




# Tech Spec: Matrix

Microsoft PowerBI Custom Visual

Confidential

# Wireframes: Basic

01

Hours 	Steps
12:00 AM – 1:00 AM CST	26
8:00 AM – 9:00 AM CST	125
10:00 AM – 11:00 AM CST	300
2:00 PM – 3:00 PM CST	303
8:00 PM – 9:00 PM CST	405

**Note:** Need the ability to make row a measure with a grouping (e.g., episode ID)



# Wireframes: Summary

02

Date & Time	Heart Rate
Sat, Oct 16, 2021	54 – 165
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57

**Note:** Need the ability to make row a measure with a grouping (e.g., episode ID)



# Wireframes: Banded Rows





03



Date	Heart Rate
<b>+ Fri, Oct 15, 2021</b>	<b>50 – 150</b>
<b>– Sat, Oct 16, 2021</b>	<b>55 – 165</b>
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57



# Wireframes: Expanded

04

Date & Time 	Steps 
 Fri, Oct 15, 2021	3,000
 Sat, Oct 16, 2021	3,000
12:05 AM – 12:06 AM CST	26
12:28 AM – 12:38 AM CST	125
12:42 AM – 12:55 AM CST	300
8:42 AM – 8:55 AM CST	303
1:00 PM – 1:05 PM CST	405





Date & Time	Heart Rate (bpm)
 Fri, Oct 15, 2021	50 – 150
 Sat, Oct 16, 2021	55 – 165
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57







**Note:** Ability to choose icon for expansion (i.e., +/-, up / down arrow)



# Wireframes: Fully Expanded

05

 Date & Time 	Kilocalories (kcal)
 Fri, Oct 15, 2021	3,000
 Sat, Oct 16, 2021	3,000
12:05 PM CST Turkey Sandwich with Cheddar Cheese and Lettuce   1 serving	200
12:10 PM CST Fruit Smoothie   8 Fl. Oz.	125
03:10 PM CST Pretzel Chips   20 Chips	100
03:10 PM CST Plain Hummus   5 Oz.	100




 Date & Time 	Kilocalories (kcal)
 Fri, Oct 15, 2021	3,000
 Sat, Oct 16, 2021	3,000
 12:00 PM – 01:00 PM CST	325
12:05 PM CST Turkey Sandwich with Cheddar Cheese and Lettuce   1 serving	200
12:10 PM CST Fruit Smoothie   8 Fl. Oz.	125
 03:00 PM – 04:00 PM CST	200

**Note:** Need ability to make the entire left column control expansion and only value(s) leads to selection



# Wireframes: Merged Columns

06


Date 	Blood Pressure (mmHg)
 Fri, Oct 15, 2021	120-115 / 80-75
 Sat, Oct 16, 2021	120-110 / 80-70
12:59:45 AM CST	120 / 80
01:55:30 AM CST	110 / 75
02:55:45 AM CST	111 / 78
03:45:55 AM CST	120 / 80
03:46:56 AM CST	115 / 70



# Wireframes: Added Columns

07

## Option 1: Value First

Date 	Kilocalories (kcal)			
	Morning	Afternoon	Evening	Total
Fri, Oct 15, 2021	300	400	500	1,200
Sat, Oct 16, 2021	250	500	600	1,350
Sun, Oct 17, 2021	300	400	500	1,200
Mon, Oct 18, 2021	250	500	600	1,350
Tue, Oct 19, 2021	300	400	500	1,200
Wed, Oct 20, 2021	250	500	600	1,350
Thu, Oct 21, 2021	300	400	500	1,200

**Note:** Ability to choose if the value or column is first in the hierarchy






# Wireframes: Added Columns

08

## Option 2: Group First

Date 	Morning		Afternoon		Total	
	Calories	Protein	Calories	Protein	Calories	Protein
Fri, Oct 15, 2021	300	50	500	50	800	100
Sat, Oct 16, 2021	250	40	600	60	850	100
Sun, Oct 17, 2021	300	50	500	50	800	100
Mon, Oct 18, 2021	250	40	600	60	850	100
Tue, Oct 19, 2021	300	50	500	50	800	100
Wed, Oct 20, 2021	250	40	600	60	850	100
Thu, Oct 21, 2021	300	50	500	50	800	100

**Note:** Ability to choose if the value or column is first in the hierarchy



# Wireframes: Selected Rows

09

Date	Steps
<b>+ Fri, Oct 15, 2021</b>	<b>3,000</b>
<b>- Sat, Oct 16, 2021</b>	<b>3,000</b>
12:05 AM – 12:06 AM CST	26
12:28 AM – 12:38 AM CST	125
12:42 AM – 12:55 AM CST	300
8:42 AM – 8:55 AM CST	303
1:00 PM – 1:05 PM CST	405

Date	Heart Rate
<b>+ Fri, Oct 16, 2021</b>	<b>50 – 150</b>
<b>- Sat, Oct 15, 2021</b>	<b>55 – 165</b>
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57

**Note:** Ability for selected row to go to the top of the matrix based on settings



# Control Zones

10

Expand / Collapse All Zone

Expand / Collapse Row Zone

"Sort by" Zone

"Sort by" Zone

Selection and Interaction Zone

+ Date & Time	Kilocalories (kcal)
+ Fri, Oct 15, 2021	3,000
- Sat, Oct 16, 2021	3,000
12:05 PM CST Turkey Sandwich with Cheddar Cheese and Lettuce   1 serving	200
12:10 PM CST Fruit Smoothie   8 Fl. Oz.	125
03:10 PM CST Pretzel Chips   20 Chips	100
03:10 PM CST Plain Hummus   5 Oz.	100



# Fields & Format (1/3)

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## Field(s)

- **Row(s):** Allow Multiple Items (*Required*) – order of data determines hierarchy
- **Group Rows By:** Allow Single Item (*Not Required*)
- **Row Details:** Allow Single Item (*Not Required*)
- **Column(s):** Allow Multiple Items (*Not Required*) – order of data determines hierarchy
- **Value(s):** Allow Multiple Items (*Required*) – order of data determines hierarchy
- **Unit(s):** Allow Multiple Items (*Not Required*)

## General Settings

### 1. Properties

#### Size

- Width: Default – 280 px
- Height: Default – 280 px

#### Position

- X Position: Default – 10
- Y Position: Default – 0

#### Advanced Options

- Maintain Layer Order: Default – Off
- Responsive: Default – Off

### 2. Title

- Title: Default – On
- Title Text: Default – Value
- Title Heading: Default – Heading 3
- Font: Default – DIN
- Font Size: Default – 14
- Bold: Default – Off
- Italic: Default – Off
- Underline: Default – Off
- Text Color: Default – #252423
- Background Color: Default – #ffffff
- Horizontal Alignment: Default – Left Justified
- Text Wrap: Default – On

Date & Time	Heart Rate
Sat, Oct 16, 2021	54 – 165
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57

### 3. Effects

#### Background

- Background: Default – On
- Color: Default – #ffffff
- Transparency: Default – 0%

#### Visual Border

- Visual Border: Default – Off
- Color: Default – #000000
- Rounded Corners: Default – 0 px

#### Shadow

- Shadow: Default – Off
- Color: Default – #252423
- Offset: Default – Outside
- Position: Default – Bottom Right
  - Custom
    - Size: Default – 3 px
    - Blur: Default – 10 px
    - Angle: Default – 45 deg
    - Distance: Default – 10 px
    - Transparency: Default – 70 px

## FORMAT

### #. Card

#### Group

- Setting: Default – XXX

### 4. Header Icons

#### Colors

- Header Icons: Default – On
- Background: Default – #ffffff
- Border: Default – #ffffff
- Icon: Default – #333333
- Transparency: Default – 0%

#### Icons

- Visual Information: Default – On
- Visual Warning: Default – On
- Visual Error: Default – On
- Drill On Dropdown: Default – On
- Drill Up: Default – On
- Drill Down: Default – On
- Show Next Level: Default – On
- Expand to Next Level: Default – On
- Pin: Default – On
- Focus Mode: Default – On
- See Data Layout: Default – On
- More Options: Default – On
- Filter: Default – On
- Help Tooltip: Default – On
- Comment Button: Default – On
- Copy Icon: Default – On

### 5. Alt Text

- Alt Text: Default – None



## Visual Settings

2

Date & Time	Heart Rate
Sat, Oct 16, 2021	54 – 165
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57

### 1. Properties

#### Background

- Background: Default – On
- Fill Color: Default – #fafafa
- Fill Opacity: Default – 100% (Options: 0% - 100%)
- Radius Top-Left: Default – 5 px (Options: 0 px – 20 px)
- Radius Top-Right: Default – 5 px (Options: 0 px – 20 px)
- Radius Bottom-Left: Default – 5 px (Options: 0 px – 20 px)
- Radius Bottom-Right: Default – 5 px (Options: 0 px – 20 px)
- Outline Left: Default – Off
- Outline Right: Default – Off
- Outline Top: Default – Off
- Outline Bottom: Default – Off
- Outline Color: Default – #8c9093
- Outline Thickness: Default – 2 px (Options: 0 px – 5 px)

#### Horizontal Gridlines

- Horizontal Gridlines: Default – On
- Color: Default – #8c9093
- Thickness: Default – 2 px (Options: 0 px – 5 px)

#### Vertical Gridlines

- Vertical Gridlines: Default – Off
- Color: Default – #8c9093
- Thickness: Default – 2 px (Options: 0 px – 5 px)

### 2. Rows

#### General

- Padding: Default – 2 px (Options: 0 px – 10 px)

#### Banded Row

- Fill: Default – Off
- Fill Color: Default – #d9dadb
- Fill Opacity: Default – 100%

#### Font

- Word Wrap: Default – On
- Horizontal Position: Default – Left (Options: Left; Center; Right)
- Vertical Position: Default – Middle (Options: Top; Middle; Bottom)
- Step Indentation: Default – 3 px (Options: 0 px - 10 px)
- Font Family: Default – Segoe UI
- Size: Default – 10 pt
- Color: Default – #000000
- Bold: Default – Off
- Italic: Default – Off
- Underline: Default – Off

#### Expand/Collapse

- Expand/Collapse: Default – Off
- Icon Type: Default – Chevron (Options: Chevron; +/-)
- Icon Size: Default – 5 px (0 px – 30 px)
- Icon Color: Default – #ffffff
- Rectangle Fill Color: Default – #00458f
- Rectangle Outline Color: Default – #00458f
- Rectangle Outline Thickness: Default – 2 px (0 px – 5 px)

### 2. Rows Continued

#### Row Details

- Row Details: Default – Off
- Word Wrap: Default – On
- Horizontal Position: Default – Left (Options: Left; Center; Right)
- Vertical Position: Default – Middle (Options: Top; Middle; Below)
- Step Indentation: Default – 3 px (Options: 0 px – 10 px)
- Font Family: Default – Segoe UI
- Size: Default – 10 pt
- Color: Default – #000000
- Bold: Default – Off
- Italic: Default – Off
- Underline: Default – Off

#### Selected

- Selection Interaction: Default – On
- Type: Default – Highlight & Move To Top (Options: Highlight Only; Move To Top Only; Highlight & Move To Top)
- Fill Color: Default – #00458f
- Fill Opacity: Default – 50% (Options: 0% - 100%)
- Rectangle Radius: Default – 5 px (Options: 0 px – 20 px)
- Outline: Default – On
- Outline Color: Default – #00244a
- Outline Thickness: Default – 2 px (Options: 0 px – 5 px)



# Fields & Format (3/3)

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## Visual Settings

3

Date & Time	Heart Rate
Sat, Oct 16, 2021	54 – 165
12:59:45 AM CST	54
01:55:30 AM CST	60
02:55:45 AM CST	58
03:45:55 AM CST	56
03:46:56 AM CST	57

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### 3. Columns

#### General

- Row Padding: Default – 2 px (Options: 0 px – 10 px)
- Column Width: Default – Auto (Options: 0 px – infinity)
- Column Before Value: Default – Off

#### Font

- Word Wrap: Default – On
- Horizontal Position: Default – Left (Options: Left; Center; Right)
- Vertical Position: Default – Middle (Options: Top; Middle; Bottom)
- Font Family: Default – Segoe UI
- Size: Default – 10 pt
- Color: Default – #000000
- Bold: Default – Off
- Italic: Default – Off
- Underline: Default – Off

#### Sort

- Icon: Default – Off
- Icon Position: Default – Next to Text (Options: Right Justified; Next to Text)
- Icon Size: Default – 5 px (0 px – 30 px)
- Icon Color: Default - #3f464b

### 4. Values

#### Font

- Word Wrap: Default – On
- Horizontal Position: Default – Left (Options: Left; Center; Right)
- Vertical Position: Default – Middle (Options: Top; Middle; Bottom)
- Font Family: Default – Segoe UI
- Size: Default – 10 pt
- Color: Default – #000000
- Bold: Default – Off
- Italic: Default – Off
- Underline: Default – Off

#### Units

- Units: Default – On

