

# Design for the Small Screen

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The full slide show is available at  
[http://cyber.bentley.edu/faculty/wb/presentations/screen\\_files/frame.htm](http://cyber.bentley.edu/faculty/wb/presentations/screen_files/frame.htm)

## Slide 1



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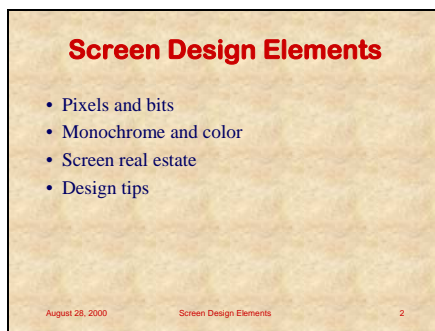
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## Slide 2



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Slide 3

**Pixels and Bits**

- "(PIX [picture] ELeMENT) The smallest addressable unit on a display screen. The higher the pixel resolution (the more rows and columns of pixels), the more information can be displayed."
- Pixel = 1+ bits in storage
- More bits (bit depth) = more color
- Monochrome = pixel on or off
- Color display = 4 to 24 bits per pixel
- Color range = 16 to 16 million colors.

Source: New York Times Tech Encyclopedia at <http://www.techweb.com/encyclopedia/define/term/pixel>

August 28, 2000      Screen Design Elements      3

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Slide 4

**Monochrome Bitmap**

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Slide 5

**Monochrome and Color**

- Monochrome = on or off
- Gray scale = varies light intensity, dark to light
- Color systems = RGB dot per pixel
- Varying light intensity = color range
- Black = three dots dark
- White = all dots light

Source: New York Times Tech Encyclopedia at <http://www.techweb.com/encyclopedia/define/term/pixel>

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**Slide 6**

### Resolution

- 640 X 480 (shipping default)
- 800 X 600 (shipping default)
- 1024 X 768
- 1152 X 864
- 1280 X 1024
- 1600 X 1200

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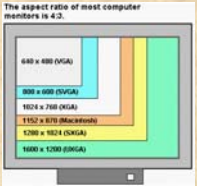
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**Slide 7**

### Screen Size in Pixels

The aspect ratio of most computer monitors is 4:3.



Source: Computer Desktop Encyclopedia 1997

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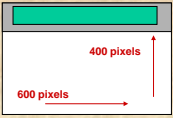
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**Slide 8**

### Screen Real Estate

- Monitor = 640 X 480 pixels



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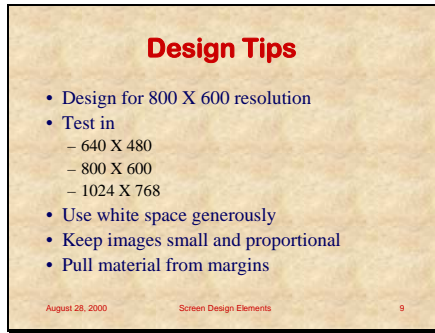
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**Slide 9**



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