tui (formerly TouchAll)

A Multi-Touch, Gestures, and fiducials Framework for ActionScript 3.0

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Videos: `https://goo.gl/eZ90NI`
Source code: `https://goo.gl/Ue2ICZ`

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Introduction

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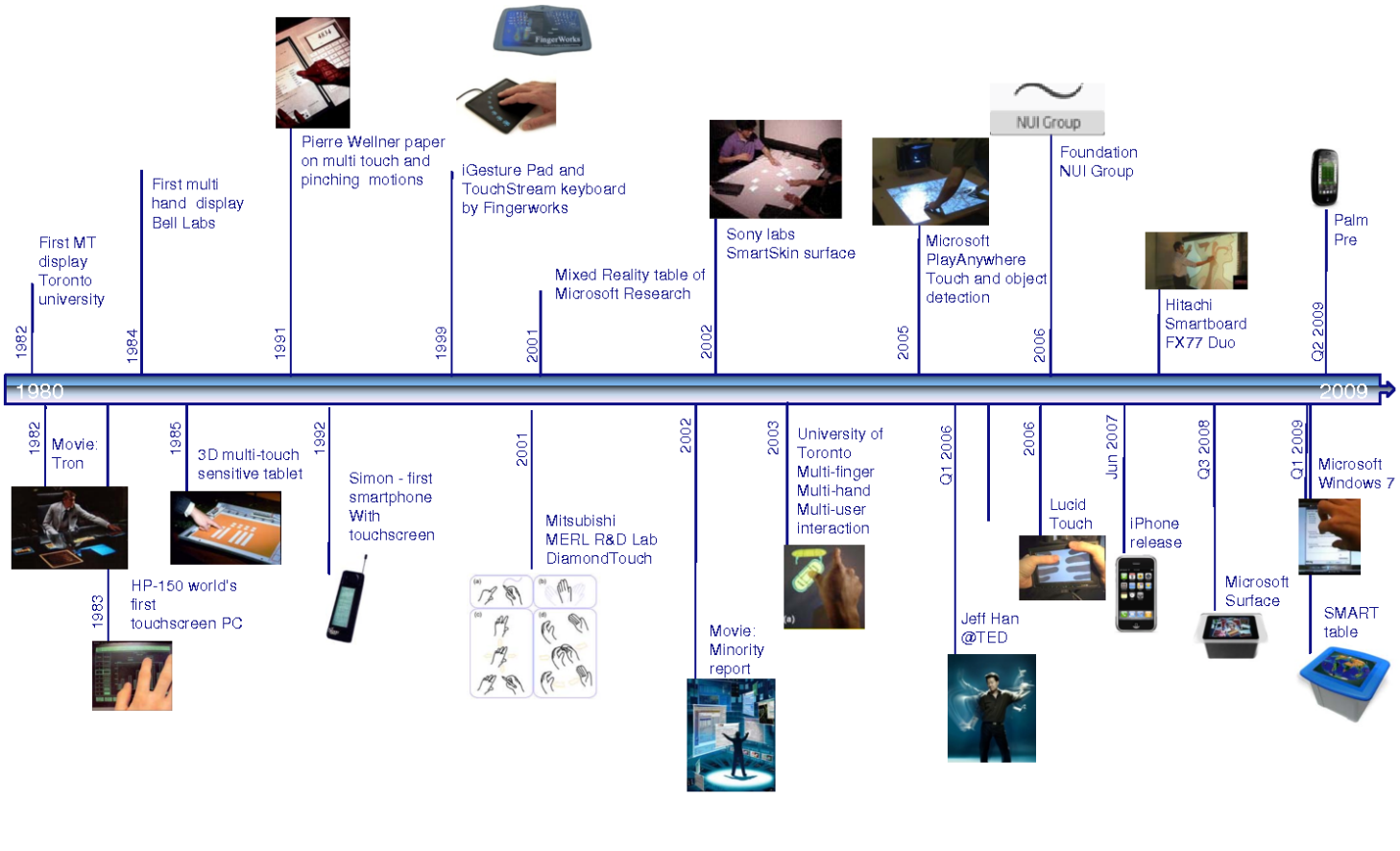
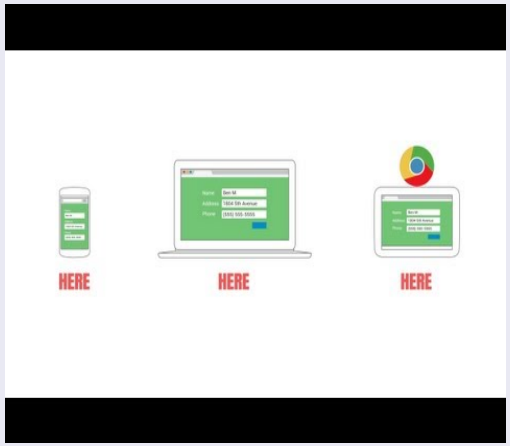
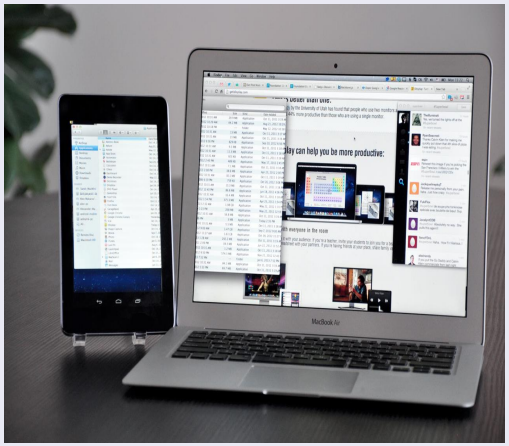
Multi-touch Brief History ...



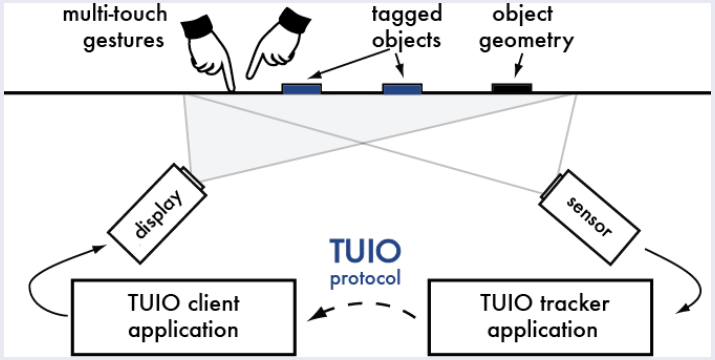
The Future is Interface Integration!





Building an Optic Touch-table

1. Build Touch-table (MTMini)



https://goo.gl/RvtIIv

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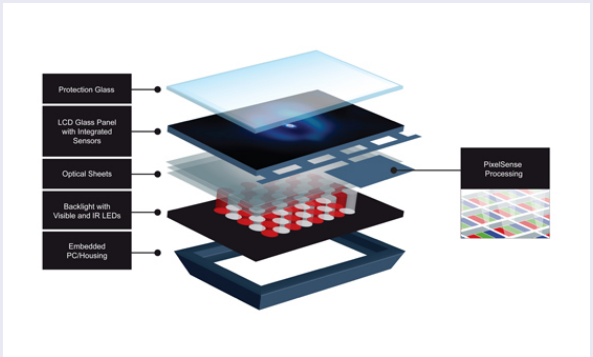
2. Add display to multi-touch table (See through LCD Screen)



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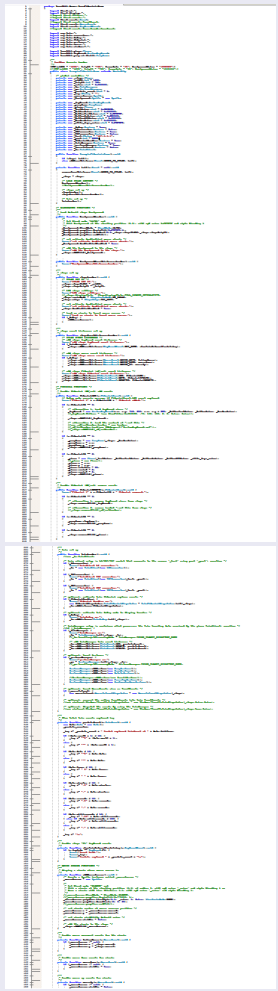
Why tui?

Before tui



After tui

tui requirements

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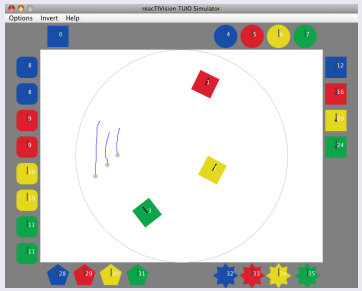

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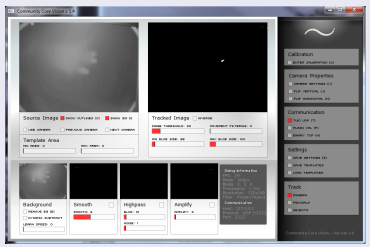

https://goo.gl/eDPr9z

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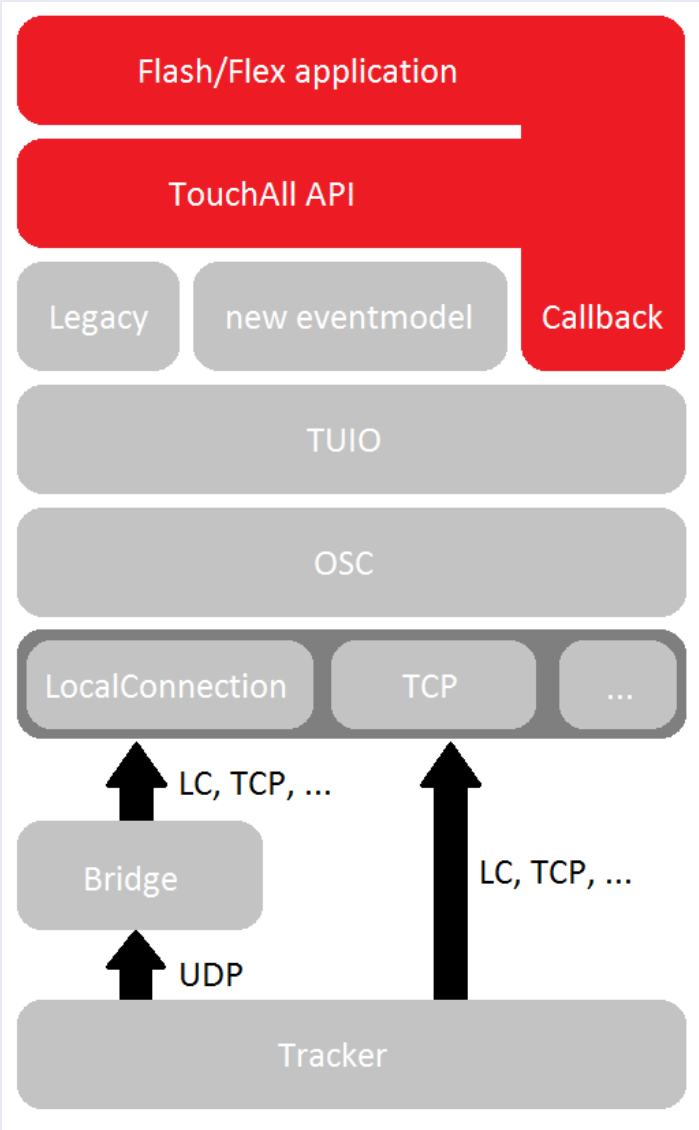
tui architecture

Touch All API
Functions to, stage setup, tuio connections, gestures, multi-touch, and fiducials widjets for specific fiducial ids

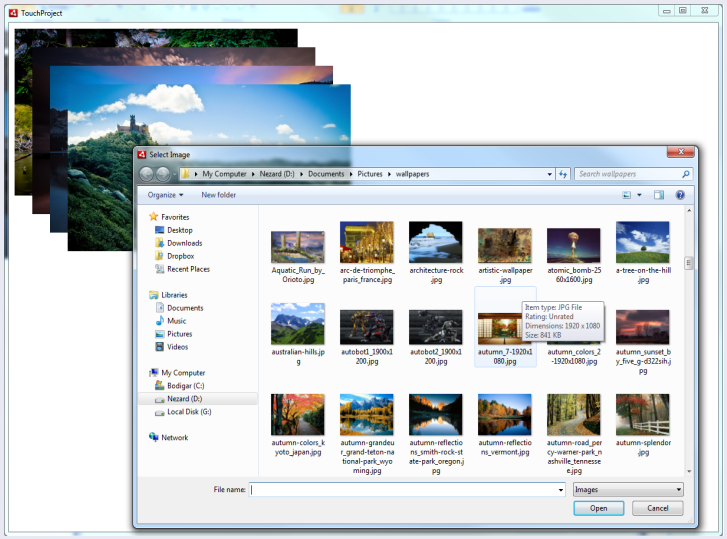
tuio as3 library
Blob, cursor, object/fiducial events
LocalConnection, TCP, and UDP sockets
OSC and Tuio Protocols

Flex SDK
Gesture, Mouse, and Keyboard events
Flash/AS3 libraries

AIR 2.* SDK
Stage additional setup options
UDP support



tui Demos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New folder
Favorites
Desktop
Downloads
Dropbox
Recent Places
Libraries
Documents
Music
Pictures
Videos
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Open
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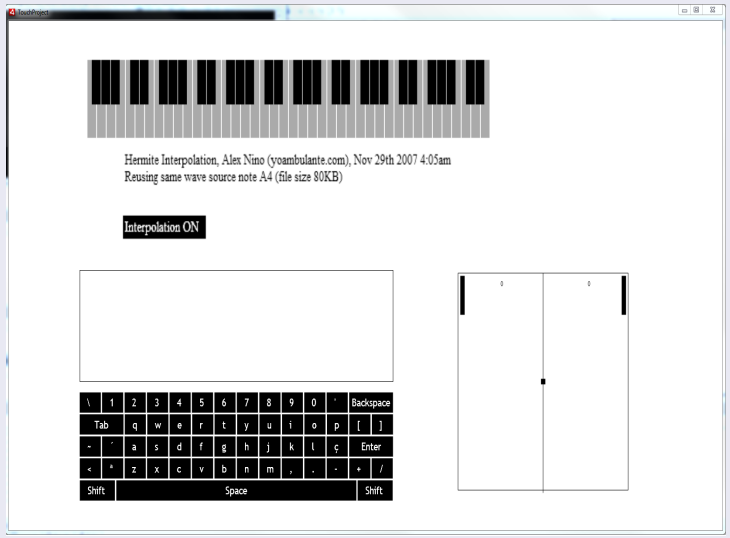
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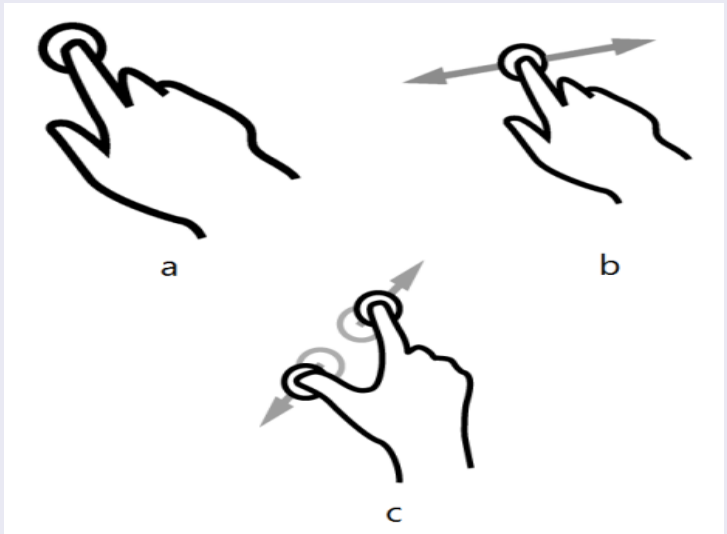
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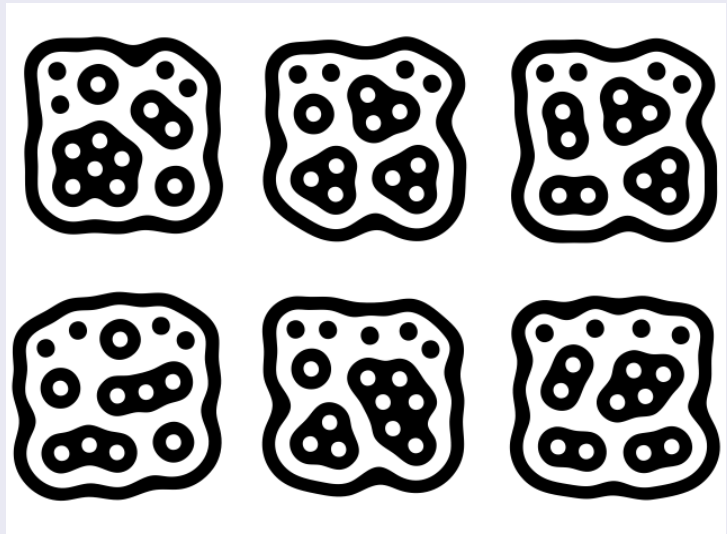

Conclusions

- The time required in developing applications for multi-touch devices can be shortened using tui.
- tui allows to use fiducials and multi-touch through UDP, TCP, flash LocalConnection all in once.
- ActionbScript-based non-free software alternatives exist, but not with native fiducial support.

Future work

- Development of tools that allow device emulation, for multi-touch, multi-mouse pointer, and platform independent application testing.
- Include in the tui more native widgets for specific fiducials.
- Include in the tui support for 3D object loading and gesture based manipulation.
- Integrate the tui as a module of an 2D/3D Action-Script 3.0 game engine.

tui

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Questions, Comments, Observations,
Twitter twitts, Facebook like's/posts/comments???