WriteOn Stylus App

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Senior Design 2016 - 2017
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Agenda

- Problem
- What is WriteOn
- Requirements
- Bluetooth
- Design Philosophy
- Design Implementation
- Game Demonstration
- Technologies
Problem

Concerns in preschool writing technique
Physical problems in incorrect writing techniques
The Goal

A = radial cross palmar grasp; B = palmar supinate grasp; C = digital pronate grasp, only index finger extended; D = brush grasp; E = grasp with extended fingers; F = cross thumb grasp; G = static tripod grasp; H = four fingers grasp; I = lateral tripod grasp; J = dynamic tripod grasp.
E = normal tripod grasp; F = tripod grasp, only index finger extended; D = brush grasp, H = four fingers grasp; I = lateral tripod grasp;
Writing Aids

Indent

Pocket
What Is Write-On?

- tablet/hand held device accessory
- teach proper pencil holding technique
  - imitate pencil holding
  - limited hand strength
  - muscle memory
- mobile application to be used with Write-On
  - exercises
Requirements

- Receive and interpret data from blue tooth device
- Use data from touch events to enforce correct technique
- Create multiple games and have them meet certain educational standards to be taught
Bluetooth

- Connection to iOS
- Various modules
- Device sensitivity
- Data synchronization
Bluetooth

Initial Prototype

Test Device
Hardware Demo
Our Kid Game App-Inspired Design Philosophy

- Game Simplicity
- Ease of use for UI
- "Gamification" of educational task
Ocean Explorer

- Simple game play & concept
  - collect pickups scattered around the level
  - grab enough pickups to move on to the next level
**Game Progression**

- This level is hard coded into set positions
- Varying sizes of spaces
Cave Diver (updated)
## Writing Practice

**Read and Trace:**

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(Repeat pattern)

Prezi
Bubble Game
UI Design

Three things to Note:

- Audience
- Understanding The Game Design
- Platform And Limitations
Know your Audience
Game Design

Wireframe

Unity
Hardware Limitation
Platform Used
Thank You!