Material Design CoP Content

Principles

1. What is Material Design?
    a. [Info slide] Google's new "visual language … that synthesizes the classic principles of good design with the innovation and possibility of technology and science"
    b. [Info slide] **Metaphor**
        i. Grounded in the tactile attributes of paper and ink
        ii. Elements coexist and move around in a shared, rationalized space
    c. [Image slide]
        i. photo of illuminated manuscript
    d. [Image slide]
        i. image of Material design paper and ink elements
    e. [Info slide] **Magic**
        i. Harnesses technology to make the impossible possible
        ii. User input ripples through the interface and transforms the design
    f. [Video slide]
        i. Paper transforming
    g. [Video slide]
        i. User input rippling through interface (buttons w/ ripples)
    h. [Info slide] **Metaphor + Magic = ?**
        i. (make all this text 24sp, just like the subtitles)
    i. [Image slide]
        i. Magic the Gathering
2. App Environment
    a. [Info slide] **Device Space**
        i. Material elements reside within the same physical space afforded by the device
        ii. Thin layers of paper stack on top of each other to create the interface
    b. [Image slide]
        i. Device space
    c. [Info slide] **Dimensionality**
        i. Depth within an app communicates hierarchy and importance
        ii. Depth is NOT ornament
    d. [Image slide]
        i. Isometric layering of app
3. Paper and Ink
    a. [Info slide] **Paper Craft**
        i. Every pixel drawn on the screen resides on a sheet of paper

        ii. Seams, steps, and toolbars are created with different arrangements of paper
    b. [Image slide]
        i. Seam
    c. [Image slide]
        i. Step
    d. [Image slide]
        i. Toolbar
    e. [Info slide] **Ink**
        i. Paper is the surface; ink is the content
        ii. Ink is confined by the bounds of the paper it saturates
    f. [Image slide]
        i. Card with various ink elements on it
    g. [Video slide]
        i. Ink filling paper space (clear function in calculator app?)
4. Visual Design
    a. [Info slide] **Grid**
        i. A consistent baseline grid is the foundation for all Material layouts
        ii. The base unit is 8dp
    b. [Image slide]
        i. Layout with 8dp grid
    c. [Image slide]
        i. Different layout with 8dp grid
    d. [Info slide] **Color**
        i. Color is used to highlight important elements and reinforce branding
        ii. Dynamic color strengthens the bond between related elements
    e. [Image slide]
        i. Color highlights important elements (FAB)
    f. [Video slide]
        i. Dynamic color used in music player app
    g. [Info slide] **Typography**
        i. Typographic scale is used to create a clear hierarchy within a layout
        ii. Type sits on the baseline grid to create a sense of rhythm
    h. [Image slide]
        i. typographic scale
    i. [Image slide]
        i. type sitting on grid
    j. [Info slide] **Icons**
        i. Icons are used to accelerate understanding
        ii. Icons are simple, modern, friendly, and sometimes quirky
        iii. Shapes are bold and geometric
    k. [Image slide]

        i. system icons
    l. [Info slide] **Imagery**
        i. The style should be optimistic, delightful, and honest
        ii. Use photography to highlight specific stories
        iii. Use illustration to represent concepts or metaphors
    m. [Image slide]
        i. Photography example
    n. [Image slide]
        i. Illustration example
5. Meaningful Motion
    a. [Info slide] **Users Initiate Change**
        i. Users are the prime movers of the app experience
        ii. Immediate tactile feedback lets users know they've been heard
    b. [Video slide]
        i. User input rippling through and changing interface (toolbar ripple)
    c. [Info slide] **Shared Stage**
        i. Material lives in the same space as we do
    d. [Video slide]
        i. State transition showed thin space (music player app)
    e. [Info slide] **Motion Focuses Attention**
        i. Teleportation is disorienting
        ii. Transition animations help direct focus
        iii. Material objects have mass and move accordingly
    f. [Video slide]
        i. Music player app (play button becomes volume slider)
6. One Adaptive Design
    a. [Info slide] **One Adaptive Design**
        i. Every device is a different view on the same underlying system
        ii. Each view is tailored to the size and interaction appropriate to the device
    b. [Image slide]
        i. Adaptive layout (files app)
    c. [Image slide]
        i. Adaptive layout (calendar app)
    d. [Info slide] **Responsive Principles**
        i. Respect human constraints: a larger screen does not equal larger cognitive capacity
        ii. Pull the furniture off the walls
    e. [Image slide]
        i. Adaptive layout (email app)