**Project Preliminary Prototype – Concussion Screening**

**UNITY SCENE – Concussion Screening**

Our 3D Virtual Environment presents an exact replica of King-Devick Test, which have 1 demo test and 3 test. We record misread and mis focused number count. And based on the time spend and

**INTERACTIVE VIRTUAL OBJECTS**

There is one distinct interactive object in our environment.

These are yellow coin shape object representing the original block in a KD-Test with numbers on it generated randomly every time the test is run.

Once the user looks at any block the crosshair changes from blue to green or red depending on whether the user is in the right sequence or not.

Voice Recognition: when the crosshair focus on a number, user can speak the word, application will determine if it’s correct.

**Requirement:**

1. Voice recognition to record and display the number of misspeaks for each scene.
2. Report the total K-D time score after the final test.
3. Report the total number of incorrect viewing interactions after the final test.
4. Report the total number of misspeaks after the final test.
5. Make a recommendation whether further concussion testing is needed.

**HOW IT WORKS**

1. Enter the application. Choose Start Demo or Start Test
2. Start Demo: would have a demo test, follow the line to read the number.
3. Start Test: would take you to real test.
4. After finish the test, look at the arrow button, it will bring you to the summary scene.
5. After all the tests are finished, there is a total summary scene and recommendation on whether further concussion exam needed.