Attribute Menu

# Game Plan

Attributes show: Primaries, Secondaries, Vital on bars

+ Button for Primary, so that we can increase the primary when level up; the secondary will increase automatically with inherited values via modifiers.

A screenshot of a video game

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Will require some design thought.

* Values are show with own frame so there’s a widget we can reuse
* FN to set value of numerical data represented
* Rows with text and framed value for each attribute
* Own widget
* Primaries are similar but also have button
* Row widget + Own widget for widget
* Reuse functionality from 2ndary?
* One big widget for menu itself
* How to construct?
* Not all 2nd attributes shown
* Scrollbar to move down to see additional values

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So:

* Framed Value widget for numbers
* Row widget contains text box and also framed value widget
* Primary is a row widget with and additional button widget
* Attribute menu widget contains many row widgets and scrollbar
* Health and mana own widget progress bars
* Close menu widget

A black background with yellow text

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# Framed Value

New UI BP

Attribute menu an Overlay? New folder is tidier

WBP\_FramedValue based on AuraUserWidget

+SizeBox

FillScreen to Desired

Override Height and Width to arbirary values 80/45 to work with for now, change later if needed

Box Size (rename to Box Size Root) set to variable; in Graph set Height and Width of box as variable floats

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Set category for W + H

Drag in Size Box Root and call set overrides from Event PreConstruct

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Check defaults, currently at zero and collapse to Function



Size box now exists. To add to the menu:

* Background colour/image
* Border
* Text

Since things are going to be on top of one another will need to add an overlay that is a child of the size frame and set to fill it

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Add an image of a child of the overlay, give it a value, either plain black RBG sliders or an asset:

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This is an animated asset like the health/mana globes and has params we can set to preference:

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Renamed the new elements and set as variable, then set in the graph:

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Remember to set a default value for the brush

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This way we can set variations, like colour, in child BPs if we want

Collapse to Fn

Add new image for the border

Fill H + V

For image pick desired border asset

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Change Draw As from Image to Border and choose margin size – I went with 0.5 for all.

The size box can be changed in size and the border and background will stretch to match

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For now I won’t parameterise the border, we can always change that later if we want!

Add Text block. Will set default as a 2 digit number for convenience

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Set alignment (centre)

Set Justification (center)

Change font

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Play with font size and outline settings for appearance

Set the text as a variable so we can set the value with Fn later

# Text Value Row

New Widget WBP\_TextValueRow

Add Sizebox, override W and H, as before with the frame

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A screenshot of a computer

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We’ll add elements left to right; first text, then the framed value widget

Add Horizontal Box and text to that box, horizonal align left, centre vertical

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Set default text, font, fontsize outline and fontspacing to taste

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Add FramedValue Widget, set to fill, right, center

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Add a spacer after it to modify the size a little

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Test with longest attribute names (intelligence, critical hit resistance)

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Too long! Make the size box bigger!

A screen shot of a computer

Description automatically generated

Better!

The spacer works well, but remember we will also need to add a button in a child class

For this we can add a Named Slot

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Slot will allow children to have more widgets on the named slot

Tinker a little for overall taste:

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# Text Value Button Row

New widget based on the Text Value row

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Includes all elements by default but only the named slot is accessible.

However, we will need to change the text and the numerical value for each instantiation, so we need to expose them!

For now, let’s add the button. Start with an overlay and an image for the button border/background

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Center and draw as image, set size (I picked 45 \* 45 to match the value box size)

Add button

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Now pick styles for Normal, Hovered, Pressed and Disabled

This project has existing assets to use out of the box

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(set to draw as image)

We can add a single character of text, a +, so we know it’s for adding to the attribute!

Alight and justify as usual, set a font and appearance to taste

A black and grey plaid

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We’ll need functions to set text and numerical value and make the button functional

# Attribute Menu Construction

We now have 3 widgets to use in the attribute menu

As before, sizebox/overlay - for now hard code widgth/height as this is a specific object

Now we start stacking.

We want a border, title, value widgets for rows with buttons etc

Draw as border, 0.5 borders etc

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Add a wrap box to help space and align things properly

We’ll drag the elements onto the wrap box

Text block for manu name:

ATTRIBUTES, Fill space, set a size, centered Horizontally

Give wrap box a padding

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Adding fields

Wrap box will wrap to a new line if over size, example:

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Setting the the new text box here, which starts right after the other box, to on “Fill span when less than “with a value greater than the set size of the sizebox, will result in the text box being pushed to a new line

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To make some space from the title, add a spacer

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The Y size can be set to make bigger spaces

Ctrl-C/Ctrl-V to copy

Next a Text Value Row (no button) for Attribute points we can spend then the box with button for the primary attributes

In the WBP\_TextValueRow, expose the Box Height/Width variables and compile, then add a new TextValueRow to the menu

A screenshot of a computer

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New:

A graph paper with a grid

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Rearrange a little as the points will not be an attribute, and add button rows

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This can be modified to taste, maybe some more padding and smaller row length again?

Pad the wrap box to 40, set width 720

Primary attributes look good

The secondary attributes will go below the primary, and we’ll put them all in their own scroll box

Set a size and fill empty space, add a spacer above

Drag the scrollbox onto the existing size box

Drag a TextValue onto the scrollbox

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Repeat for all secondary attributes

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For secondary attributes things look a little cramped and the box slot is taking up a bit too much room, so we can edit properties

Since there are a few of them, maybe have a function to set the font and other properties like space dimensions and named slot later

Finally lets add an image background for the whole menu

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Need some padding

And a background image

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# Button Widget

Add new heading for Secondary attributes (copy the primary text box); adjust spacer size to make things all fit better

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A screenshot of a computer

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We now also need a X button to close the menu after we have looked at the values

Add a sizebox outside of the wrap box

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I’ve put this at the top right like in Windows – I feel it’s more intuitive

Set size to 54/54 and padded 25 from right and top

Add an overlay as normal, then a button as before:

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We’re making a lot of very similar buttons; we should probably just BP buttons as widgets themselves, copying the attributes we’ve use for other buttons, like sizebox, overlay, border, text etc

A screenshot of a computer program

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# Wide Button Widget

New button from the main overlay to open the Attribute menu

Based on WBP\_Button: WBP\_WideButton

# Opening the Attribute Menu

To make Attributes button functional:

Make it a variable in the overlay.

Event Construct: assign to onclicked event for this button to a custom event

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Disable the button on clicked:

A screenshot of a graph

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And create widget and add to viewport:

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For the moment using 0 player controller but will add multiplayer later

This opens an attribute menu with clickable non-functional buttons but it fills the screen

To reduce the size, wrap the entire thing in an overlay:

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And bam, done!

A video game screen with a game screen and a game screen

Description automatically generated with medium confidence

We can add padding and set the size like with Messages:

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A screenshot of a computer

Description automatically generatedA screenshot of a video game

Description automatically generated

Hardcoded X, Y as 50 but other values, or variables, will work