available next month.  Updates Interactive Segmented Bar to new month view.	
14	Source highlight		Displays when source is selected in segmented bar.	If any data is available for a day, a minimum 2 pixel highlight appears.	
A1	Screen				
B1	Current Time	OnClick: Case 1: Open Link in Current Window			
C1	Home button	OnClick: Case 1: Open Link in Current Window	Always appears on app screens.	Returns user to home screen	

# **CURRENT MONTH FUTURE DAY**

STATE1

**User Interface** 

18

# NON-CURRENT MONTH CALENDAR DAY

WITH DATA

**User Interface** 



Footnote	Interactions
1	OnClick: Case 1: Open View 2 in Current Window

#### WITHOUT DATA

#### **User Interface**



#### **Object Table**

Footnote	Interactions
1	OnClick: Case 1: Open View 2 in Current Window

#### **CURRENT MONTH VIEW CALENDAR DAY**

#### WITH DATA

#### **User Interface**



#### **Object Table**

Footnote	Interactions
1	OnClick: Case 1: Open View 2 in Current Window

#### WITHOUT DATA

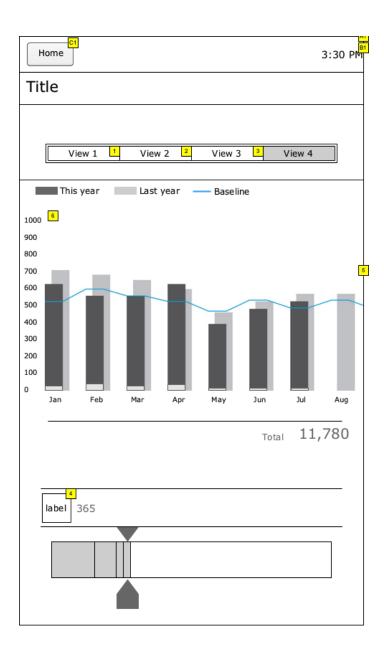
#### **User Interface**



Footnote	Interactions
1	OnClick: Case 1: Open View 2 in Current Window

# View 4

# **USER INTERFACE**



Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
1		OnClick: Case 1: Open View 1 in Current Window			

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
2		OnClick: Case 1: Open View 2 in Current Window	, 7777		
3		OnClick: Case 1: Open View 3 in Current Window			
4	Source Label/Link	OnClick: Case 1: Open Link in Current Window			
5	Year View Chart		Displays monthly data for the current year.  Light Grey Bar: Last year's data.  Blue Line: Baseline.	Displays 12 months of last year's data and peer benchmark data. Current year's months fill in as they go.  Default View At the beginning of the year, Current Year's bars fill in starting at the left had side of the chart. Once the bars have reached the right hand side of the screen, each new month bar is placed right aligned and visible. Older bars go off the screen to the left and can be viewed by scrolling.  After 12 months, the current year data becomes the previous year data and a new current year begins to fill in.  Aggregate year views are not archived.  Horizontal Swiping: Scrolls through the months. Only the bars and the timeline move.	A year is defined as 12 months beginning with initial installation.
6	Scale				The vertical scale will need to be matched to the user's data feed. A set number of scaling models should be available to choose from.  The scale should checked monthly and adjusted. It should be adjusted upwards if any month exceeds the maximum scale. Likewise, it should be adjusted downwards if all existing months (including last year's data and similar house average) fall below 50% of the scale.
A1	Screen				
B1	Current Time	OnClick: Case 1: Open Link in Current Window			

Footnote	Label	Interactions	Description	Behaviors	Notes/Questions
C1	Home button	OnClick: Case 1: Open Link in Current Window	Always appears on app screens.	Returns user to home screen	