

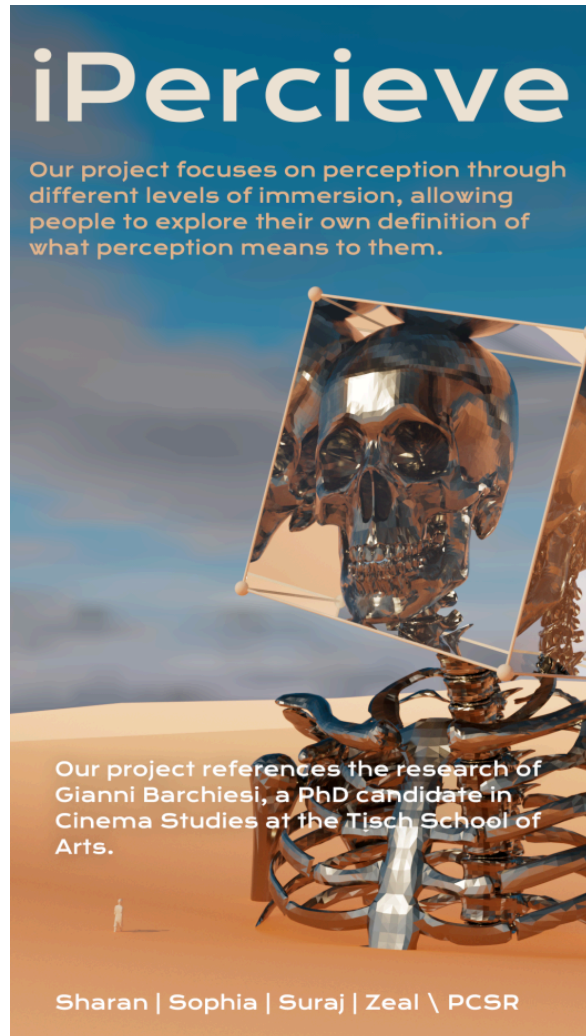
iPerceive Documentation

Team: Sophia Baker, Sharan Mohanadoss Balaguru, Suraj Barthy, Zeal Sheth

Researcher: Gianni Barchiesi

Topic: Perception

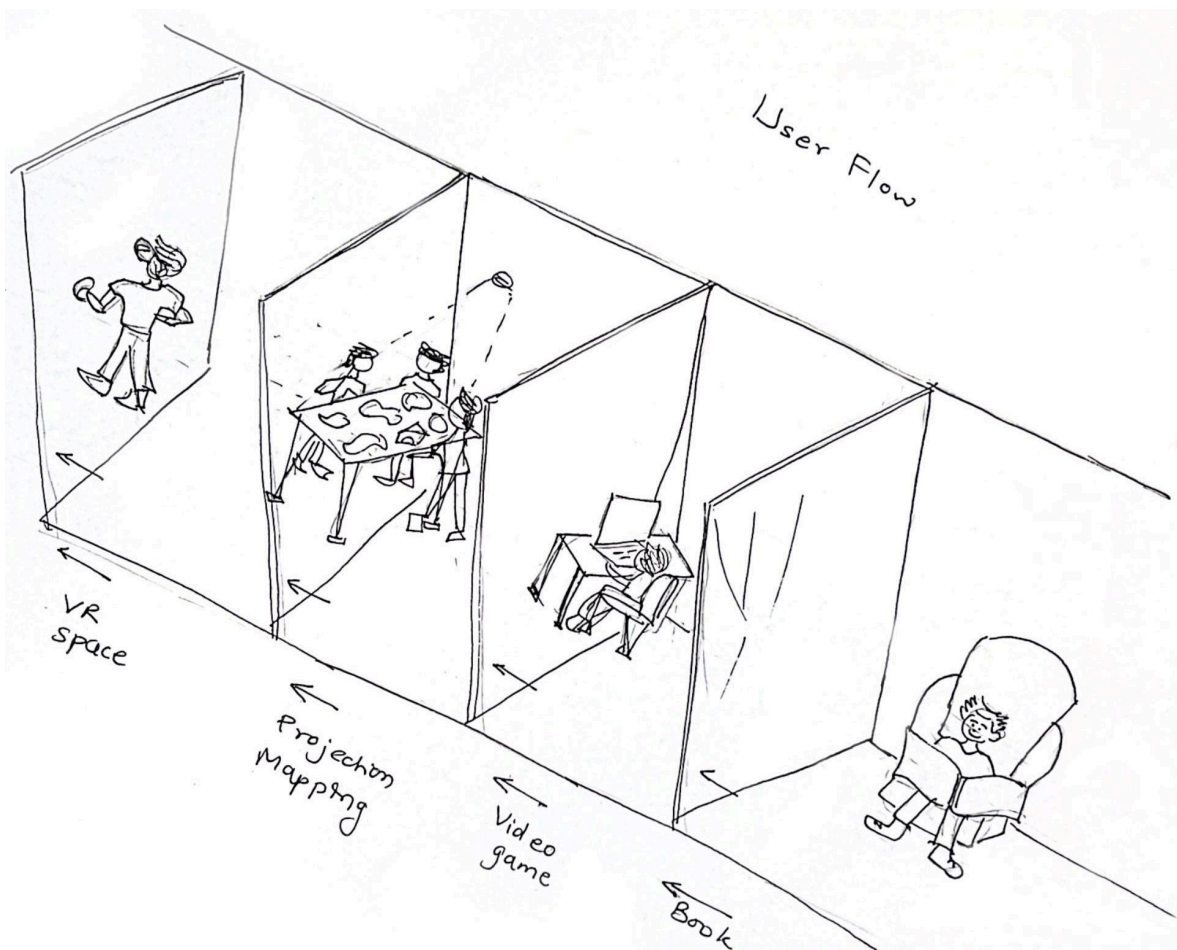
Objective: Re-create the traditional iSpy puzzle game in different media to understand the perception. This experience gives users a chance to explore how different media require users to act differently.



User Flow

- The user will be guided in a linear fashion through the exhibition - from book to projection mapping table to VR experience.
- We use the traditional ISpy puzzle game as the common activity for the users to experience different media.

From the diagram below we DON'T have a video game section.



Design & Technology Details

Our ISpy inspired puzzle theme is the Spooky House scene. We are making users go through different scenes of this Spooky House in 3 media. They need to solve the ISpy puzzle at each station. The puzzles will be different for each station. We have 3D rendered scenes in Unity.

Book Exhibit: Consists of the printout of the Spooky House scene with the puzzle to solve.



Projection Exhibit: Consists of table projection. We use the Kinect V2 and a circular disc to detect if the found objects are right or not. We use gray paper to get more clear visual for projection.

Design details for the disc:

1. Material wise we use grey paper on top of the white acrylic so that its recognized reliably.
2. Disc height is 8cm such that it is reliably detected throughout the table. (Making sure curved FOV of the kinect is detected.)
3. The circular area of the disc is made larger then hand palm area so that we can correctly detect the disc position and avoid false positives because of interference from the hand.



VR Exhibit: Consists of 3D unity scene through which the user can traverse around the spooky house and find the objects of the I Spy puzzle. We have made sure that all the scenes and objects to be found in each scene are different to make sure that our perception is least affected by repeated context.

