Interactive Electronic Hopscotch Board

Team Recess (Lose the Chalk)
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Customer: Ages 4-14 & young at heart
Project Overview

- Pressure Sensors
- LEDs
- Hopscotch Court
- \( \mu \)P
- Sounds
- LCD
- Wall power
• Materials:
  – Atmel, Pressure Sensors, LEDs, LCD, Speaker, Durable Mat Material.

Interlink

Flexiforce

Soft Membrane

Potentiometer
• Gameplay

START

Lights run up and down the middle instead of traditional throwing of the rock

Hit the initial sensor, causing the LED to stop on a square, indicating the dead square

Jump on first square

Pass

Keep jumping to final square, skipping the dead square

Pass

Turn around and head back home

Stop before the dead square, hit the square with hand, and continue

Finishing back to home square

Either next player goes or player is the winner

Next player or Start Over

Next player or Start Over

Next player or Start Over

Next player or Start Over
• Sensor Mapping
  – Alterable court
• Mat material
Current Work

• Research
• Components : Determine and Order
• Gameplay

Division of Labor

Karine  Joe
Hopscotch/Atmel/LCD Research  Force Sensor/ LED Research
Order Components  Preliminary Circuit Design
Preliminary Circuit Testing  Test/Debug coding
Gameplay design and coding  Order PCB design
PCB design  Test/Validation
Game Mat material/design  Game Board Assembly
Documentation & Presentation  Documentation &Presentation
Updated Gantt Chart

1/28/2009
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<td>X</td>
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