watch & touch
Project Presentation
by DialecTech
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Problem Definition

Technology in education?

Commonly, level of interactivity not very high...

- displaying slides with projector
- no annotation capabilities, even acetate is better
Problem Definition

Solution: Interactive Whiteboard (IWB)

A whiteboard you can "play around" with

Many hardware & software solutions exist, but...

Existing interactive whiteboard solutions are either:

- expensive
- have limited capabilities
- cumbersome, difficult to use
- platform restricted
## Problem Definition

Are existing interactive whiteboard solutions EXPENSIVE?

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Current Price</th>
<th>Unit of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Pro Range 87” ActivBoard with Fixed Stand and LCD short throw projector – 2 x Teacher &amp; 2 x Student ActivPen 50 included. ActivInspire Professional Edition available FOC</td>
<td>$4,199.30</td>
<td>each</td>
</tr>
</tbody>
</table>
Our Goal

Build on Johnny Chung Lee's ideas

Create an IWB system which is...

- low cost (in terms of hardware)
- free & open source software
- multi-platform
- user friendly

Allow students to interact further

- collaborative drawing
- accessing the IWB
Watch & Touch System

Projector & Board
Watch & Touch System

WiiMote (IR Sensor)
Watch & Touch System

IR Input Devices (IR Pen, IR Ring)
Watch & Touch System

Computer
Watch & Touch System

Software
Watch & Touch System

Network
(for Collaboration)
Components of watch & touch

Hardware Components:

• Infrared Pen or "Infrared Rings"
Components of watch & touch

- Wiimote
- Projector
- Instructor's machine
- (Optional) tablets for students
Components of watch & touch

Software Components:
- IWBC - interactive white board client
- CBC - collaboration client for students

Open Source (GPL v2)
- http://code.google.com/p/watchntouch

Built with the Qt framework
- multi-platform (Ubuntu and WinXP as test OSes)
- good choice for UI-centered apps
Features of the System

Content display and annotation

• presentations, webpages, videos
• auto-recall previous annotations
• export for handouts
• Google Docs support for presentations
• screencasting the whole operation
Features of the System

Sketching

Multi-touch gestures

Collaborative drawing

- students can join from own devices
- e-mailing the work
- instructor can collect all work automatically
Scenario 1
Scenario 2
Scenario 3
Thank you for listening!

Visit us:
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Questions?