

TAXY

Gives your thumb a lift.

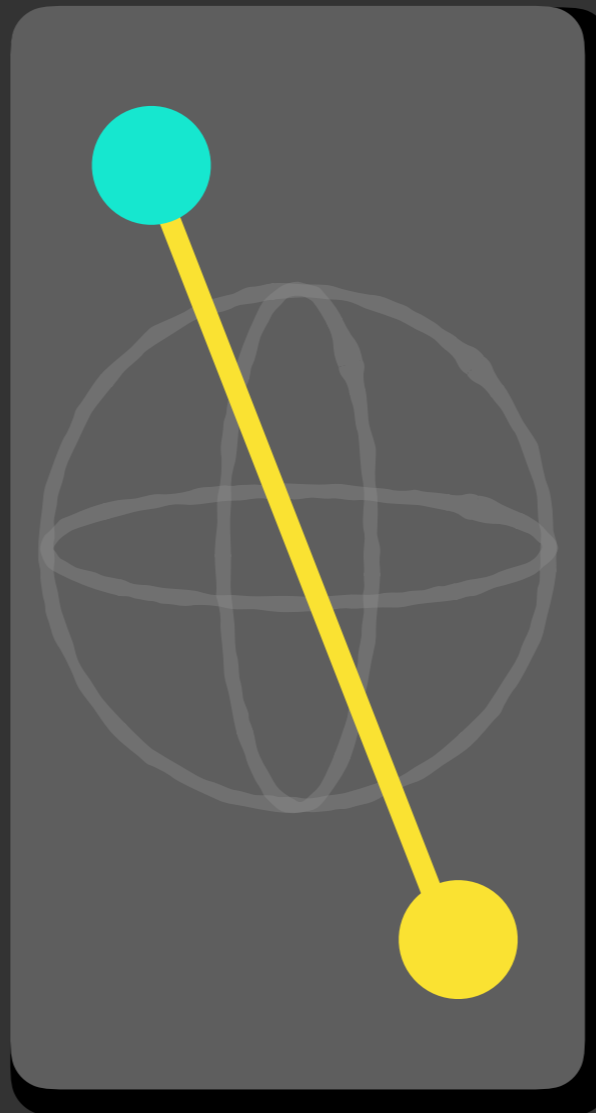
Julia Hafner

LOGLINE

TAXY is a reachability feature to facilitate one-handed interaction with smartphones.

Once activated by a flick gesture, TAXY generates a new virtual cursor, determined by the user's thumb position and the current values of the accelerometer.

Distant elements can easily be reached - even on a large screen.



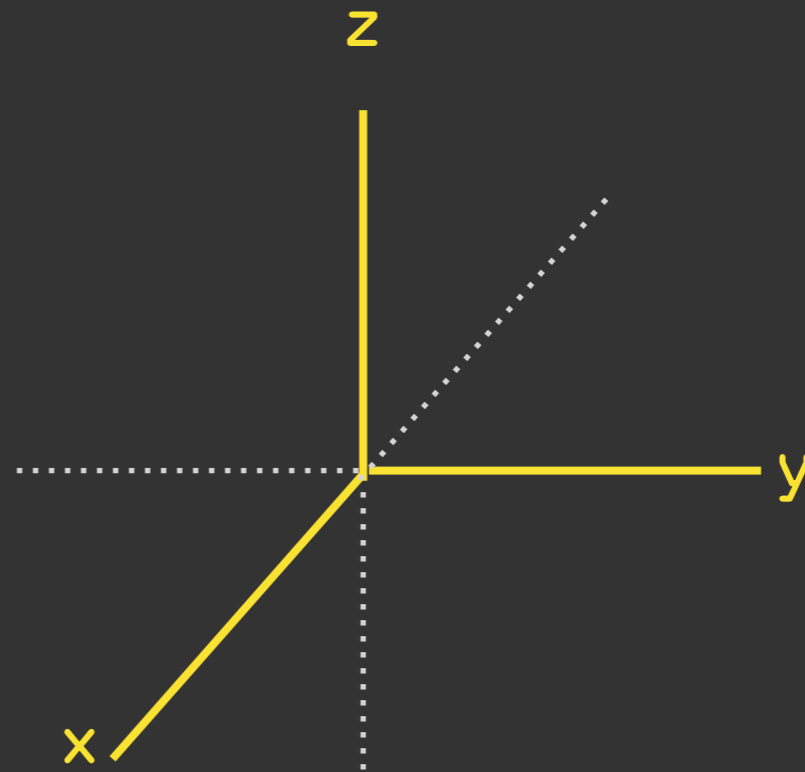
Tilt



Acceleration

X-Axis

Y-Axis





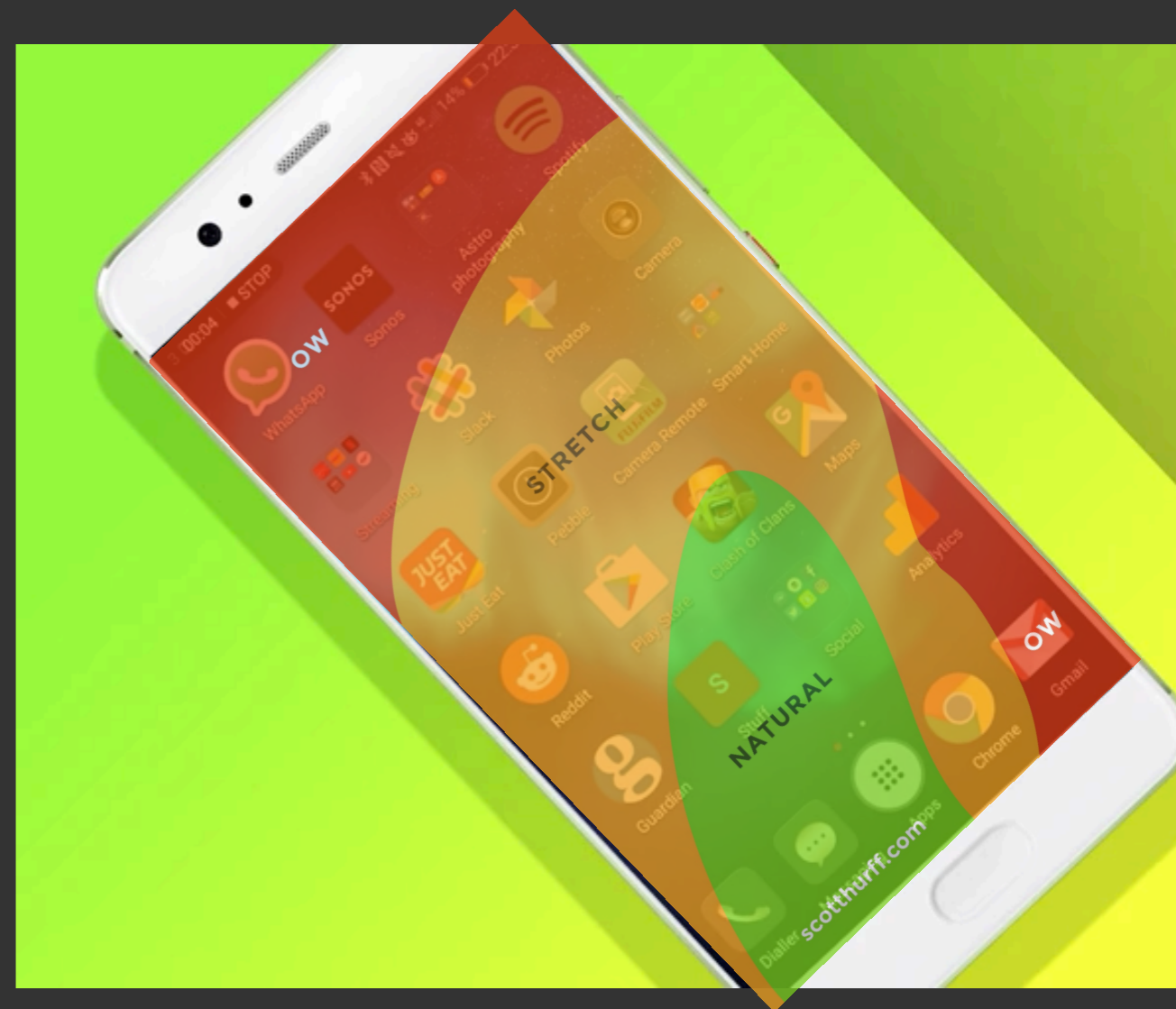
APPLE

Reachability

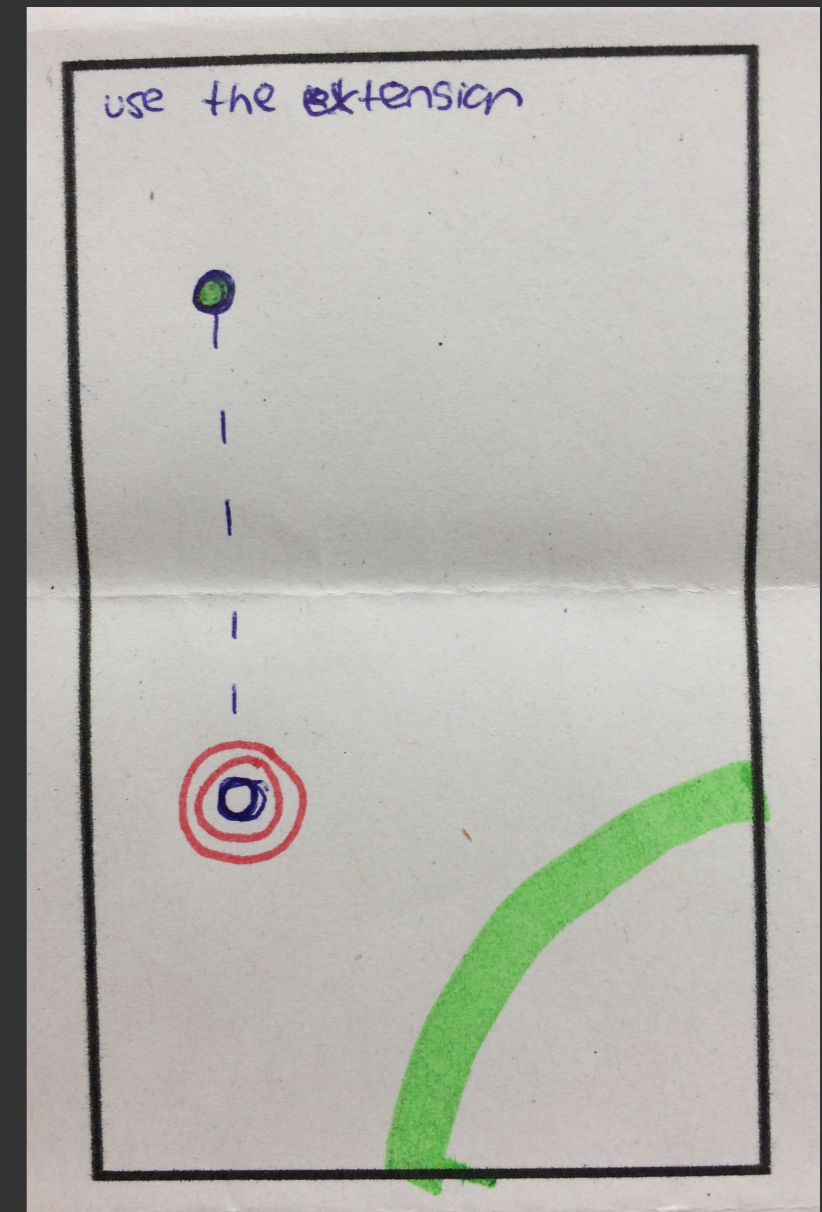
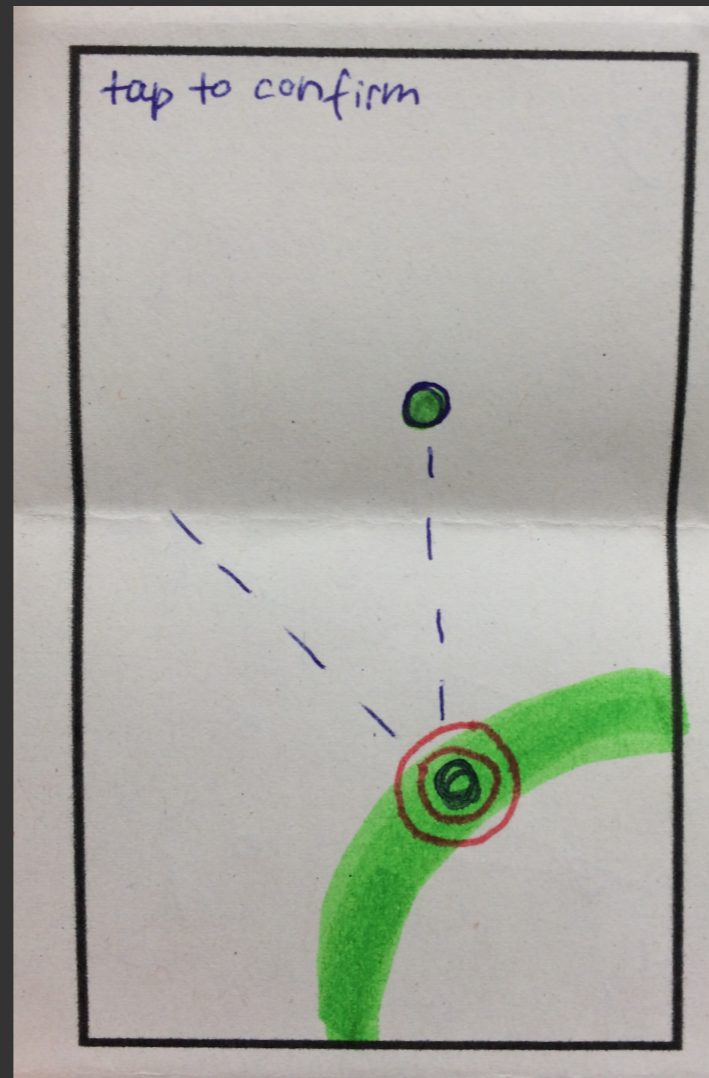
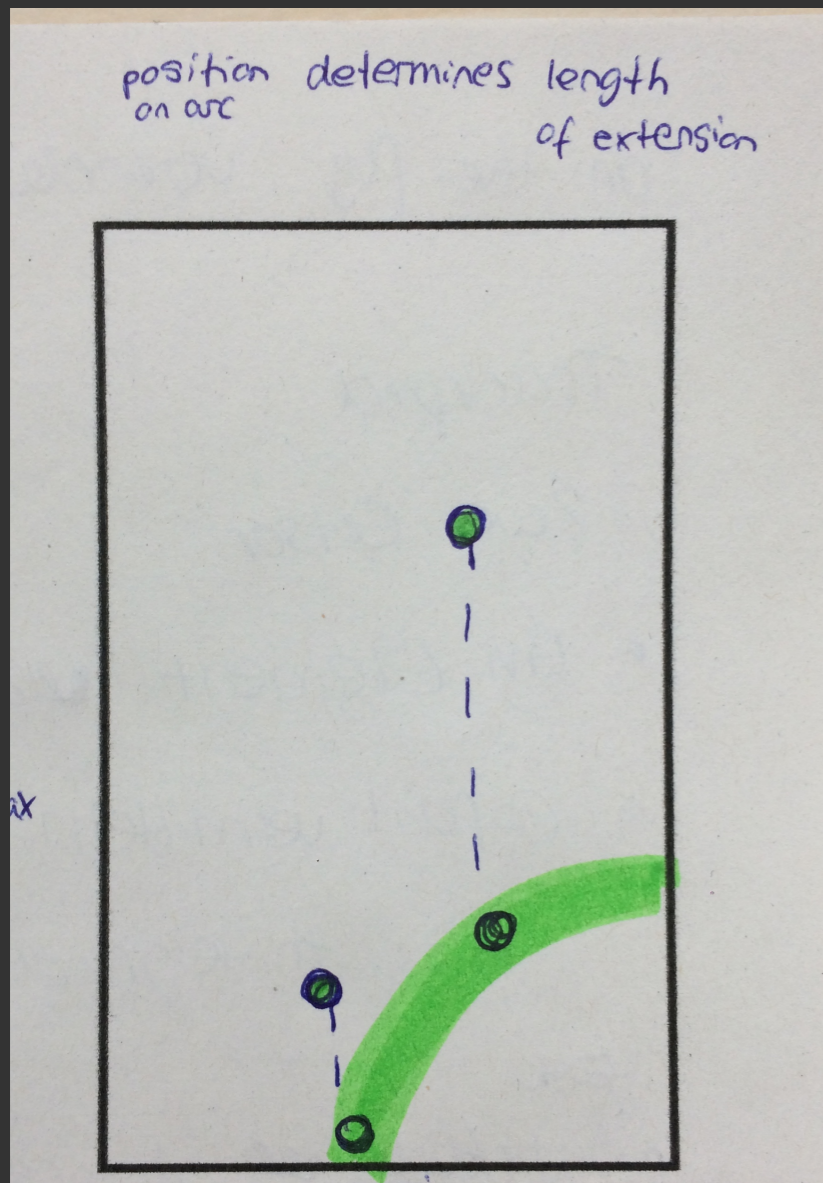


HUAWEI

Mini Screen View

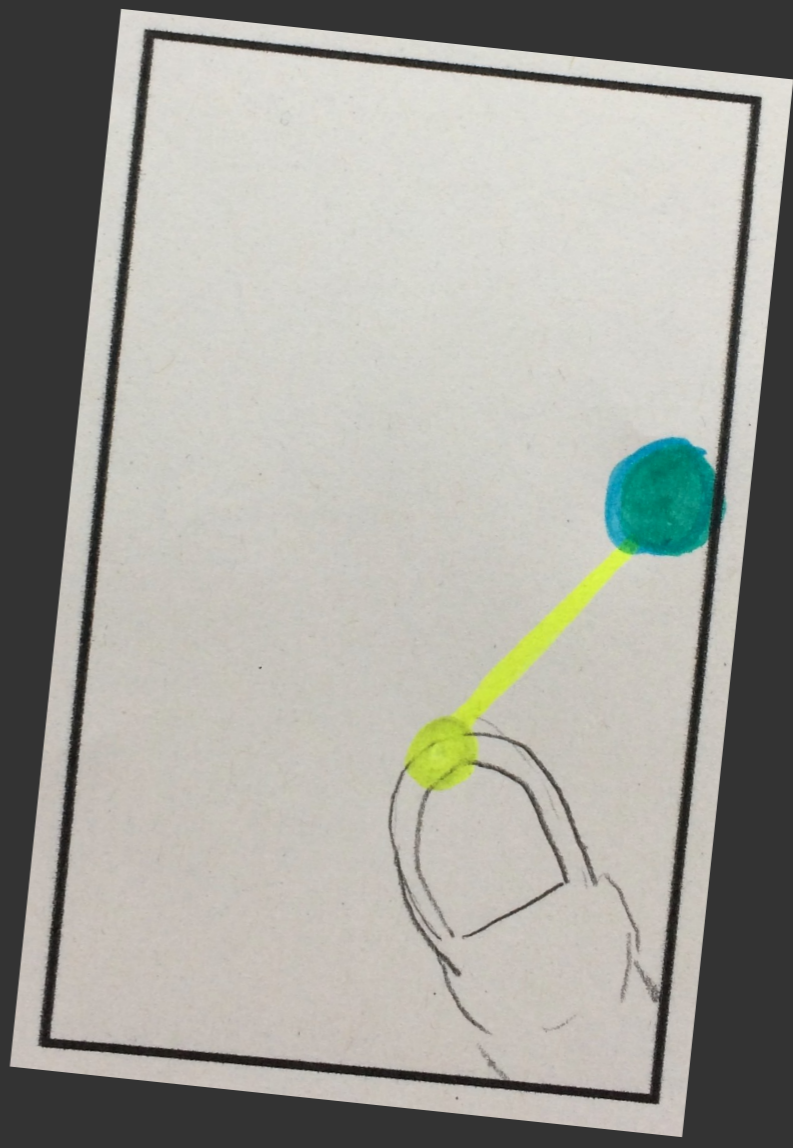
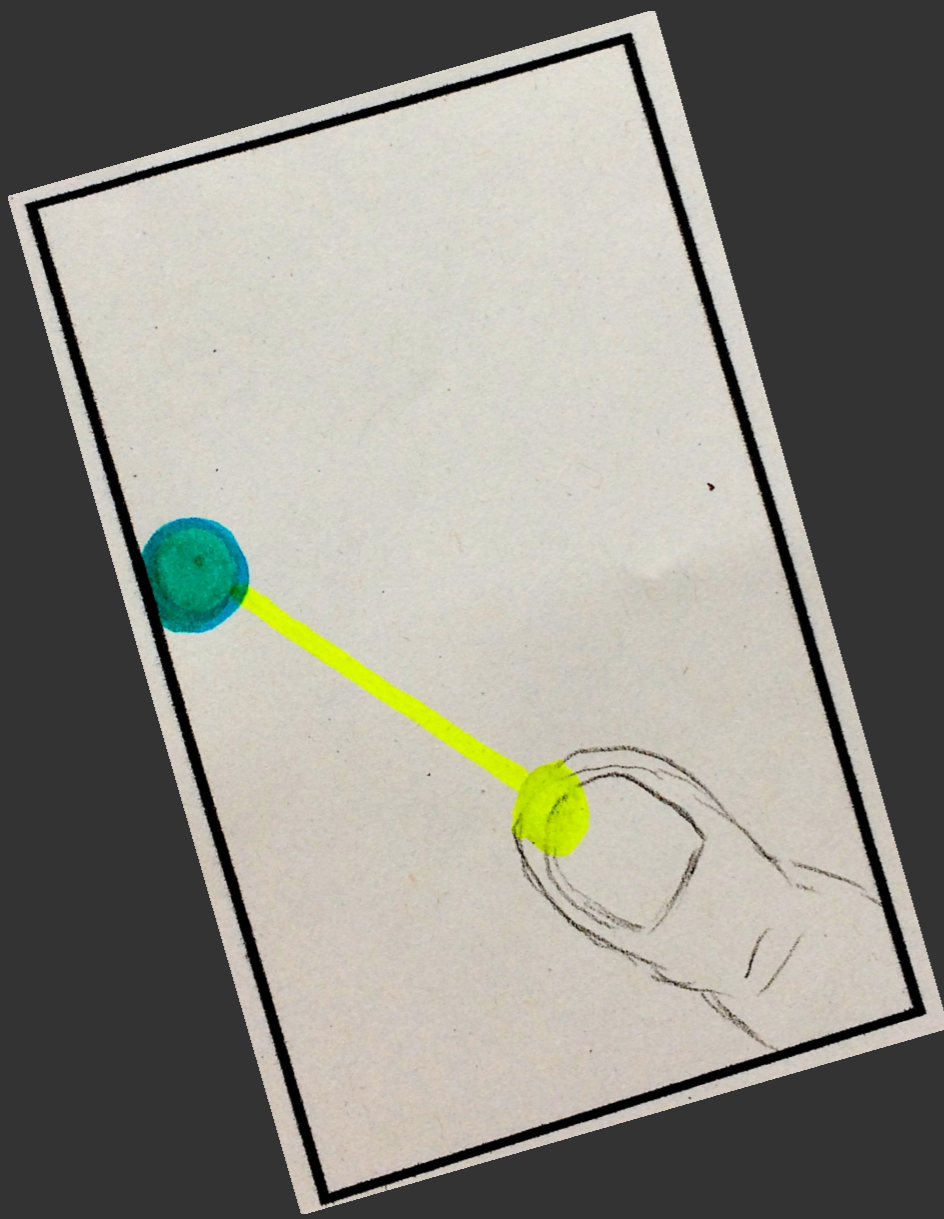


SKETCHING

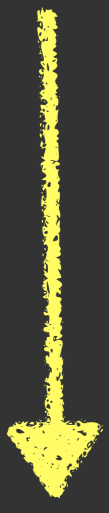
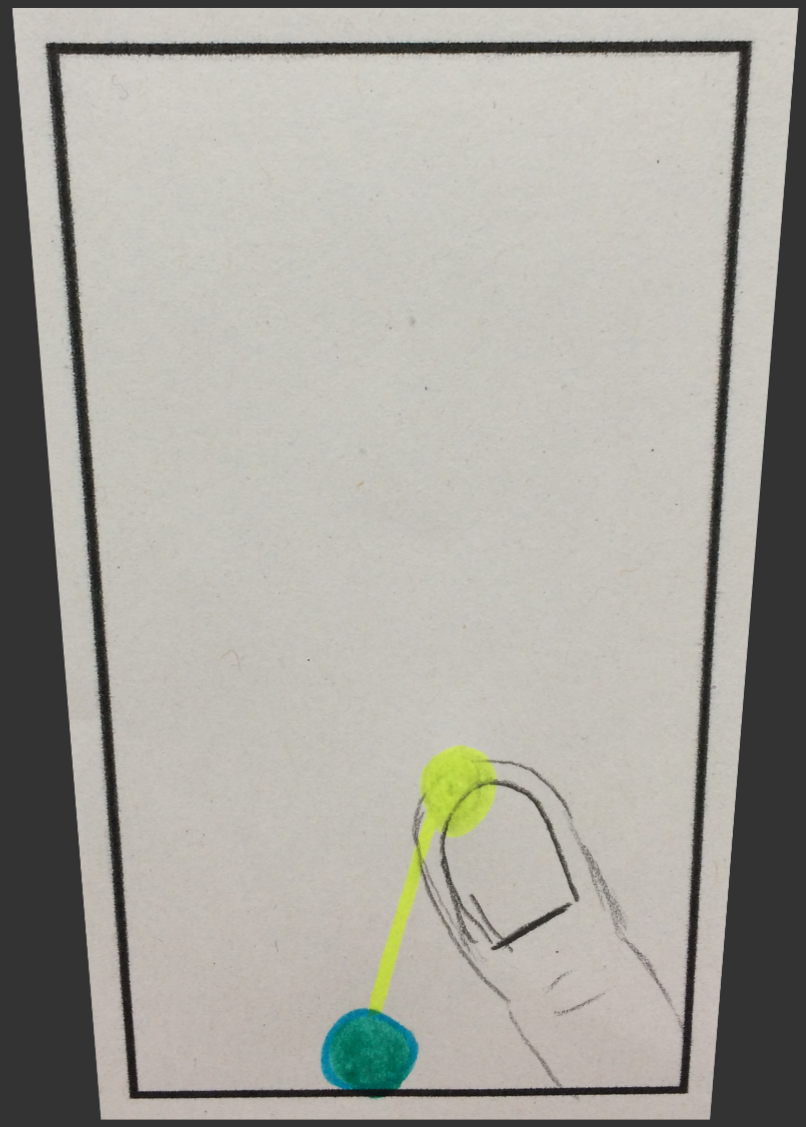
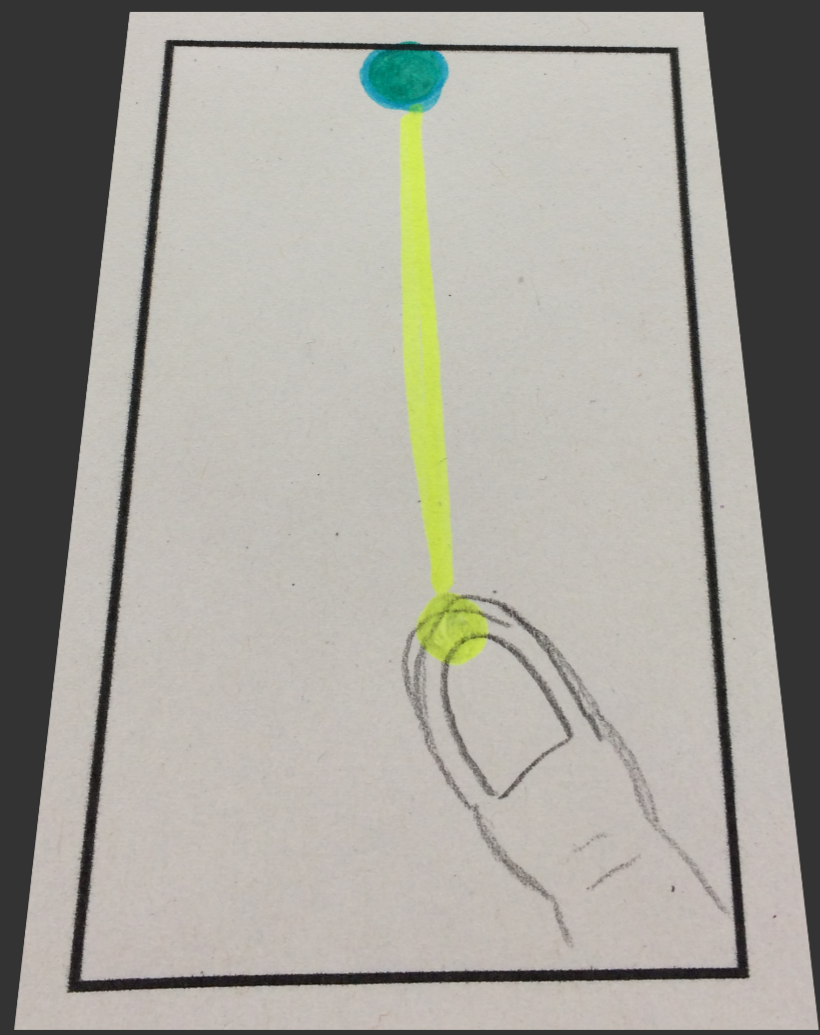


Problem: How to adjust on the fly?

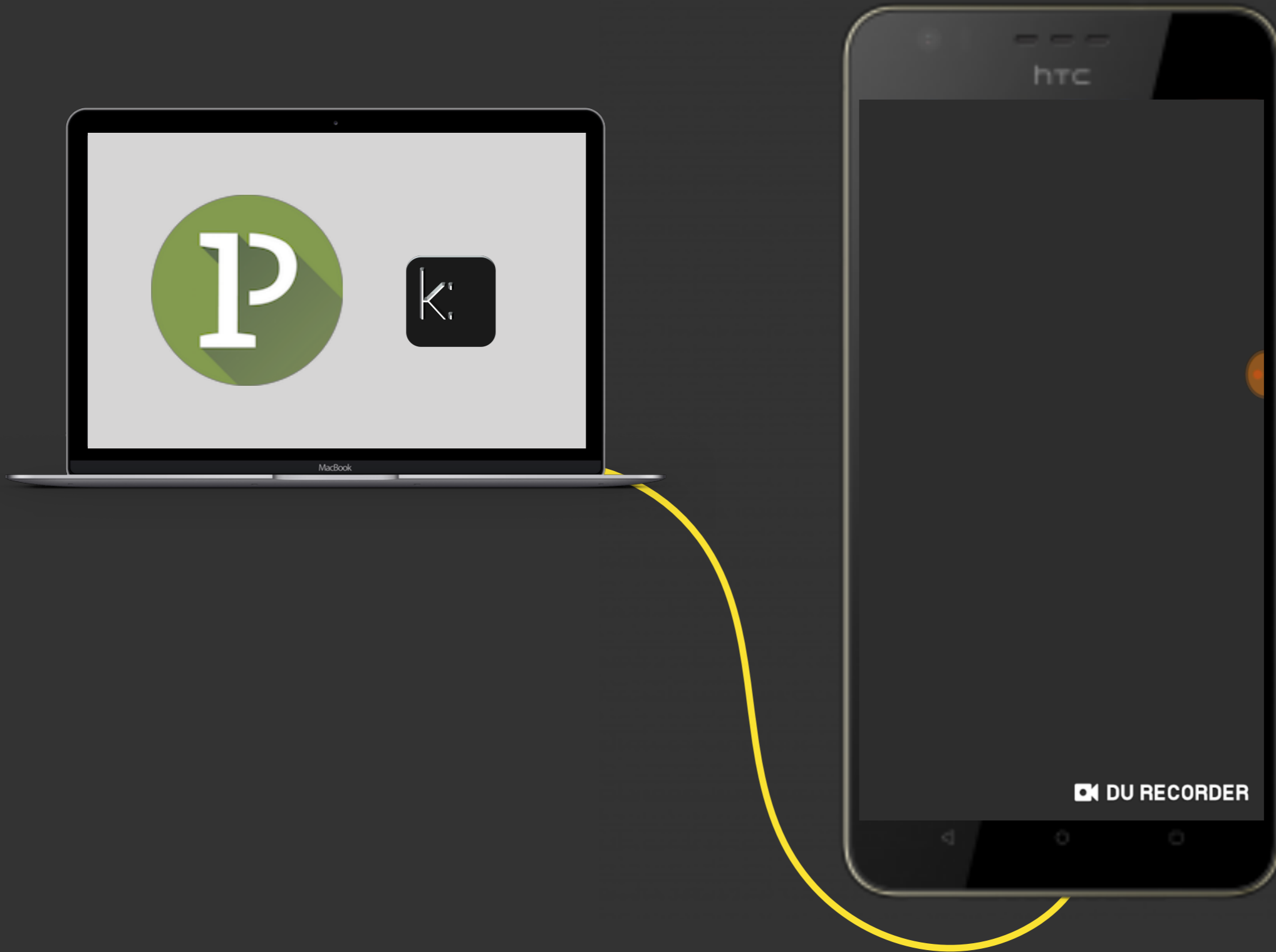
X-TILT



Y-TILT

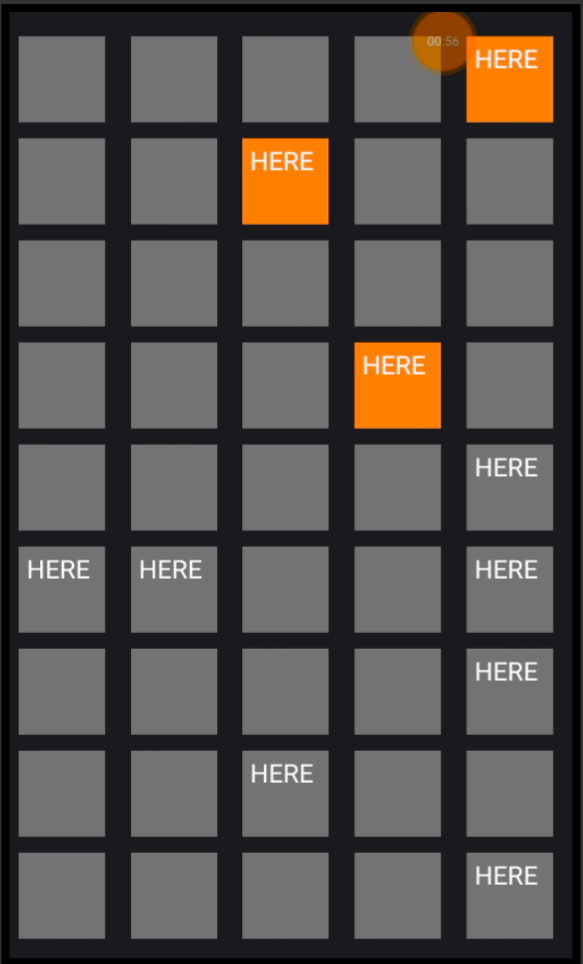


DEVELOPMENT



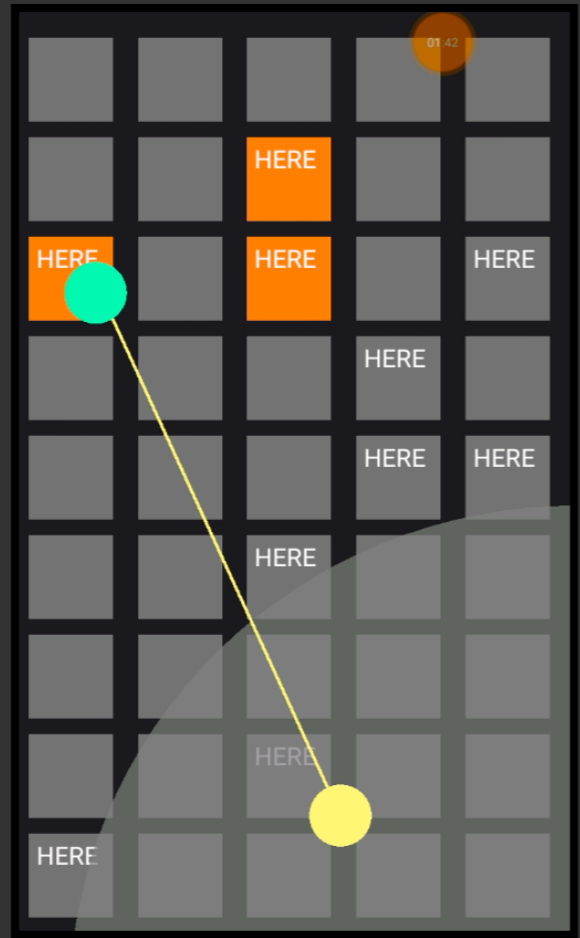
TASKS

1a



Select Rectangles
(Touch only)

1b



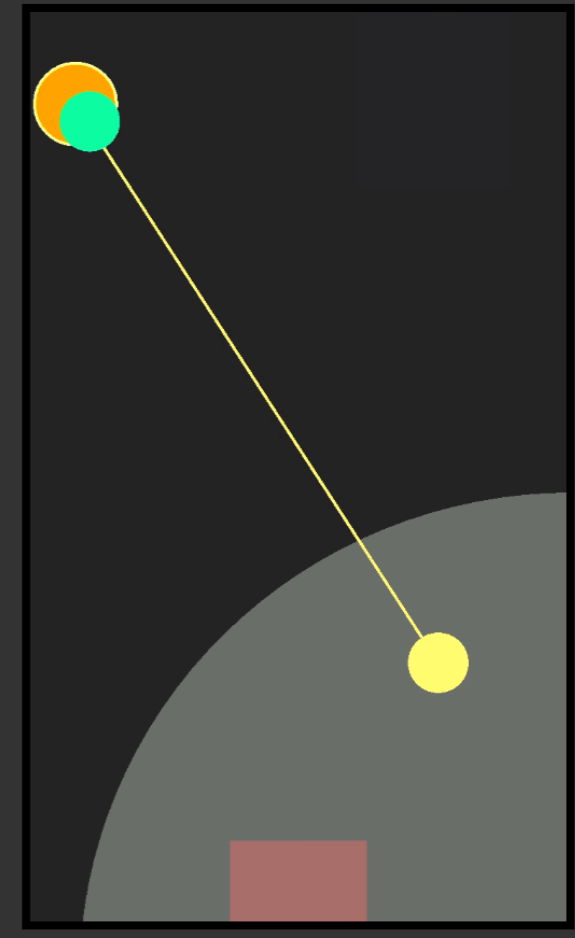
Select Rectangles
(Touch + TAXY)

2a



Delete Ellipses
(Touch only)

2b



Delete Ellipses
(Touch + TAXY)

USER TESTS

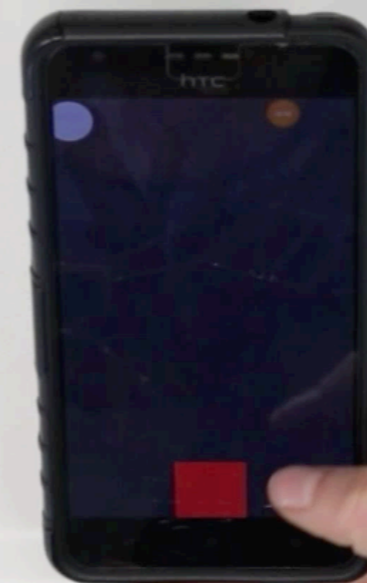
2a

Delete Ellipses
(Touch only)



2b

Delete Ellipses
(Touch + TAXY)



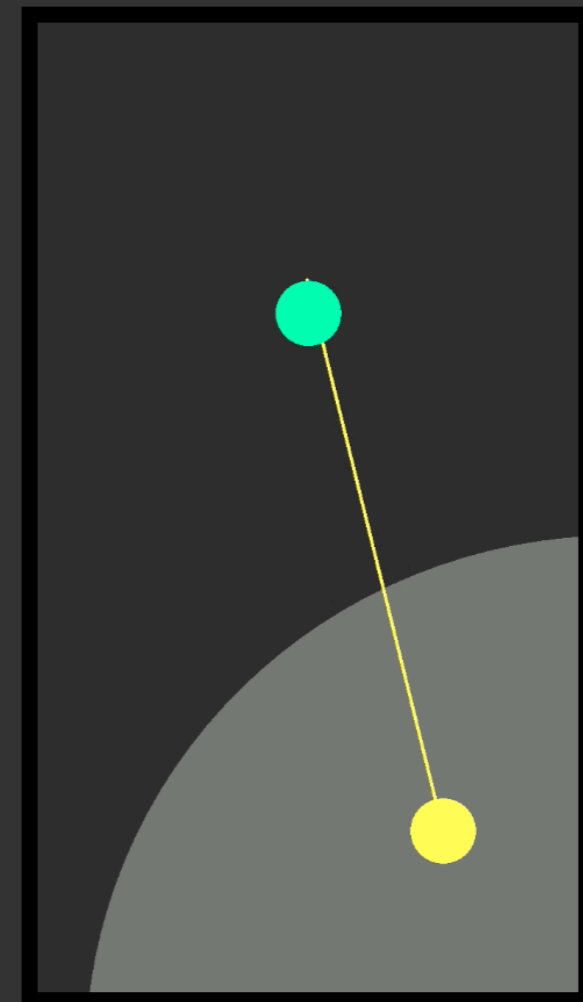
LIVE DEMO

RESULTS

- ✗ not necessarily faster than normal touch
 - ✓ but more comfortable, less risky
 - ✓ easy to learn, intuitive
- more suitable for drag & drop than selection task

IMPROVEMENTS

- new activation gesture
- add a “magnet”
- minimalistic design



THANKX