

Appendix 1

Description of the IREX virtual reality games as performed by Mr. YZ. (Adapted from [7]).

IREX Applications	Task Description
Soccer	<p>The participant is a goaltender and must stop the soccer balls from entering the net with any part of his/her body.</p> <p><i>Settings:</i> The number of soccer balls was kept at 2 and the ‘travel time’, or time from appearing on the screen to when it would enter the net was kept at 2 seconds with a full & even distribution to encourage movements.</p> <p><i>Scores:</i> Saves & goals.</p>
Snowboarding	<p>The participant is snowboarding down a hill and must go over as many jumps as possible while avoiding other objects (rocks, trees, snowmen).</p> <p><i>Settings:</i> The travel time was kept at 4 seconds.</p> <p><i>Scores:</i> Jumps & slams (objects hit).</p>
Birds & Balls	<p>The participant is in a field-setting with a variety of colourful balls floating by. They must reach and touch the virtual object gently with the red glove to produce a bird. If the movement is too quick or sporadic, the ball pops and no points are awarded.</p> <p><i>Settings:</i> Red gloves limit use to the hands.</p> <p><i>Scores:</i> 50 points for each bird.</p>
Formula Racer	<p>The participant is in a formula-1 racecar and must navigate through the track while avoiding other racecars as well as the sides of the track.</p> <p><i>Settings:</i> body-tracking to work balance.</p> <p><i>Scores:</i> Time on track & time off track.</p>
Juggler	<p>The participant is in a circus environment with balls floating down from the top. The objective is to keep the balls in the air for as many consecutive hits as possible.</p> <p><i>Settings:</i> The red glove was used to limit interactions with virtual objects to the hands. The number of balls was kept at 1 with a fall rate of 4 seconds with a full & even distribution to ensure maximal movement opportunities.</p> <p><i>Scores:</i> Most consecutive hits & misses.</p>