

When you open this app in your iPhone, you will see the world scene of the back camera of your phone and this app will automatically detect a horizontal plane. When a horizontal plane is detected, a red reticle will show up.

If you touch the reticle (i.e., the screen of your cell phone), a framed pair of closed sliding doors will show up at the location of reticle while the original reticle will disappear. The size, position and rotation of the reticle indicate the size, position, and rotation of the pair of doors showing up correspondingly.

When the doors show up, a UI text saying “Doors Closed” will also appear near the top of the screen of your cell phone. When you tap the screen again, the sliding door will open up with an animation and a music which volume will increase gradually from zero to full as the doors open. In the meantime, the UI text will change to “Doors Open.”

From the opened door, you can see a scene of a plaza with a graffiti wall at the end. More than just seeing the plaza through the door, you can actually walk through the door and walk around inside the plaza and thus see every detail inside of it.

If you tap the screen again while the doors are open, the sliding door will close with an animation and the volume of music will also decrease gradually from full to zero as the doors close. In the meantime, the UI text will change to “Doors Closed.”

For subsequent taps of the screen, this app will alternate between the above two states: (1) the sliding doors closed with an UI text of “Doors Closed”, or (2) the sliding doors open with an UI text of “Doors Open”.

Note: this app doesn't allow the detection of vertical plane and only show the side-view of the plaza but the top-down view. The reason for this design is mainly that I want user to be able to walk through the doors and walk inside the plaza. If you push the doors on the top of a vertical plane like a wall, the users won't be able to walk inside the plaza because of the physical barrier. Similarly, walking through a plaza from top to bottom doesn't make sense either. Hence, I finally choose to only detect the horizontal plane, like floor, and only display the side-view of the plaza.