

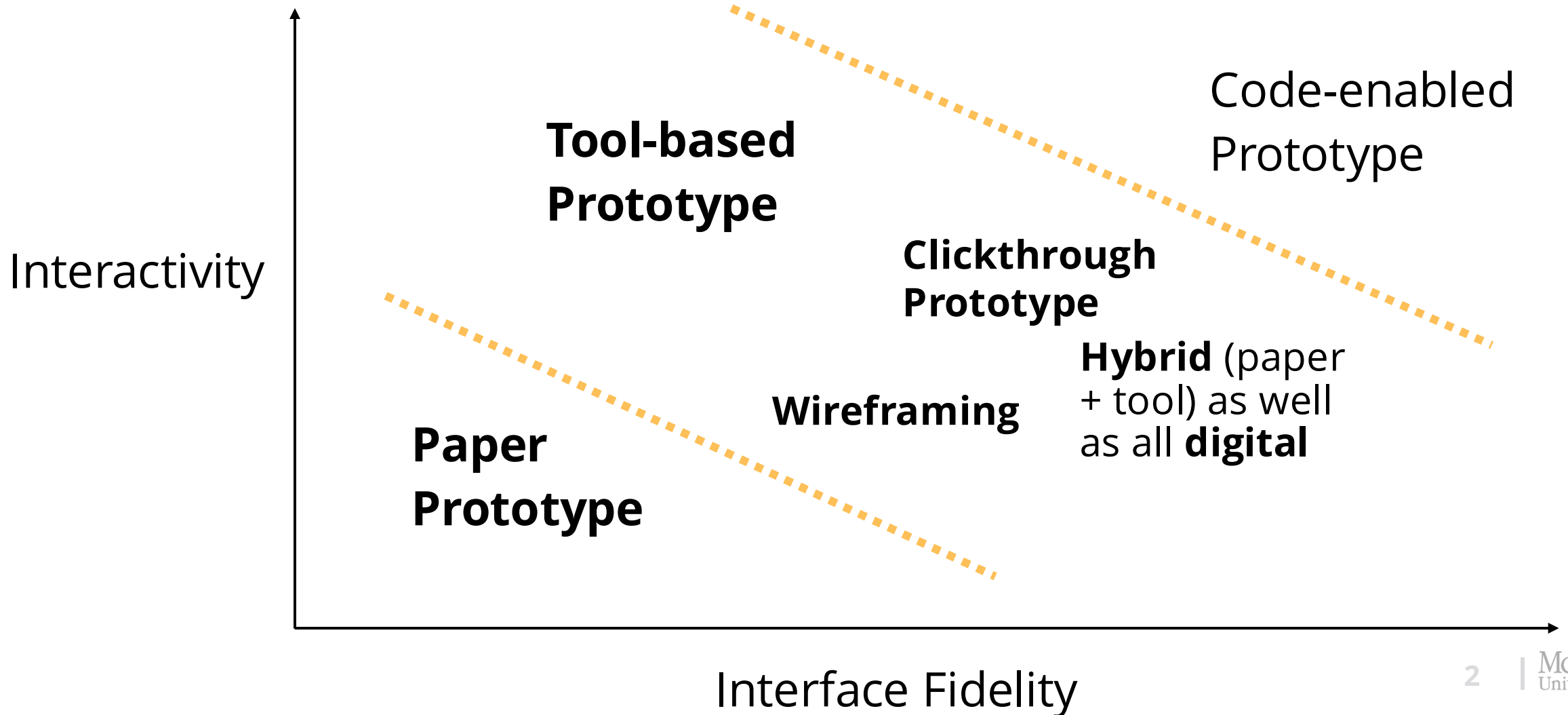
Week 10-3

Interface Design Patterns

SFWRENG 4HC3/6HC3 Human Computer Interfaces

** Slides adapted from previous instructors of COMPSCI/SFWRENG 4HC3/6HC3
and the COMPSCI 5115 course from University of Minnesota*

Low-High Fidelity Prototypes



Resources Shared for A2 and M3

- Interactive prototypes on Figma
- Interactive prototypes on Axure

Look ahead...

- In-tutorial prototype evaluation (with peers)



**Which of the following questions
you **CANNOT** ask when testing a
paper prototype?**



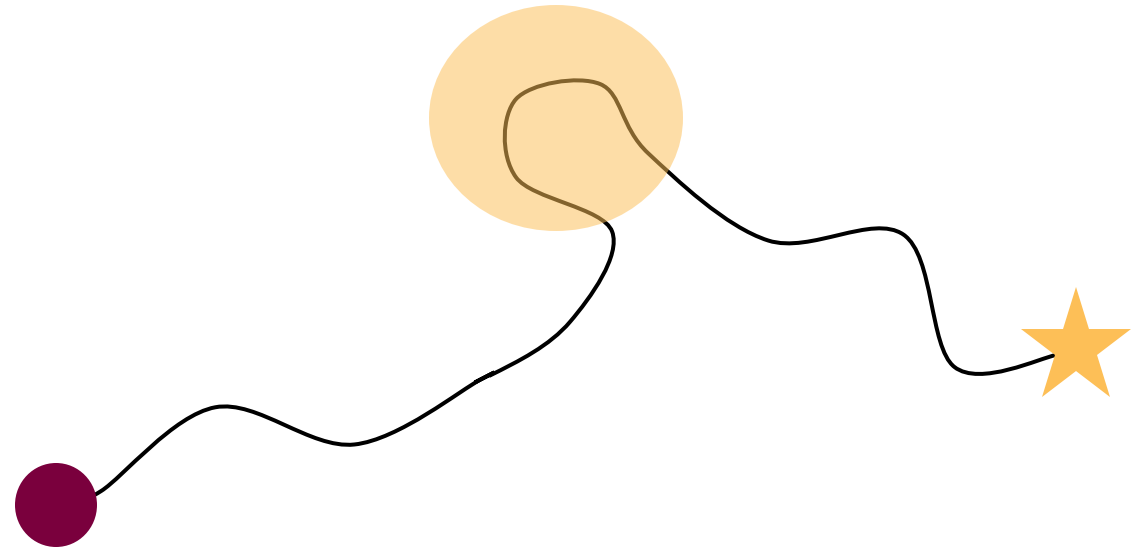
Which of the following are **DRAWBACKS of going into too much detail when prototyping using design tools (select all that apply)?**

Week 10 Overview

- ~~Monday~~
 - ~~Prototyping Overview~~
 - ~~LoFi Prototyping~~
- ~~Wednesday~~
 - ~~Paper Prototype Exercise~~
 - ~~Interactive Prototyping~~
- **Friday**
 - **Interface Design Patterns: Navigation**

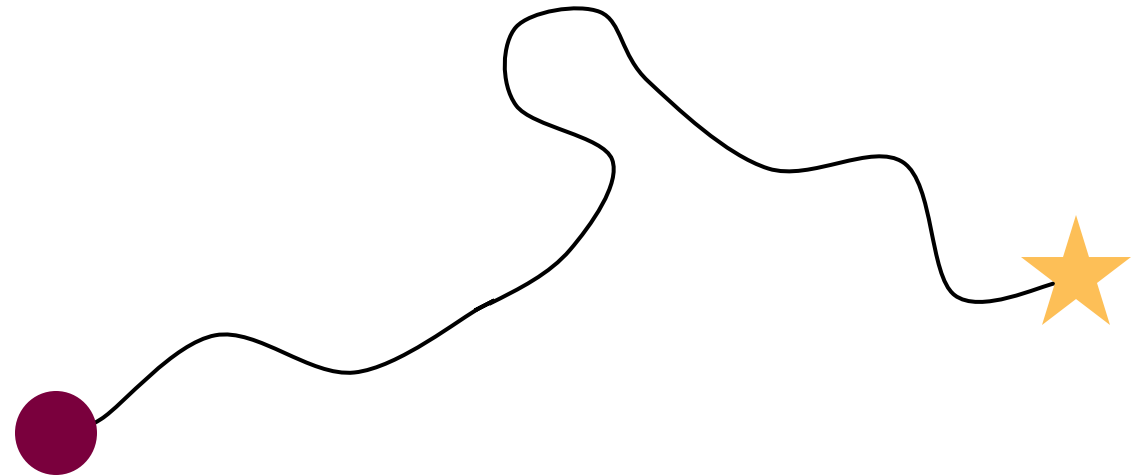
Navigation: Goal Seeking Process

- People have to **navigate from a system state toward their goal**
- Usually when exploring, at each point in the interaction, a user progresses with **local knowledge only**
- But can (hopefully) get to (navigate to) the goal



Navigation: Goal Seeking Process

- Users are **not** going to progress in a straight line (will not take the optimum path)
- Designers should try to **avoid/minimize chances of big detours**

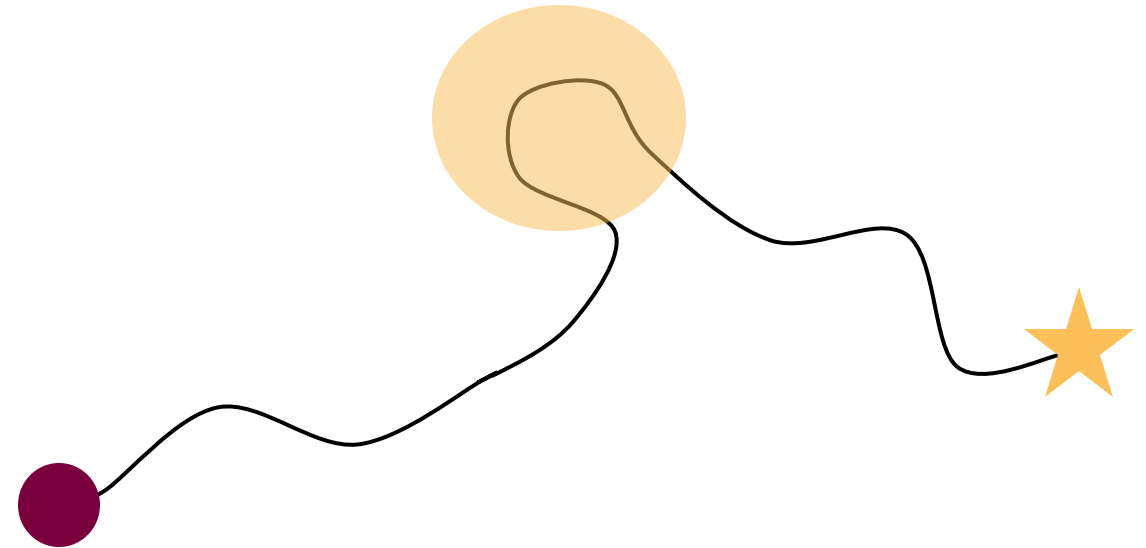


Navigation: Rules

1. Knowing **where you are**
2. Knowing **where you are going**
Or **what will happen**
3. Knowing **where you've been**
Or **what you've done**

These generally have to be part of **conscious cognition**

Interfaces should support these to minimize **cognitive load!**



Rules: Knowing where you are

Important to have clear identification since users can enter from anywhere



REGISTRATION OPENS JULY 19TH!

JOINT REGISTRATION WITH ITS 2013

UIST 2013 is collocated with the [ACM Interactive Tabletops and Surfaces 2013 \(ITS 2013\)](#) conference; ITS (Oct. 6-9) ends just before UIST starts. For **early bird registration only** (July 19-September 6) there are discount joint registration rates available:

Joint UIST and ITS registration:

ACM Member: \$895 (USD)
Student: \$525
Non-member: \$995

UIST-ONLY REGISTRATION RATES

All rates in USD

LATEST UPDATES:

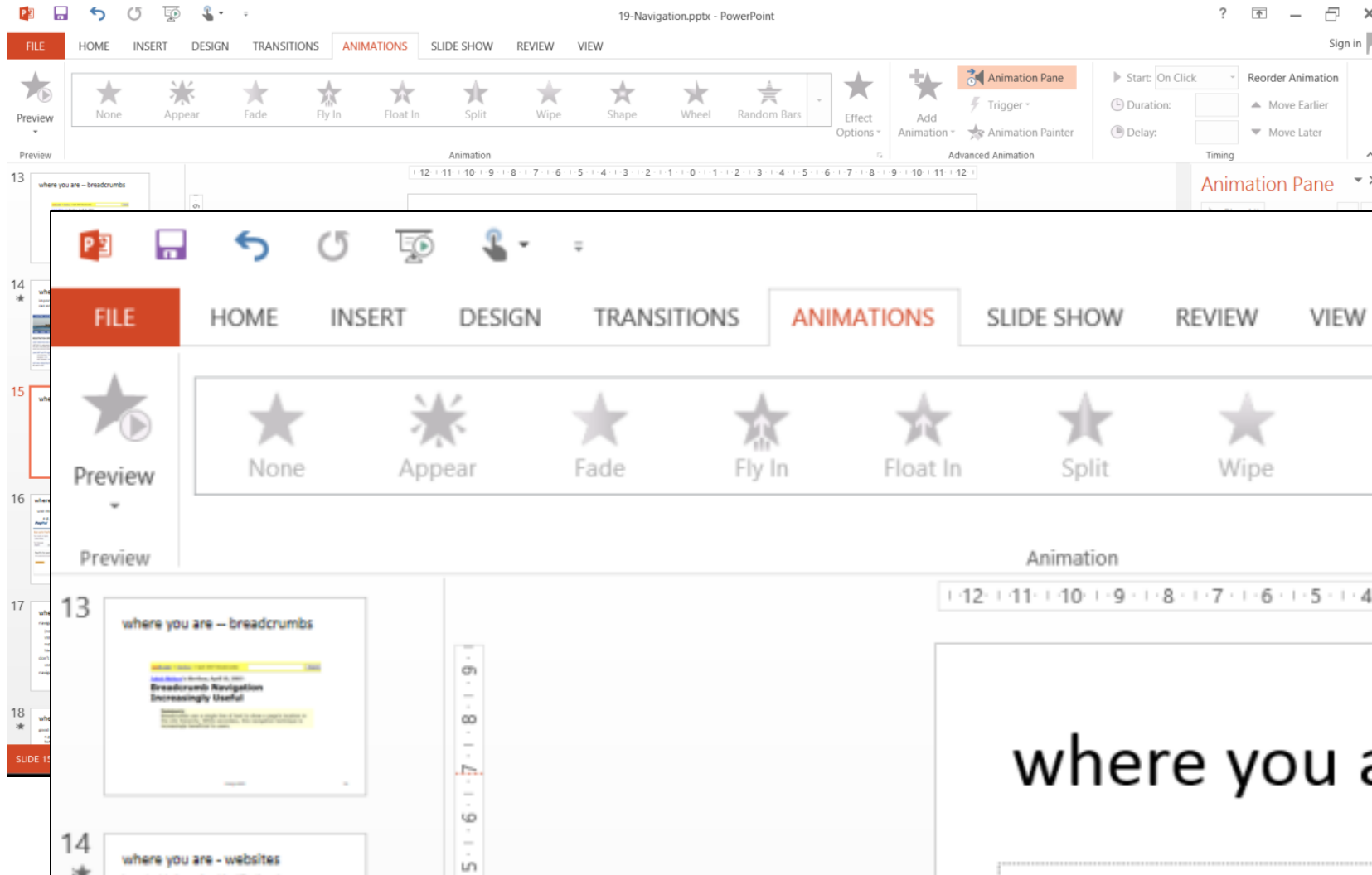


[proceedings](#)
[adjunct proceedings](#)

mobile apps available.



Knowing where you are: Current



Knowing where you are: Journey

SPEND \$50 AND SHIPPING IS FREE

Log in Wish List Français

STORE LOCATIONS

HE

MEC

LEARN COMMUNITY & EVENTS SERVICES ABOUT MEC

SEARCH

MEN WOMEN KIDS CLIMB BIKE HIKE CAMP RUN & TRAIN TRAVEL SNOW WATER Y

Your path: [All Products](#) / [Cycling](#) / [Clothing](#) / [Men's](#) / Gloves and Mitts

CYCLING : CLOTHING : MEN'S : GLOVES AND MITTS

products 1 - 37 of 37

Sort by: Best Match

CATEGORY

◀ All

◀ Clothing

Gloves and Mitts

GENDER

◀ All

Men's

Men's Specific (21)

Unisex (17)

ACTIVITY

◀ All

Cycling

DeFeet Wool Dura Gloves (Unisex)
\$19.00 CAD
★★★★★
10 reviews
Product Number: 5017-985
Made in USA
 [COMPARE](#)

MEC Inverno Gloves (Unisex)
\$32.00 CAD
★★★★★
18 reviews
Product Number: 5020-735
Made in China
 [COMPARE](#)

MEC Coldspell Gloves (Unisex)
\$49.00 CAD
★★★★★
29 reviews
Product Number: 5020-733
Made in Vietnam
 [COMPARE](#)

12 | McMaster University

Breadcrumbs

- Use when program has a **strong hierarchical design with a lot of pages** (e.g., encyclopedia)
- Web: use when a user may **land on a deep page** from an external link, brings them up to speed
- **Does not replace main navigation**, but adds more detail as a secondary support
- Useful when tracing a journey (online shopping)

Breadcrumbs: Example

If used when unnecessary – can be cluttering or confusing




Rules: Knowing where you are going

- Use meaningful link / button descriptions
 - avoid “click here” to do X, instead have X



Sign up for PayPal

Secure 

Your country or region

United States  

Your language

English 

Already have a PayPal account? [Upgrade now.](#)

PayPal for personal use

Get a personal account for personal use.

Get Started

PayPal for business and nonprofits

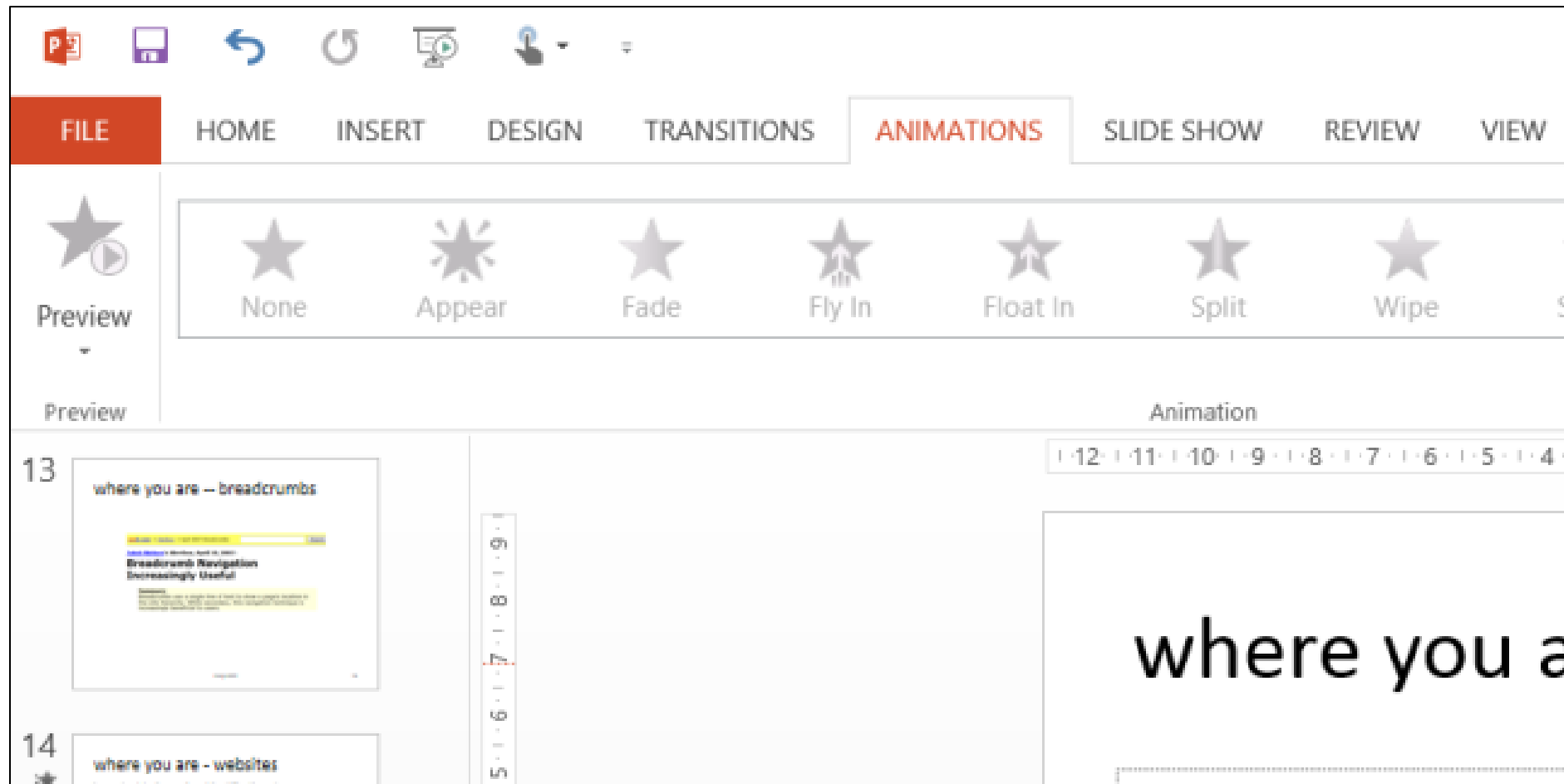
Get a business account for use by businesses and nonprofit organizations.

Get Started

Rules: Knowing where you are going

- **Navigation panels should be at the top and/or the left** (North America!)
 - Visible even with small devices
 - Support left to right reading order
 - Hierarchy of page is up front and center!
- **Don't rely on "search" boxes**
 - Users aren't great at formulating queries and give up
- **Navigation structures should not dominate content**

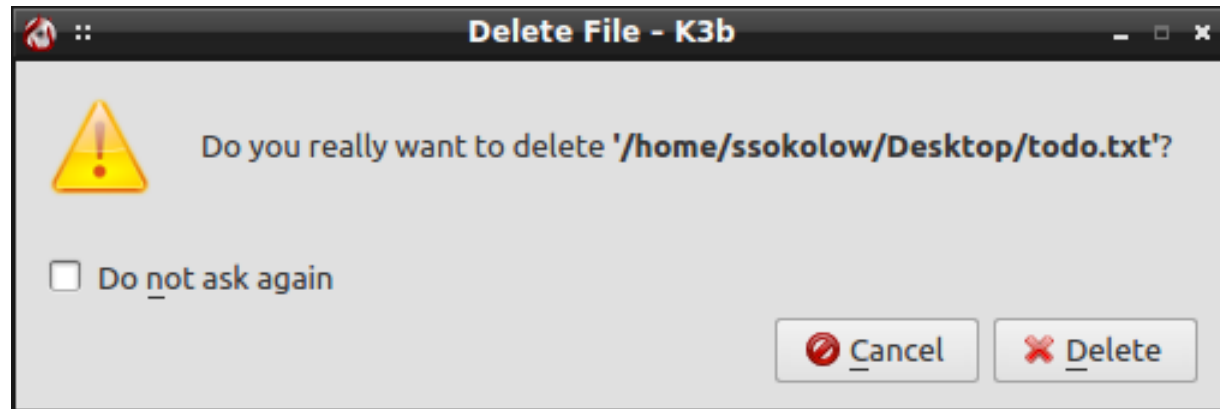
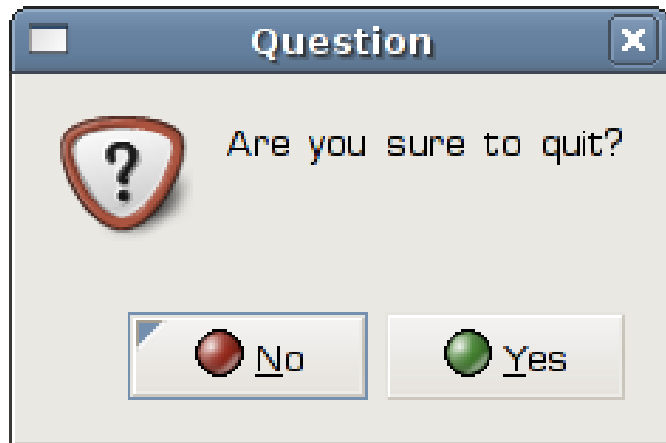
Rules: Knowing where you are going



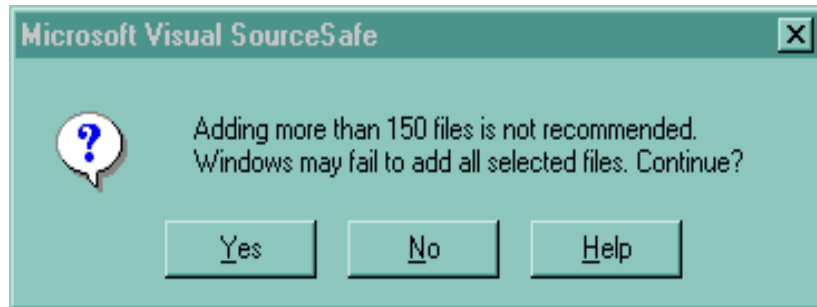
Knowing where you are going: Dialog

Be **VERY** clear about options

- Use simple, user-centered language IN the dialog
- Use action verbs in buttons instead of OK CANCEL or YES NO



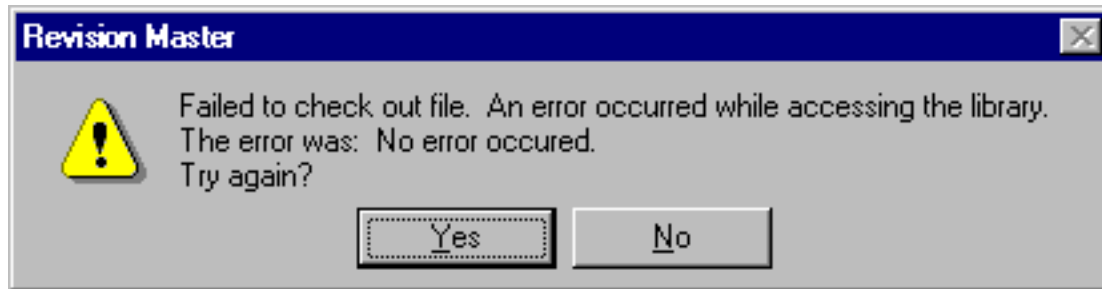
Dialog: Examples



What happens if I press yes?



What happens when you cancel a cancelled operation?



So was there an error?

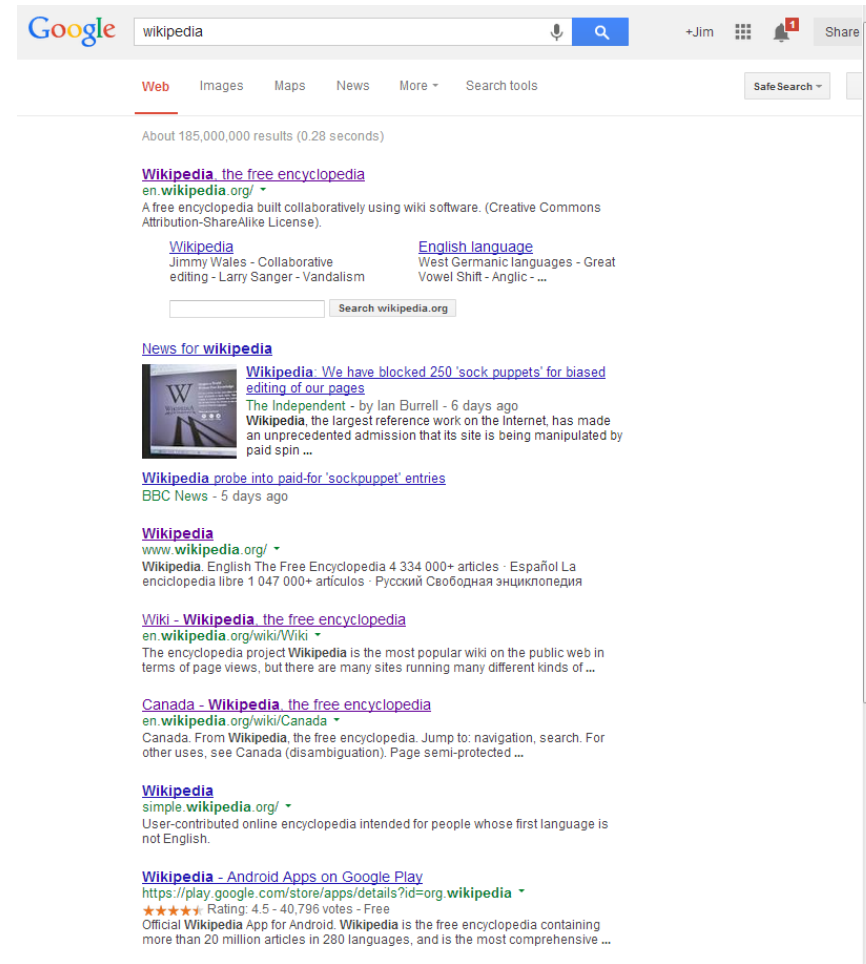


????

Rules: Knowing where you have been

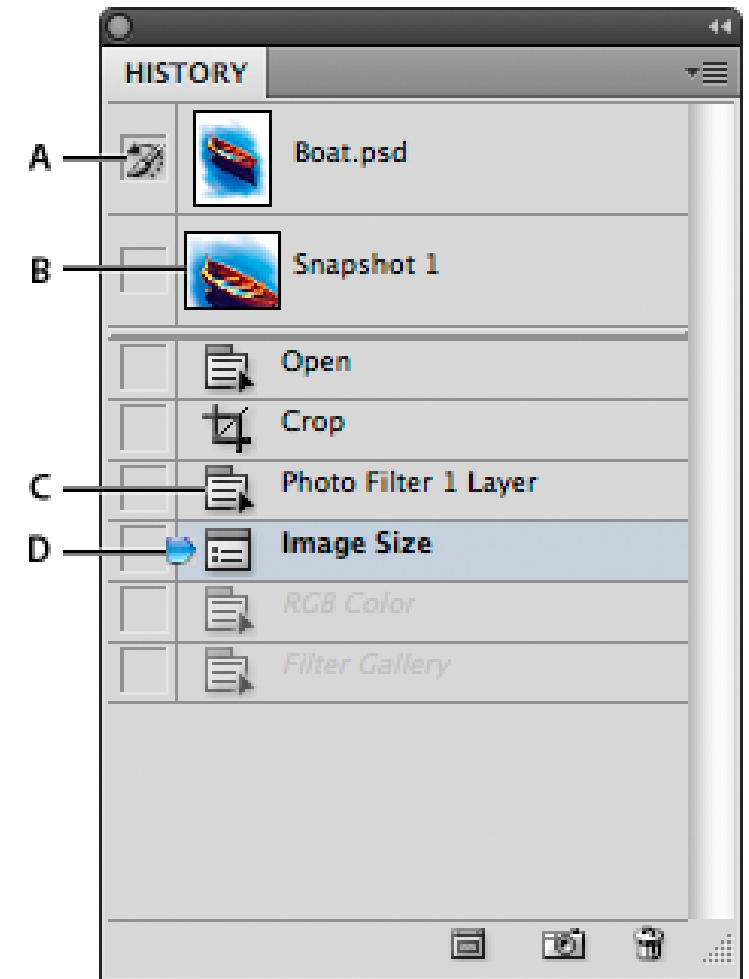
Good on the web!

- colouring previously visited links, history lists, back button



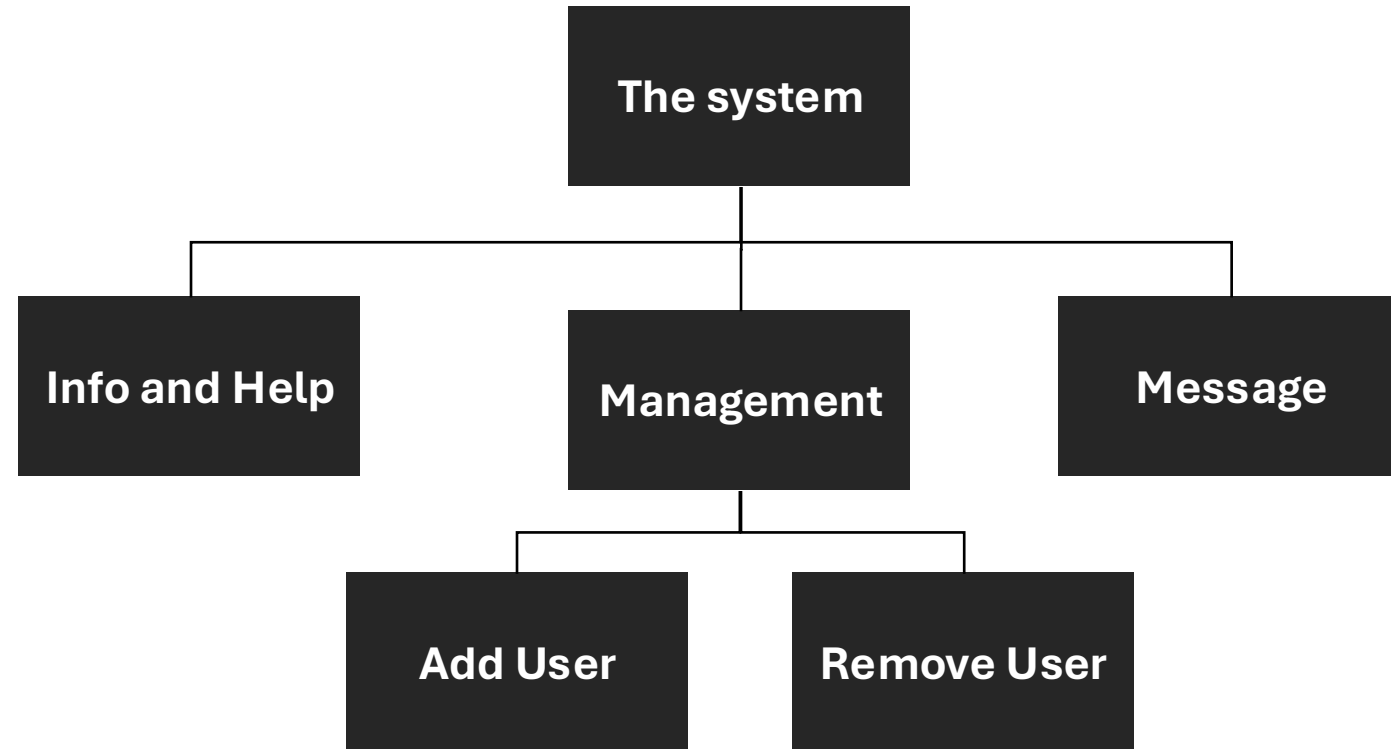
Rules: Knowing where you have been

- Can provide a “**history**”
- Include a way **back to a place** that acts as a “vantage point”
 - from where users can reorient themselves if lost
 - “home” button



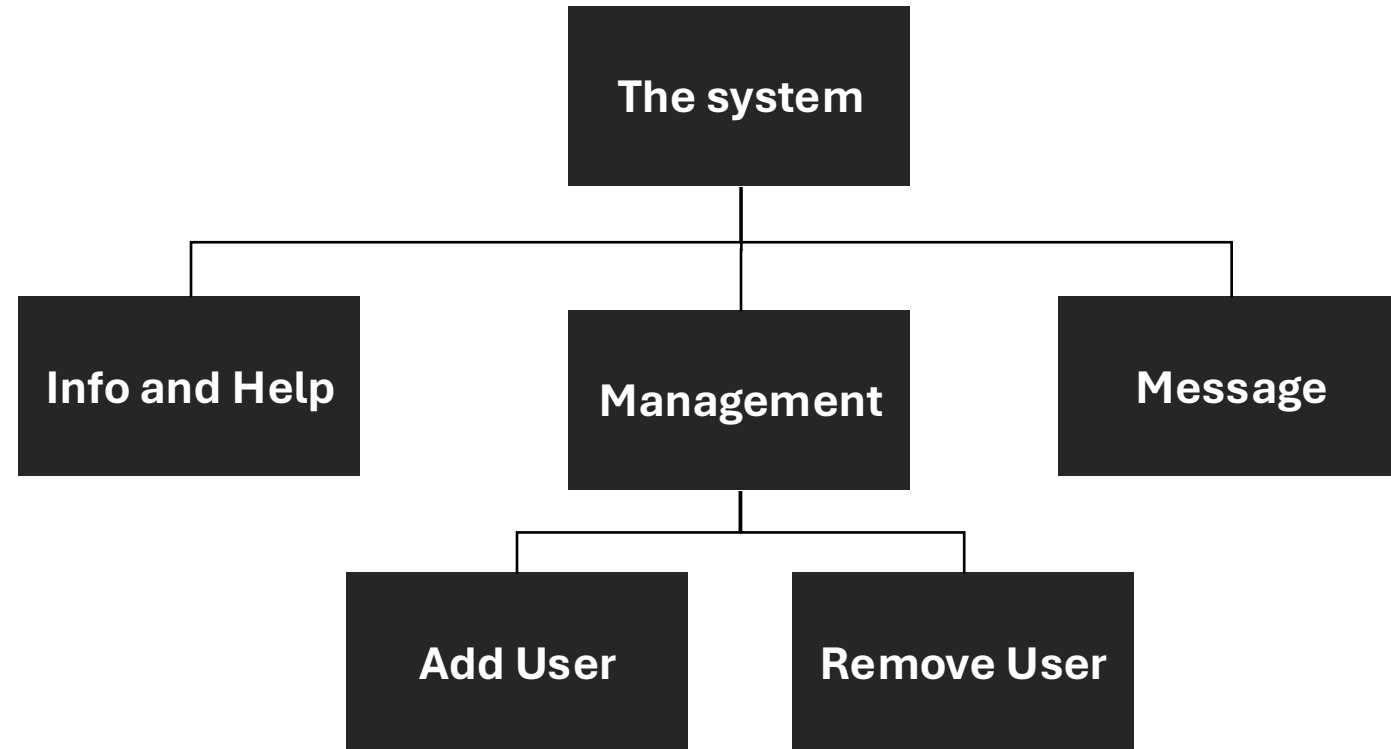
Navigation Hierarchy: Design

Explicitly plan out the navigation hierarchy for your system



Navigation Hierarchy: Design

- Is this hierarchy “**visible**” to the users?
 - Will assist with the 3 goals suggested earlier
- Typically **functional separation** but also
 - By roles
 - By user types
 - By modules in an educational system



Navigation Hierarchy: Considerations

- Deep is difficult!
 - Users lose track of where they are, limited conscious cognition
 - There is evidence that **if it takes any more than 4-5 clicks, users will give up**
 - Implication: aim for a **flat** application
- Optimal?
 - Many items on each screen (logically related)
 - Leads to fewer screens
 - But **well structured** within screen

Navigation Hierarchy: Considerations

Bigger Problems: Navigating between applications and websites

- **Style issues**
 - Platform standards, consistency
- **Functional issues**
 - Cut and paste (now mostly central)

Week 11 Overview

- **Monday**
 - Interface Implementation and Frontend Overview
 - Interaction Patterns
- **Wednesday**
 - Prototype for Multiple Platforms
- **Friday**
 - Physical Prototyping: Beyond Screen