



Tech Info Library

HyperCard: Script for Drawing Pie Charts (7/92)

Revised: 12/8/93
Security: Everyone

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Article Created: 16 January 1991
Article Reviewed/Updated: 23 July 1992

TOPIC -----

This handler draws a pie chart when you pass it some values.
Try this: pieChart "3,4,5,6,7,8"

To erase the chart, type "clearPicture".

DISCUSSION -----

```
if frame is empty
  then put insetRect(localRect(rect of card window),10) into frame
  clearPicture frame
  put itemArray(values) into values -- convert to comma separated list
  put sum(values) into total
  put number of items in values into valueCount
  put item 3 of frame - item 1 of frame into frameWidth
  put item 4 of frame - item 2 of frame into frameHeight
  put min(frameWidth,frameHeight)/2 into radius
  reset paint
  get centerOfRect(frame)
  put item 1 of it into centerH
  put item 2 of it into centerV
  choose oval tool
  set lineSize to 2
  set centered to true
  drag from centerH,centerV to -
  round(centerH+radius),round(centerV+radius)
  choose line tool
  set centered to false
  drag from centerH,centerV to centerH,round(centerV-radius)
  put zero into angle
  repeat with i = 1 to valueCount
    put pi * item i of values / total into halfChange
```

```
    add halfChange to angle
    put centerH + round((radius-3) * sin(angle)) into halfH
    put centerV - round((radius-3) * cos(angle)) into halfV
    add halfChange to angle
    put centerH + round(radius * sin(angle)) into h
    put centerV - round(radius * cos(angle)) into v
    choose line tool
    drag from centerH,centerV to h,v
    if halfChange > .01 then -- don't try to fill very small wedges
        set pattern to item (i mod 12)+1 of "2,13,11,3,14,6,21,17,31,18,4,32"
        choose bucket tool
        click at halfH, halfV
    end if
end repeat
choose browse tool
end pieChart
```

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Tech Info Library Article Number:14163