Try building these!

Demonstration: Building virtual wood objects

Virtual Handcrafting

+ Pick up & Move
  - Solenoid: to provide force feedback
  - Pinch
  - Move
  - Release

+ Cut
  - LED: to indicate when users can cut virtual objects
  - Tactile switch: to detect whether the device is pressed to the table or not
  - Press against the table
  - Slide
  - Release to cut

+ Join
  - Accelerometer: to detect the swinging speed
  - Put objects together
  - Hit
  - Done!

The user interface of most 3D modeling software is often complex and not suitable for novice users.

Our solution

[ToolDevice]

A set of interactive devices that uses hand tool metaphors

[TweezersDevice]
Pick up & move virtual objects!

[KnifeDevice]
Cut virtual objects!

[HammerDevice]
Join virtual objects!

Demonstration: Building virtual wood objects

Pick one of the primitives to start building!

Pick unneeded objects into the trash bin to discard them!

a mixed reality (MR) 3D modeling system that imitates real-life woodworking

Solenoid: to provide force feedback

LED: to indicate when users can cut virtual objects

Tactile switch: to detect whether the device is pressed to the table or not

Accelerometer: to detect the swinging speed

Press against the table

Slide

Release to cut

Put objects together

Hit

Done!

http://www.rm.is.ritsumei.ac.jp/english/