BUILDING A VUFORIA APP FOR HOLOLENS

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AGENDA

• Vuforia Introduction
• Vuforia HoloLens Experiences
• How to build the Vuforia HoloLens demo
A simple API describes what is in the camera’s FOV, and where

- Images
- Objects
- Text
- Meshes
Vuforia Market Traction

25K + COMMERCIAL APPS

230K + REGISTERED DEVELOPERS

260M + APP INSTALLS
PLATFORM COMPONENTS

Vuforia Engine

Supported Devices
- Phones & Tablets - Android & iOS
- Eyewear - Samsung Gear VR, Epson-BT 200, ODG R-6/7
- Support for Unity, Xcode, Android Studio

Tools

Target Manager
- Create & Manage databases for use on device or cloud

Vuforia Object Scanner
- Scan objects such as toys to create Object Targets

Eyewear Calibration

Cloud Services

Vuforia Cloud Recognition Service
- Allows use of cloud reco database with up to 1 million targets

Vuforia Web Services
- RESTful APIs to manage cloud-based target databases
VUFORIA UWP SUPPORT

• Support for Windows 10 (coming soon)
  – HoloLens
  – Microsoft Surface
  – HP Spectre

• Easily deploy apps across devices
HoloLens Spatial Mapping

Creates 3D meshes of Spatial Surfaces

- Reconstructs Spatial Surfaces
- Maps to Spatial Coord System
- Localizes the user and surfaces
3D SPATIAL SURFACES IN THE REAL WORLD
### COMMON USAGE SCENARIOS

<table>
<thead>
<tr>
<th>Placement</th>
<th>Occlusion</th>
<th>Physics</th>
<th>Navigation</th>
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<tbody>
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<td><img src="image2.png" alt="Occlusion Image" /></td>
<td><img src="image3.png" alt="Physics Image" /></td>
<td><img src="image4.png" alt="Navigation Image" /></td>
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Vuforia for HoloLens

Recognition and Pose Registration for HoloLens

- Recognize images and objects
- Know their precise location
- Accurately register content
Vuforia enables HoloLens apps to recognize things and know where they are

- Uniquely identify images and objects
- Know where they are in the environment
- Precisely register content

Supported by

- Vuforia Extended Tracking
- C# API in Unity and Visual Studio
- On Windows 10 Devices
BUILDING THE DEMO
WORKFLOW OVERVIEW IN UNITY

1. Configure the scene for AR
2. Add targets and digital content
3. Position on CAD proxy model
4. Configure build package
5. Build for Windows Store
Workflow in Unity