User Interaction: Intro to Multi-Touch

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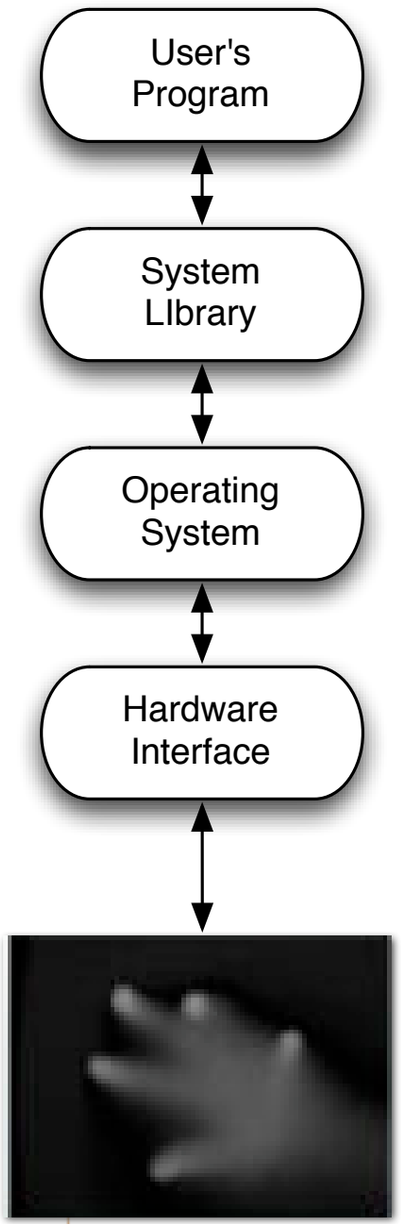
INF 133 Fall 2011

Getting Multi-Touch up and Running



- Your program
- MT4J

  TUIO
- Community Core Vision
- web cam

Getting Multi-Touch up and Running

- Community Core Vision (http://ccv.nuigroup.com/)
  - is a open source/cross-platform solution for computer vision and machine sensing. It takes an video input stream and outputs tracking data (e.g. coordinates and blob size) and events (e.g. finger down, moved and released) that are used in building multi-touch applications.

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- MT4J
  - MT4j - Multitouch for Java™ - is an open source Java™ development platform, created for rapid development of graphically rich applications. MT4j is designed to support different kinds of input devices with a special focus on multitouch support.
  - http://www.mt4j.org

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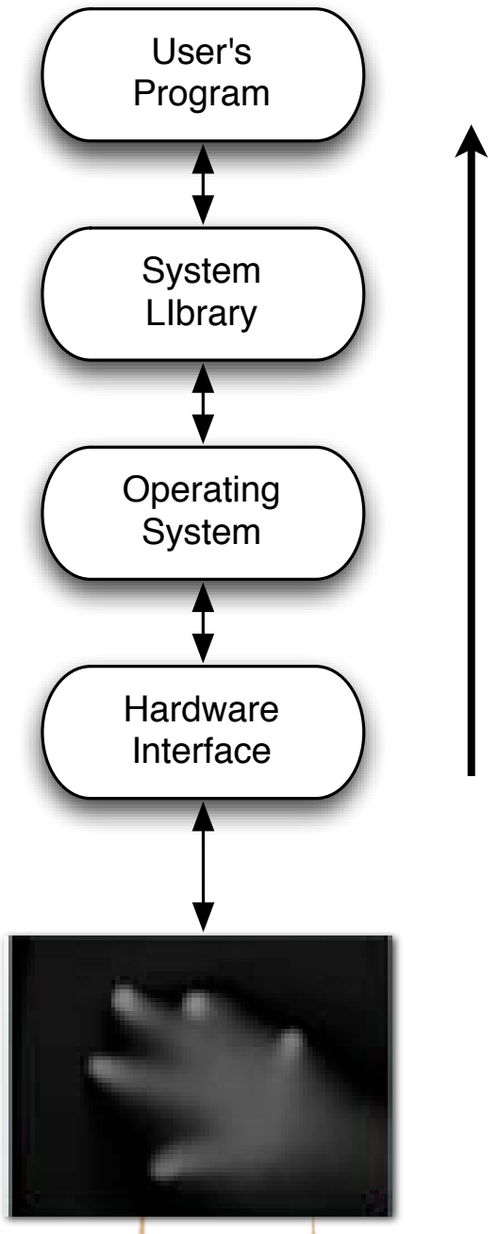
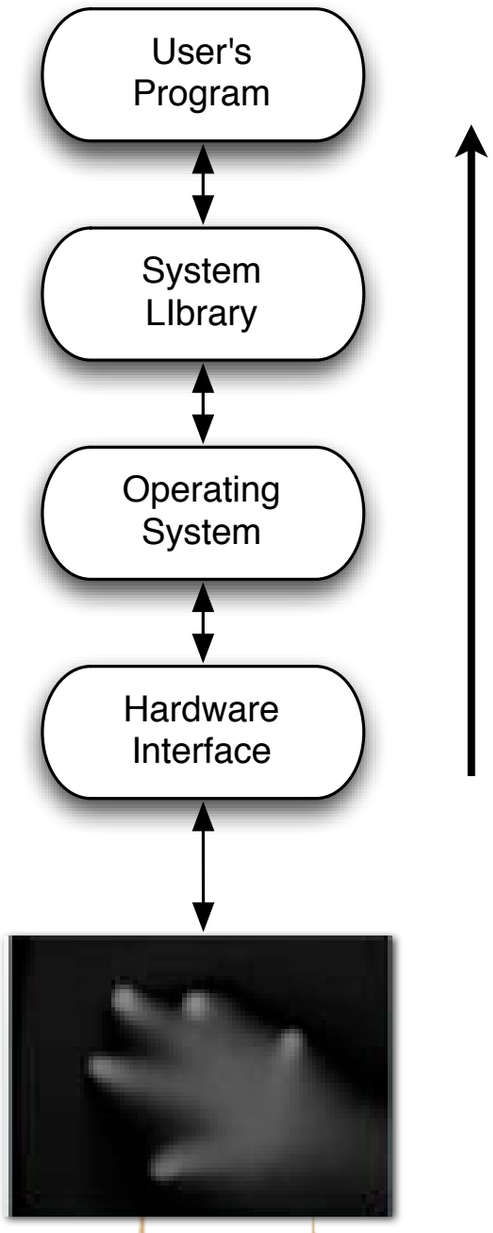
- TUIO
  - TUIO is an open framework that defines a common protocol and API for tangible multitouch surfaces. The TUIO protocol allows the transmission of an abstract description of interactive surfaces, including touch events and tangible object states.
  - http://www.tuio.org/

Getting Multi-Touch up and Running: Demo #1



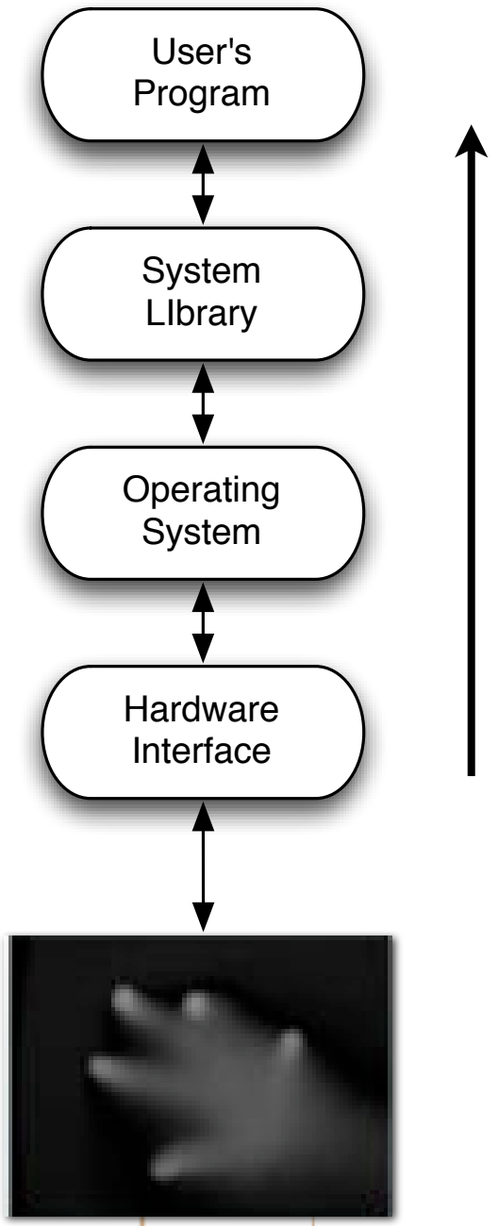
- To a flash application that is multi-touch aware
- Through a TUIO server
- Going through CCV
- Video from recorded gray scale

Getting Multi-Touch up and Running: Demo #2



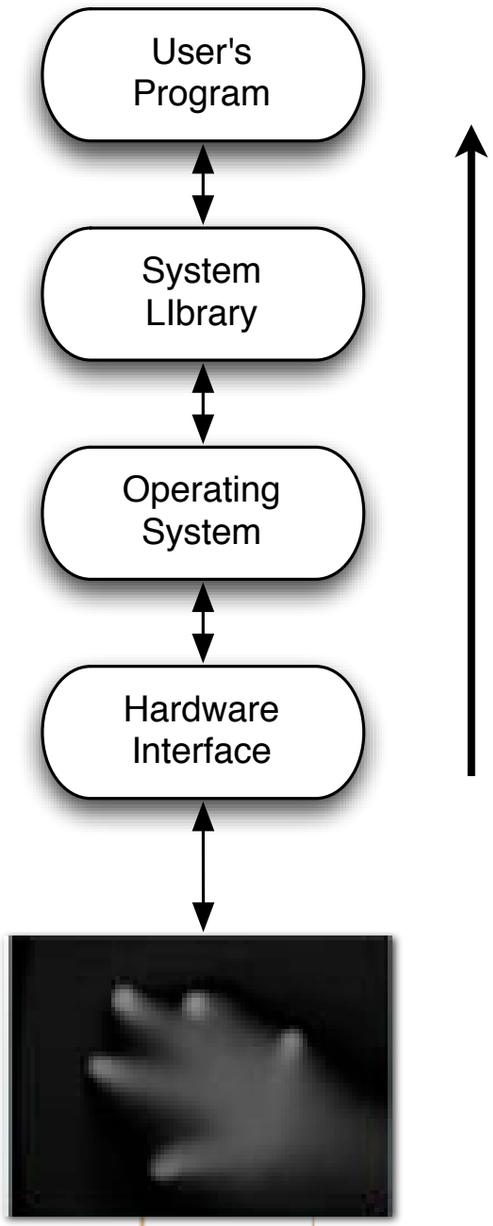
- To a flash application that is multi-touch aware
- Through a TUIO server
- Going through CCV
- Live video

Getting Multi-Touch up and Running: Demo #3



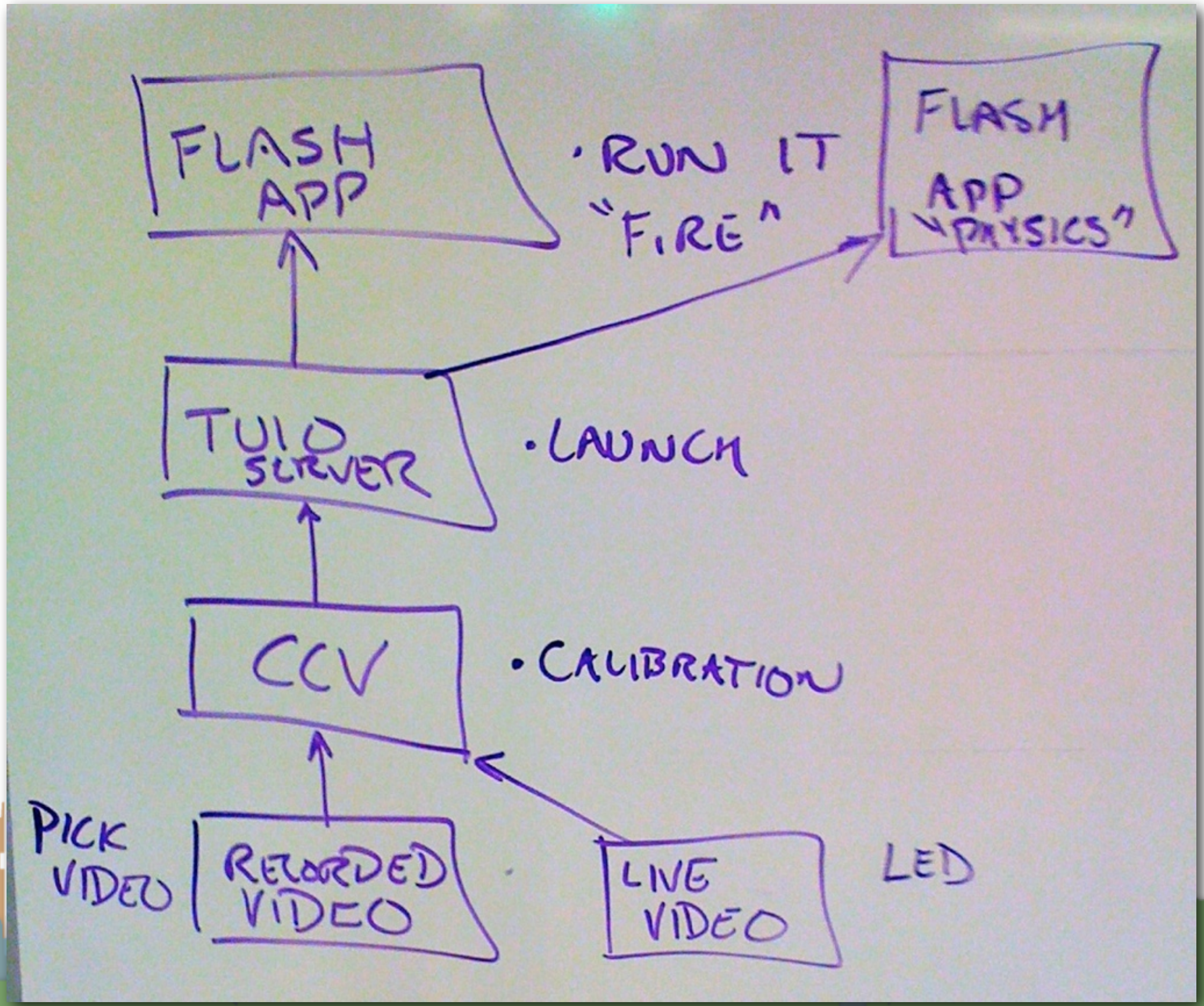
- To a MT4J application that is multi-touch aware
- Going through a MT4J TUIO server
- Multitouch from a TUIO simulator

Getting Multi-Touch up and Running: Demo #4



- To a MT4J application that is multi-touch aware
- Going through a MT4J TUIO server
- Live multitouch from iPhone

Getting Multi-Touch up and Running



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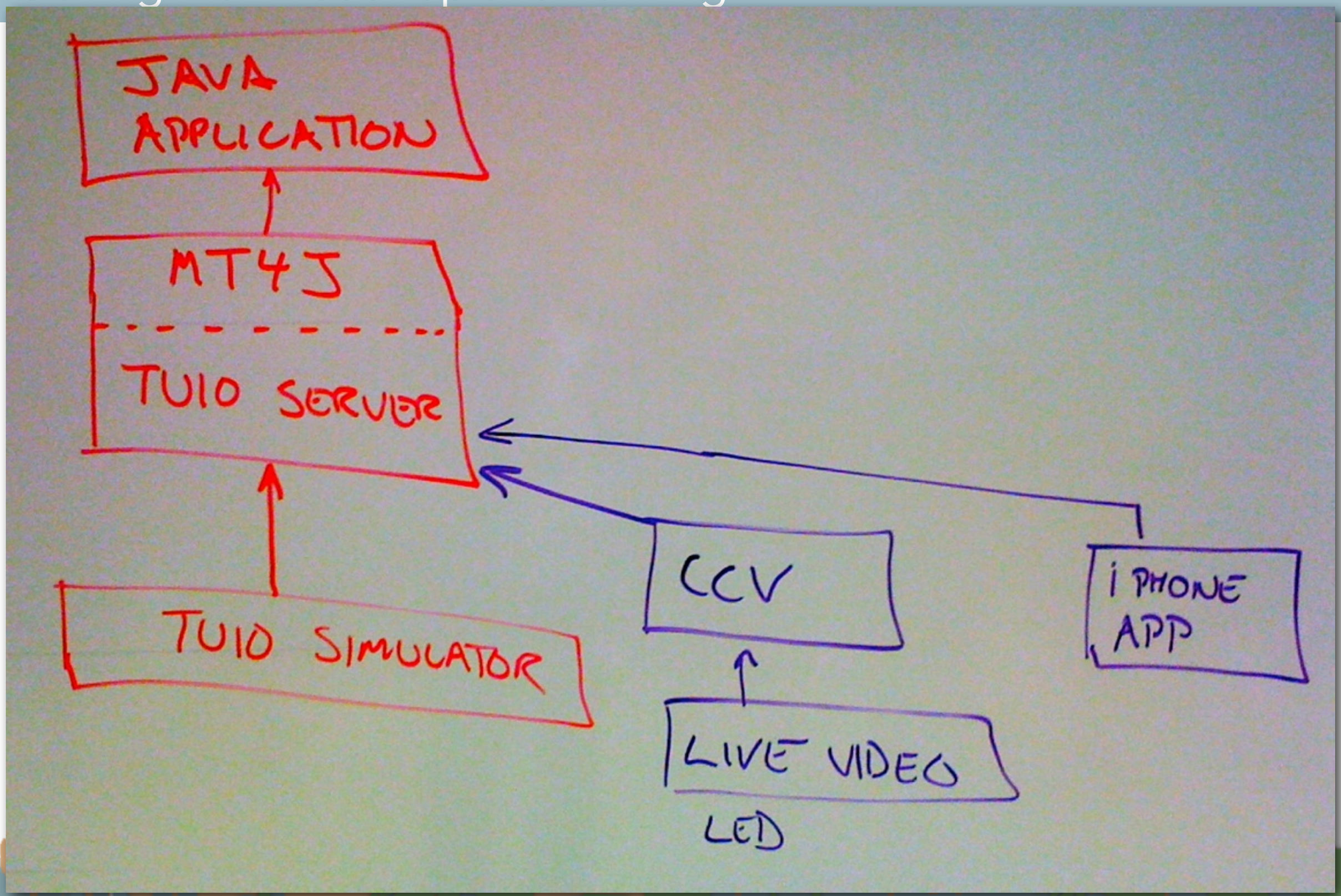

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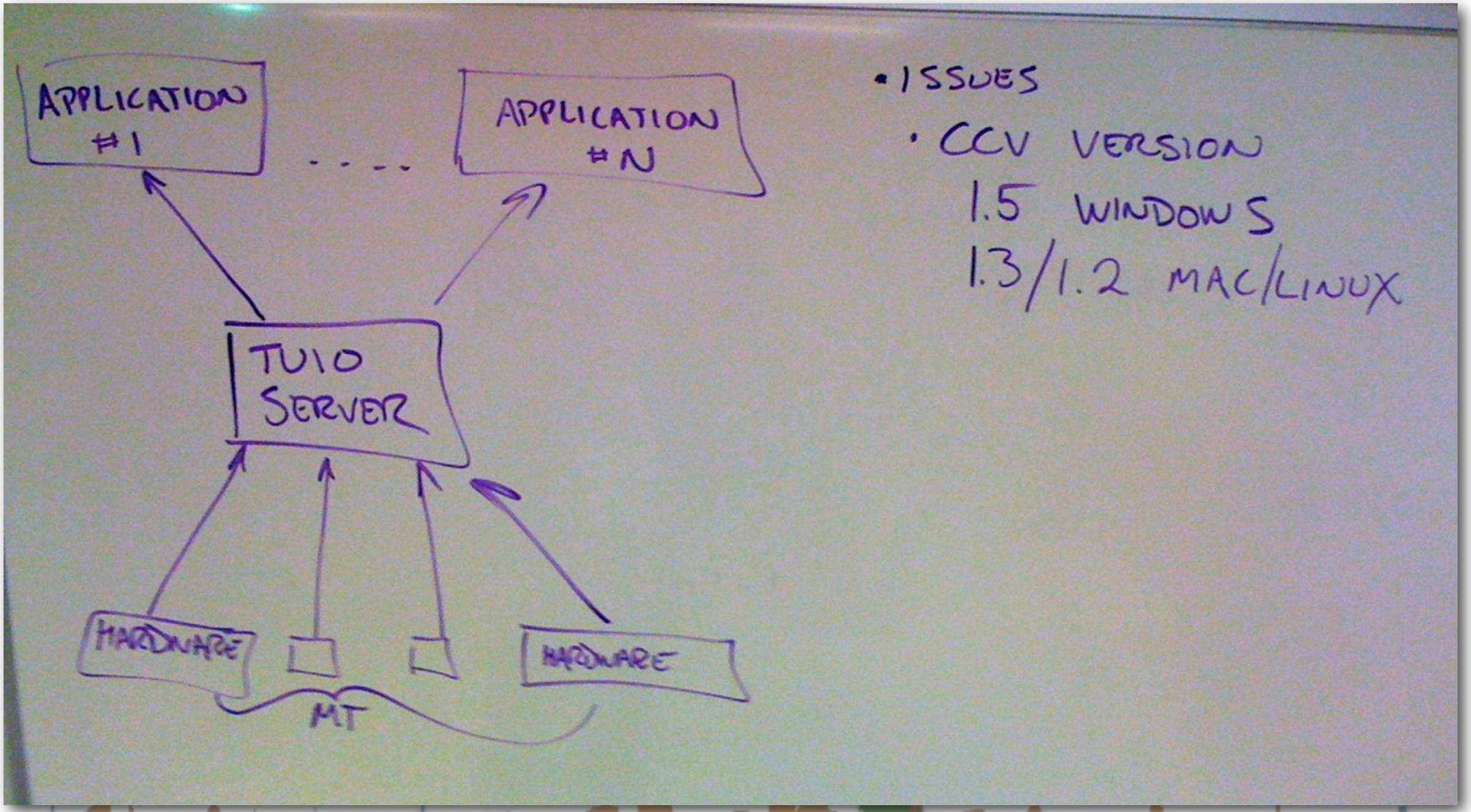

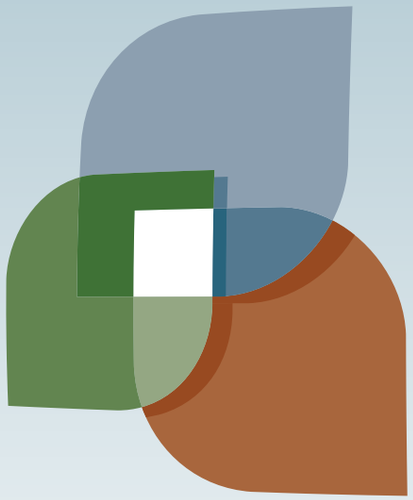

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Monday, October 31, 11