

# HUMAN-MAP INTERACTIVITY

Interactive Map Design | Spring 2018



Designing a map for the web means that we are no longer designing for map *readers*, but map *users*

- ▣ People interactive & manipulate maps
- ▣ No need for a one-size-fits all approach
- ▣ Design to respond to a map user's needs

# Terminology

- **Graphical User Interface (GUI, aka 'gooey')**. Allows people to interact with electronic devices through graphical icons and other visuals
- **Human-Computer Interaction (HCI)**. Researches the design and use of computer technology.

# Human Computer Interaction...



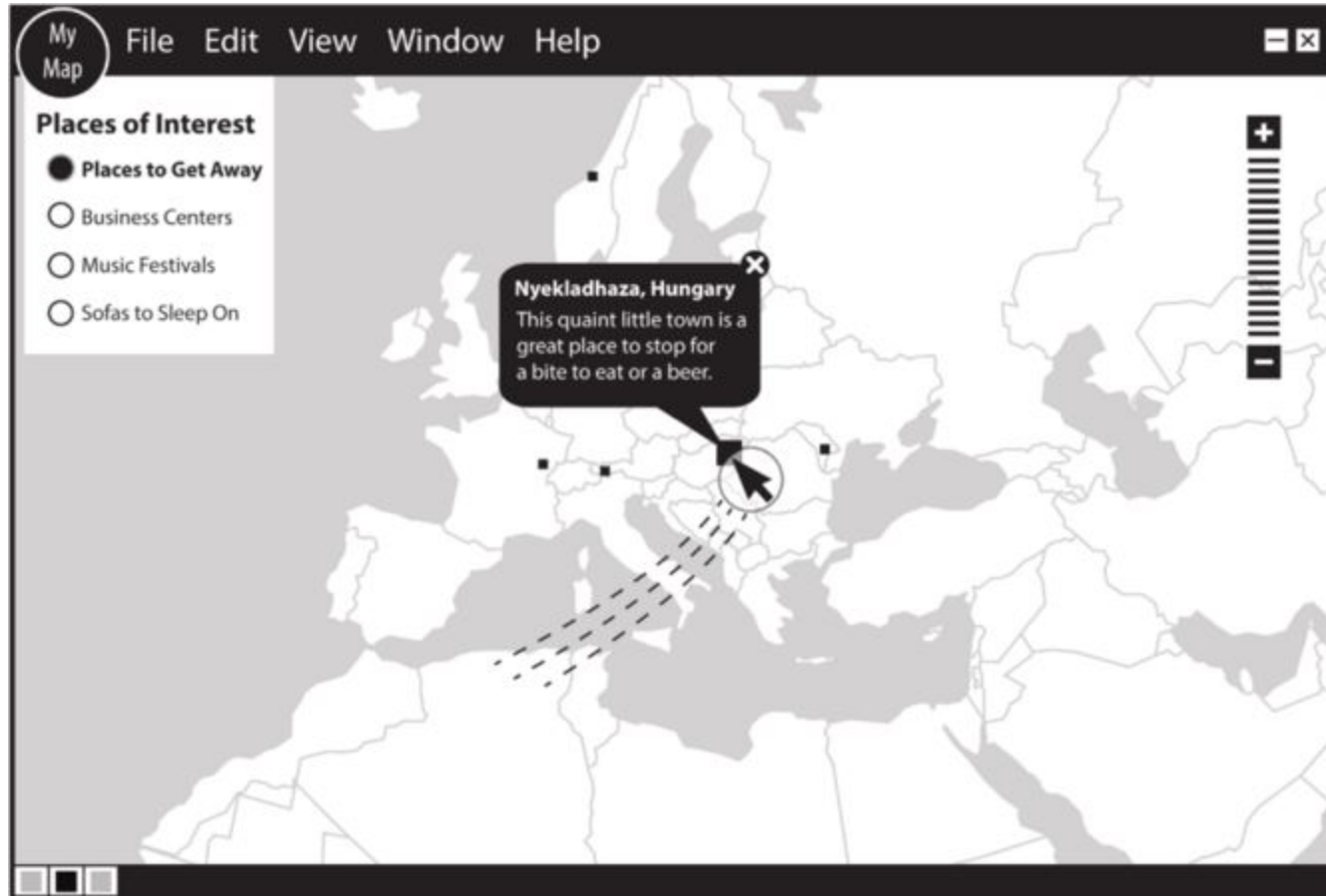
# WIMP

- **Windows, Icons, Menus, Pointer**
  - Windows & MAC operating systems adopted this early on – mimics 2D desktop space to which many can relate
  - Windows. Frame around a functioning program
  - Icons. Buttons that perform a tasks
  - Menus. Graphic or text – similar to icons, but always execute commands, programs or run tasks
  - Pointer. Always on, user-controlled, virtual point on the screen, that allows the user to interact with the GUI

# Post-WIMP interfaces

- Touchscreens – pointers are disappearing!
- Multitouch inputs – allowing for more than one point on the screen to be interacted with at one time

# WIMP or multi-touch?



# WIMP or multi-touch?





# Why do I need to know this as a web mapper?

- Any map you design should be WIMP & post-WIMP compatible
- Multi-platform design – mobile phones, tablets, desktops – various sizes and functionalities

What elements should all effective maps have?




# Core interactive map design elements

- Find & design map elements that facilitate your communication goals rather than simply using default map elements
- Not all maps need every map element. Be selective.
- Respect the established rules of map elements in the visual hierarchy.



# Lessons learned from Lakeshore Nature Preserve Interactive map

Robert E. Roth & Mark Harrower

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- User-centered design
  - Usability testing
  - Feature Creep
  - Screen real-estate
  - Information-to-interface ratio
  - Map browsing
  - Data-ink ratio
  - Affordance
  - Design map content first, not the interface with mock or made-up data