Talkit++: Interacting with 3D Printed Models Using an iOS Device

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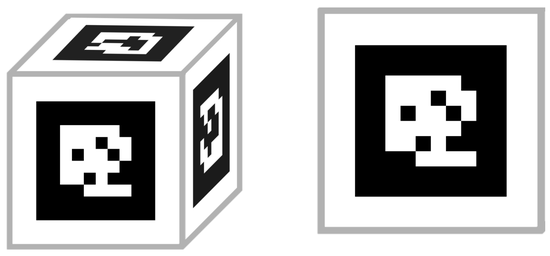
THE GOALS

1. Enabling visually impaired students to learn about concepts using 3D printed models that have interactive auditory and visual feedback
2. Students should be able to easily retrieve the interactive feedback using commodity devices

THE FEATURES

Model Tracking Using 3D and 2D Tags



Color-based Finger Tracking

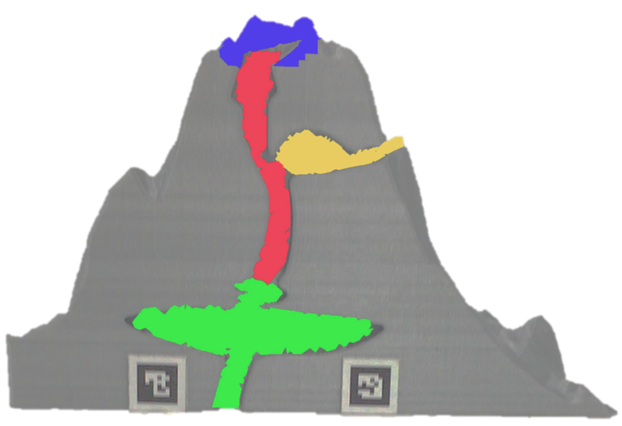
Speech Input

Audio Labels & Audio Effects

Visual Animations

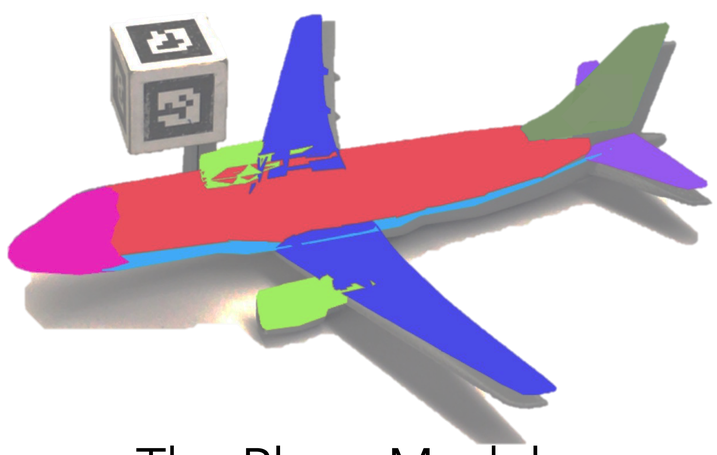
All Implemented in an iOS Application

SAMPLE MODELS



The Volcano Model

- Crater
- Secondary Vent
- Main Vent
- Magma Chamber



The Plane Model

- Cockpit
- Underside
- Body
- Vertical Stabilizer
- Wing
- Horizontal Stabilizer
- Engine

The Map Model

- Coast
- Western Lowland
- Cascade Mountains
- Columbia Plateau
- Okanogan Highlands

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