



CSE 165: 3D User Interaction

Lecture #16:
3D Menu Widgets

Upcoming Deadlines

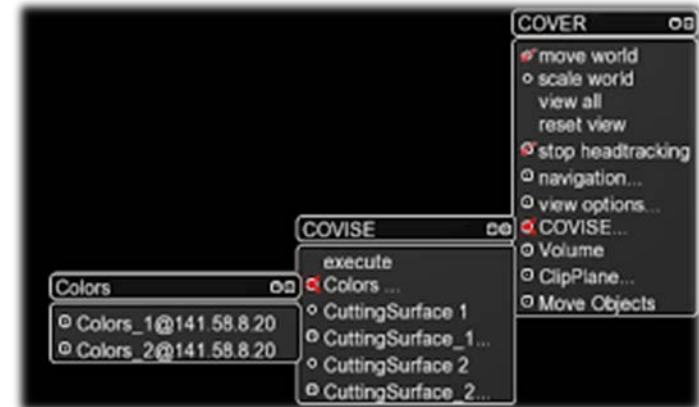
- Sunday, February 28th at 11:59pm:
 - Homework project 3 late deadline
- Monday, March 1st at 4pm:
 - Discussion project 4
- Sunday, March 7th at 11:59pm:
 - Homework project 4 due
- Sunday, March 14th at 11:59pm:
 - Homework project 4 late deadline

3D UI Presentations

- Milanka Trang:
 - Exploring a Mixed Reality Framework for the Internet-of-Things
- Thomas Lauer:
 - SLAM vs Lighthouse tracking
- Ashwin Rao:
 - SimX

Labels

- Describe individual widgets or groups
- Need to be legible:
 - Font
 - Font size
 - Color
- Switchable label sets for multi-lingual applications



Action Buttons

- No state
- Trigger action when pressed



Radio Buttons

- Can be selected or not
- Visually organized in groups, often in framed box
- In each group only one radio button can be selected

What burger do you want?

☒ Hamburger

☐ Chicken burger

☐ Veggie burger

Check Boxes

- Two states: checked or unchecked
- Independent of other check boxes

What do you want on your burger?

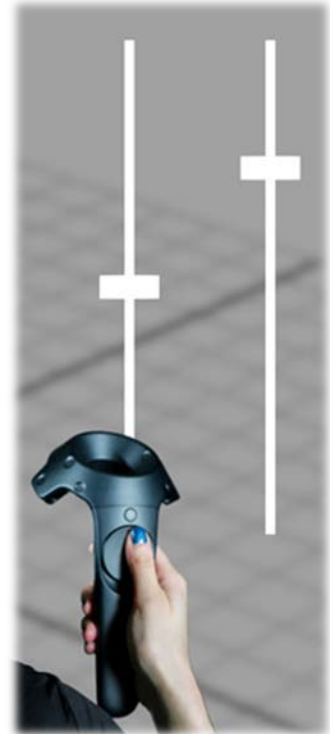
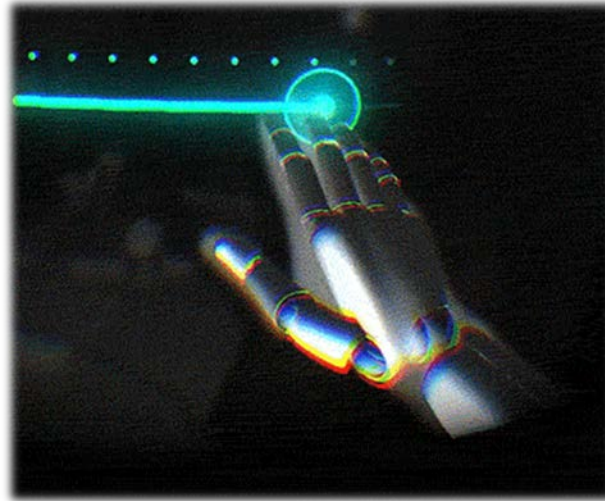
☒ Cheese

☐ Tomato

☒ Lettuce

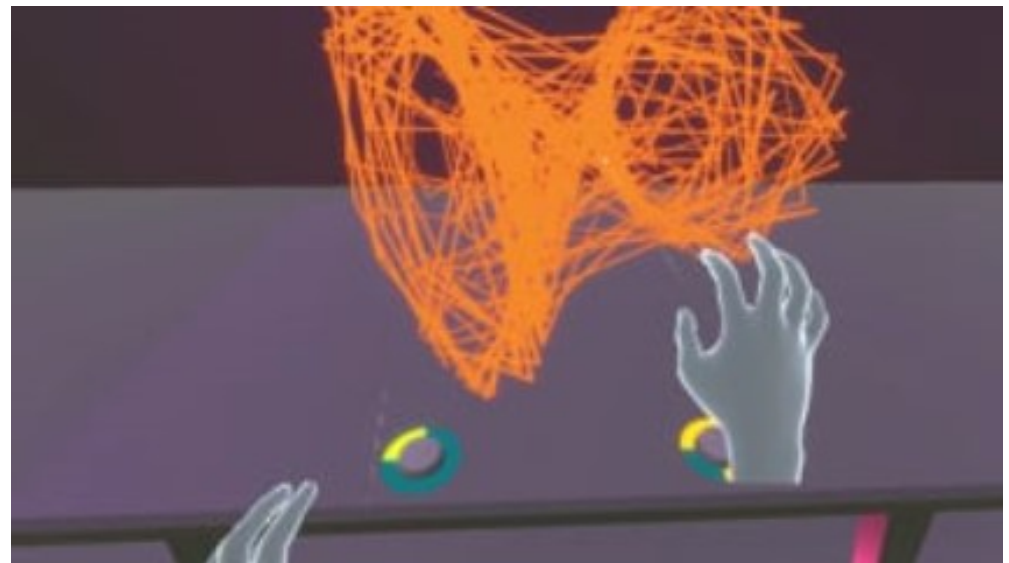
Sliders

- Intuitive use
- Horizontal or vertical orientation
- Limited at low and high end
- Narrow but long
- Twitchy when used with raycast





Dials

- Compact size
- Options for limits:
 - Limited low end
 - Limited high end
 - No limits
- Intuitive interaction
- High precision
- Great for scrolling through data



Choice Lists

- Single or multiple selections allowed
- Unlimited list entries
- Only subset of items is shown, rest can be reached by scrolling

<p>What burger do you want?</p> <p><input type="radio"/> Hamburger</p> <p><input checked="" type="radio"/> Chicken burger</p> <p><input type="radio"/> Veggie burger</p> <p><input type="radio"/> Mushroom burger</p> <p><input type="radio"/> Beef burger</p> <p><input type="radio"/> Bacon burger</p> <p><input type="radio"/> Bunless burger</p> <p><input type="radio"/> Ostrich burger</p> <p></p>	<p>What burger do you want?</p> <p><input type="text" value="Chicken burger"/></p> <p></p>
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