

SonicSurface

Touch-Enabled Interactive Mirrors Using Sound-Based Localization

Team Brogrammers

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Convenience



Multitasking



Fun



Problem definition

Most of the conventional
smart mirrors **do not**
support touch interaction

Problem definition

Interactive smart mirrors
require **expensive** touch
surfaces

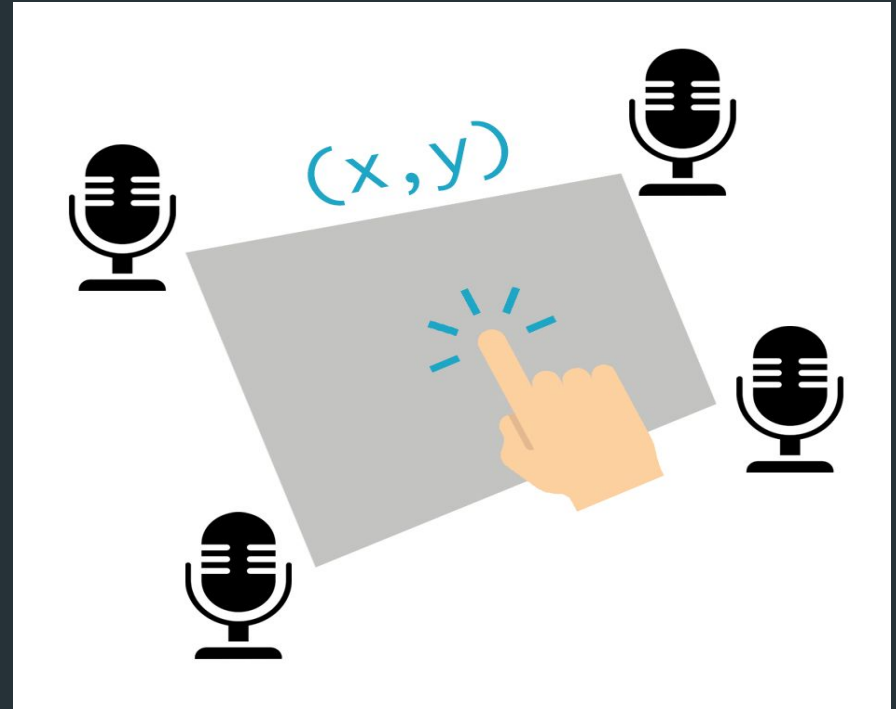
They end up costing more
than **\$1000**

How Might We ... ?

Support acceptable quality of touch interaction in mirrors by making use of cheap hardware

Sound-Based Localization

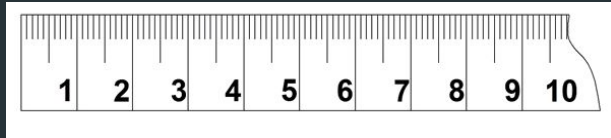
Detect position of the tap
based on the sound
produced



Accurate(ish) and Very Cheap

Sub-centimeter tap
accuracy is achievable on
solid surfaces

Microphones cost < \$10



SonicSurface

Breathing Life into Mirrors
through Sound . . .