



VR App Recipes 1.0.3

Cookbook for VR application makers

Hi, and Welcome to VR App Recipes!



My name is Shakhruz Ashirov. I have been developing VR/AR prototypes, apps, custom client projects, demos and also VR trainings and lectures since 2014.

Every time working on a new VR app I have been facing the same problems again and again and I have been collecting solutions for these problems so that there is no need to reinvent the wheel and I could get to the fun part as fast as possible. I have also been participating and organizing VR hackathons and it was important for me to be able to create an MVP within hours. When teaching VR, it was also important to provide students with a framework that would let them get results and satisfaction right away and build their VR experiences without getting too deep into solving technical problems.

VR App Recipes is a **collection of mini projects, scenes, scripts, Playmaker actions that will help you solve some of the most common problems that VR developers face every day**. It's not perfect and is still under active development. With your feedback it can become even better and I hope it will serve you as much as it serves me in my freelance, consulting and development practice.

Current version is targeting **GearVR** as the most widespread, high quality mobile VR platform. Next in line is Daydream and Google Cardboard support, that will be included in one of the next updates.

This package requires **Unity 5.6.0f3** and higher and leverages new awesome Video Player that you get for free with 5.6.

This package does not require you to be a developer and write scripts. By using visual scripting framework [Playmaker](#) you can create your own application logic by dragging and dropping actions and choosing values from drop down menus. Even if you are a seasoned developer you can quickly get used to that instead of writing scripts for your business/app logic.

I highly recommend purchasing Playmaker on [Unity Asset Store](#). No wonder it is one of the most popular packages among all on the store and Unity is planning to create something similar that will be built into the engine for free. But for now, Playmaker is worth it's price and will save you a lot of time if used right.

I might not be able to provide you with free consulting or training on this package, but I'm always open to connecting with new VR people and friends. Your feedback is always appreciated.

You can always reach out to me on facebook - <http://facebook.com/shakhruz> , skype - **'shakhruz'** or email - shakhruz@gmail.com.

Please subscribe to ZefirVR Newsletter for updates and free beta releases - <http://eepurl.com/cNyA5j>

Changelog:

1.0.3

- * VectorIcon - added VectorIcon component that make it easy to use FontAwesome and MaterialDesign icons
- * New procedural skyboxes from DaydreamLab
- * Milky way space skyboxes
- * Low poly skybox
- * Head in a Mirror in VR demo
- * Oculus Utilities 1.14 with modified reticle (old blue)
- * Oculus Avatar SDK 1.14
- * Oculus Platform SDK 1.14

- * Oculus Platform demos:
 - * Test scene with platform Initialization and console
 - * VrVoiceChat - voice chat with another GearVR user
 - * VrBoardGame - a simple multiplayer tic tac toe game
 - * VRHoops - multiplayer basketball hoops game

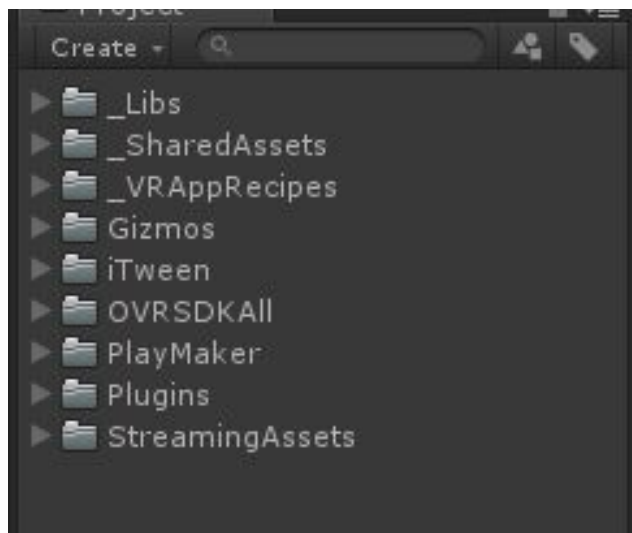
Oculus VR SDK

Although VR support is built into Unity today, to create something more than just a demo you will need Oculus SDK. It's free and available for everyone, but might be complex, scattered

among different packages and not easy to start with for many non-developers. That's why I included complete Oculus SDK into the package. Some parts of it are slightly modified, some examples are removed and some are transformed, all to help you build your app faster. This also means that you can just import this package, drop your osig file, change bundle id and build it for your GearVR with no need to import anything else.

Installation

Before importing the package please import **Playmaker** plugin. After importing VRAppRecipes package please move all files from the folder '**VRAppRecipesPlaymaker**' into root folder. This way you will make sure 'Plugins' and 'StreamingAssets' folder is in your project root folder.



Make sure there are no errors in the Console.

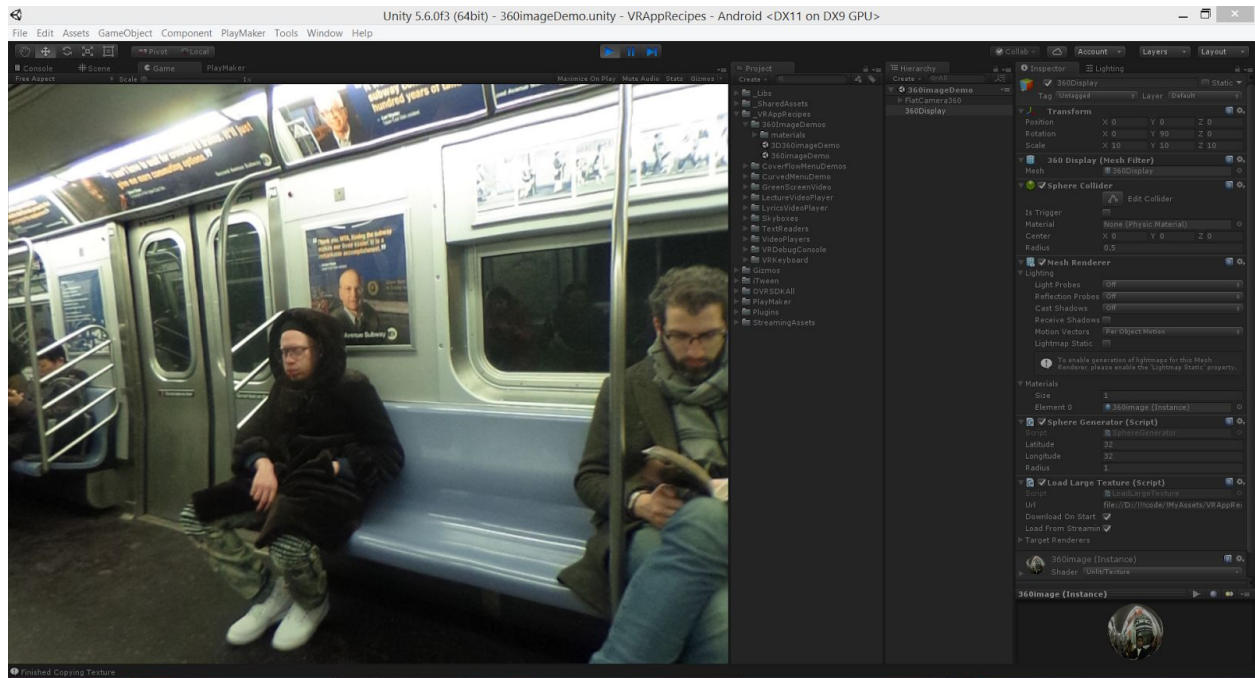
Scenes

360 Image Demos

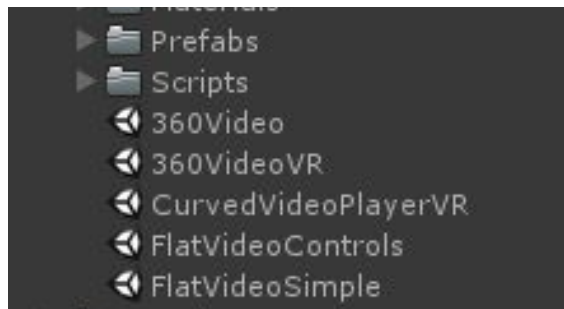
360imagedemo

3D360imagedemo

Examples how to load and display 360 / 3D 360 image and display it.



Video Players



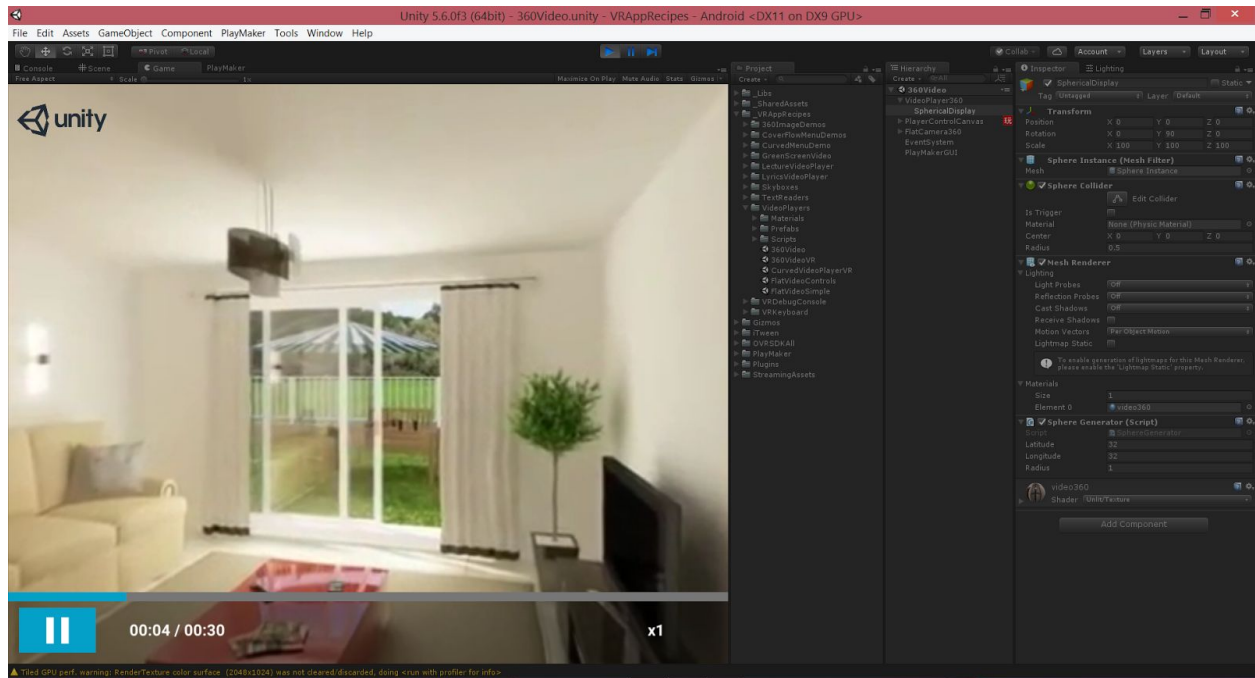
360Video - sample flat 360 video player with controls

360VideoVR - sample 360 video player for GearVR

CurvedVideoPlayerVR - curved screen video player for GearVR

FlatVideoControls - flat video player with controls

FlatVideoSimple - example how to play flat video

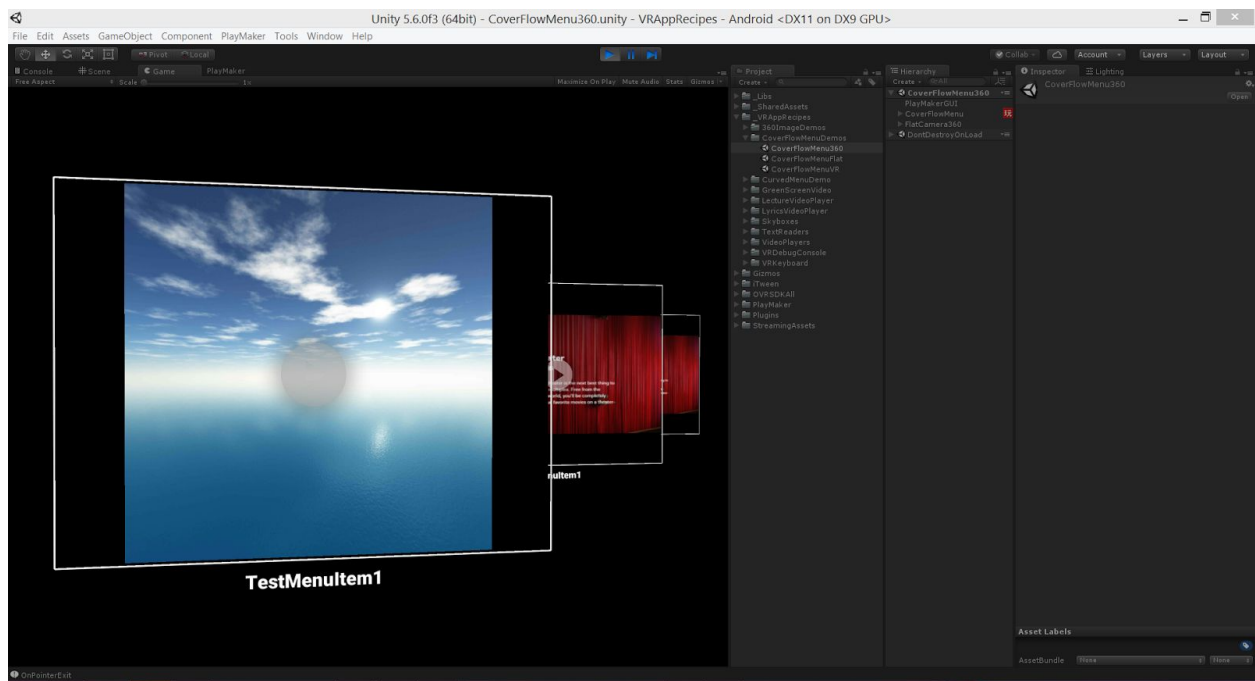


CoverFlowMenuDemos

CoverFlowMenu360 - example cover flow menu with 360 flat camera

CoverFlowMenuFlat - example simple flat cover flow menu

CoverFlowMenuVR - example cover flow menu for GearVR



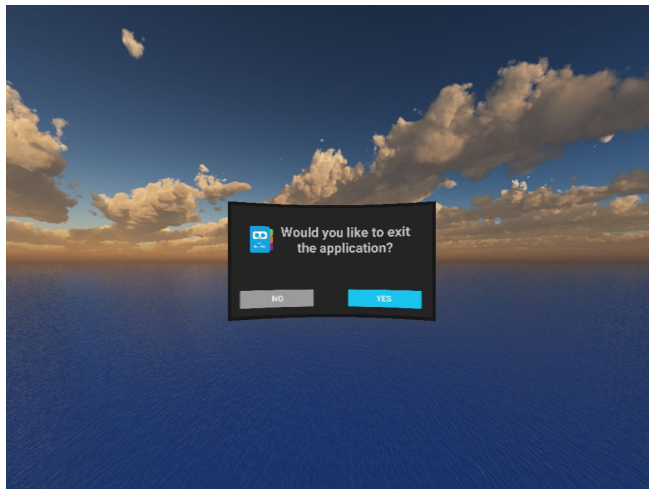
CurvedUI Demos with antialiasing

This is experimental solution from Oculus for creating curved UIOverlay interactive components.

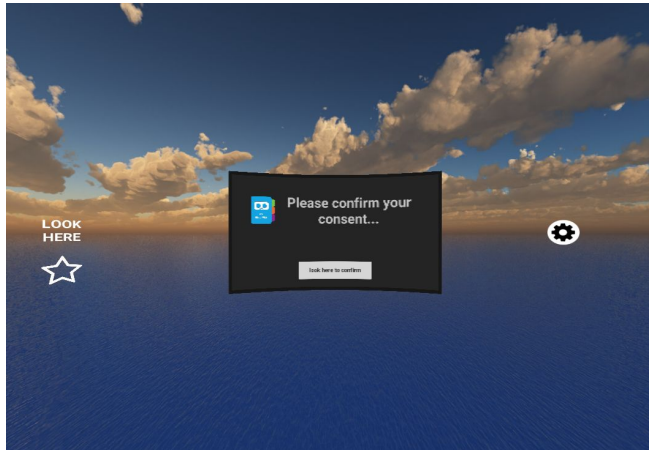
CurvedMenu - menu with 5 displays



Simple Dialog - curved dialog window with 2 buttons

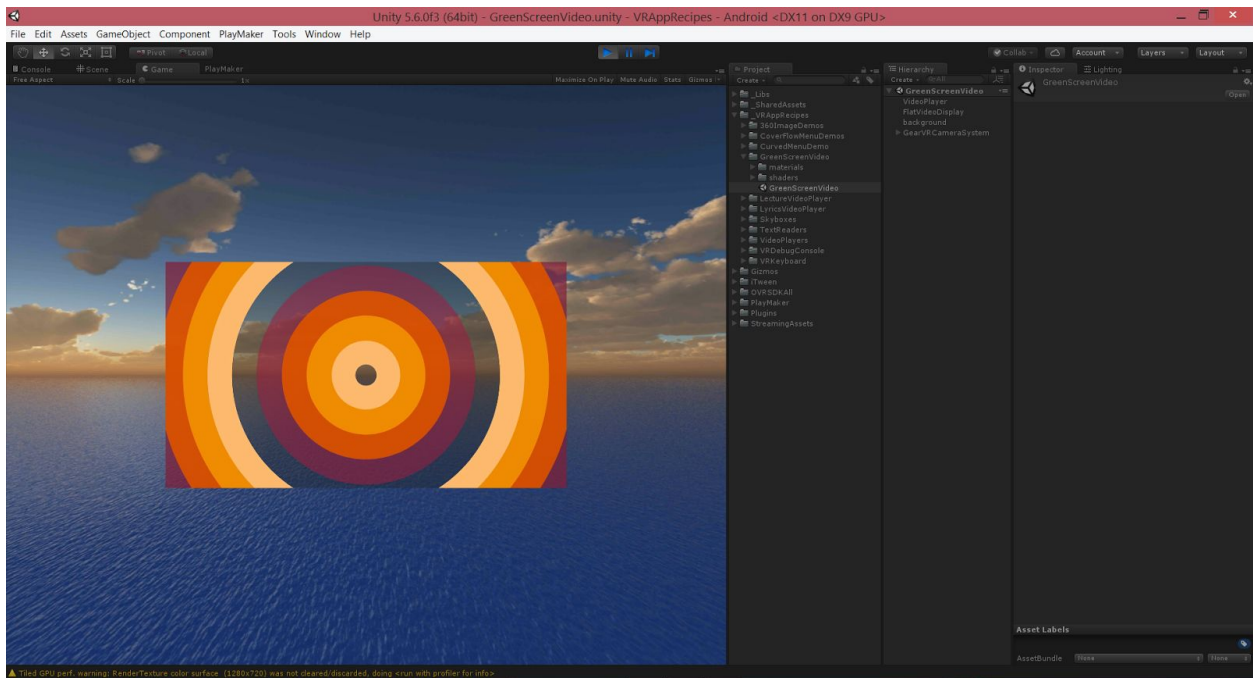


SimpleConfirmDialog - curved dialog with a gaze to click button and 2 single buttons



GreenScreenVideo

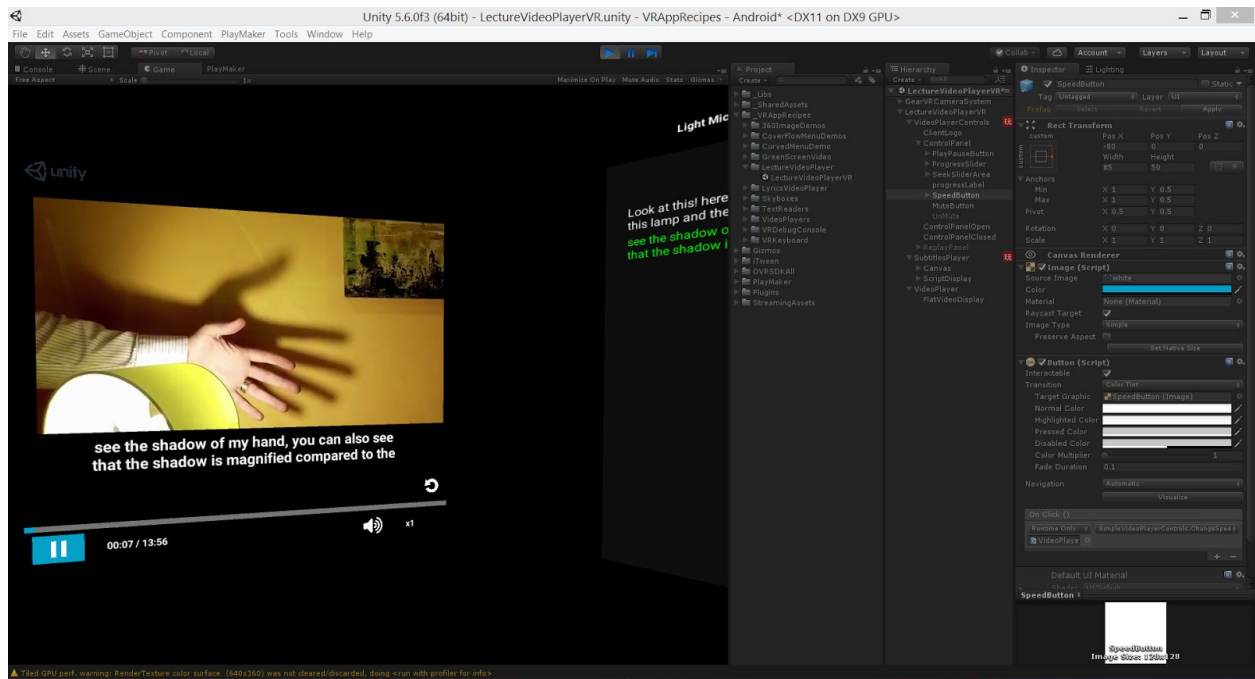
Example scene and shader for displaying green screen videos



LectureVideoPlayer

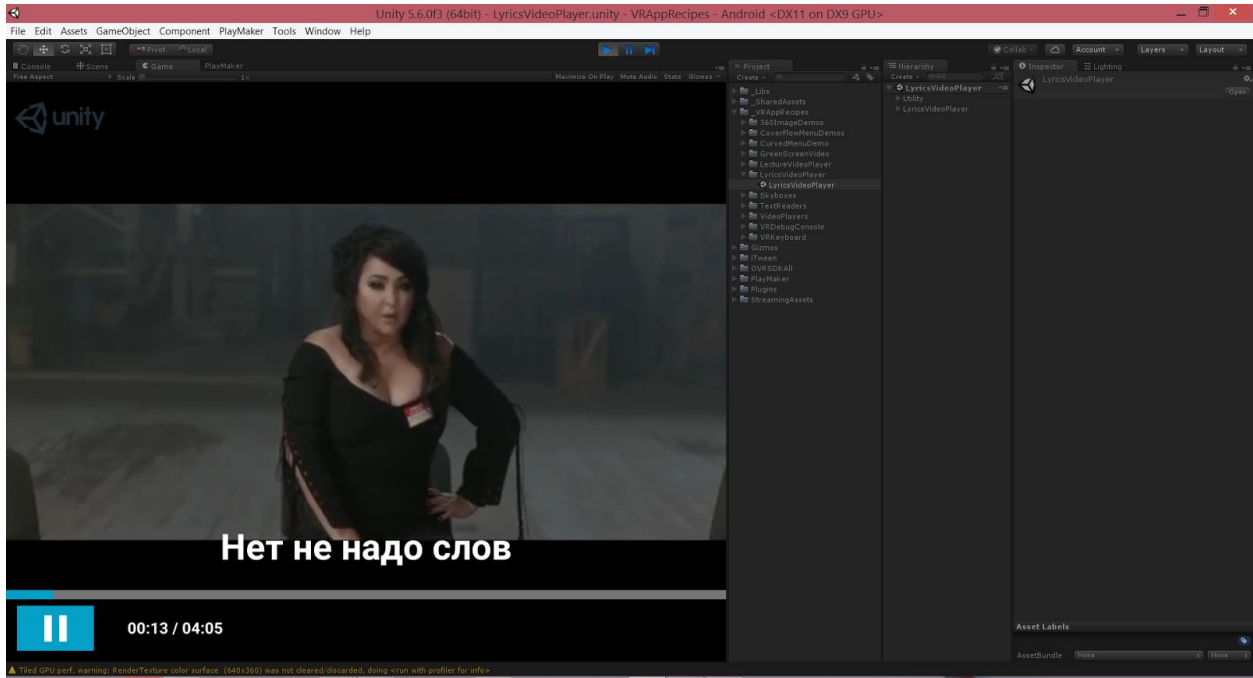
Example video player that can be used to play video lectures in VR. It shows subtitles in two modes - classic on screen and a list mode. In the list mode you can see all previously displayed subtitles in a scrolling list. You can scroll through the list by gazing at it's top or bottom. If you click on a subtitle in the list, player will rewind and replay starting with that moment in the video.

If you click 'replay' button player will loop playing one selected section of the video that corresponds to that subtitle. You can also increase video speed playback, pause and rewind the video.



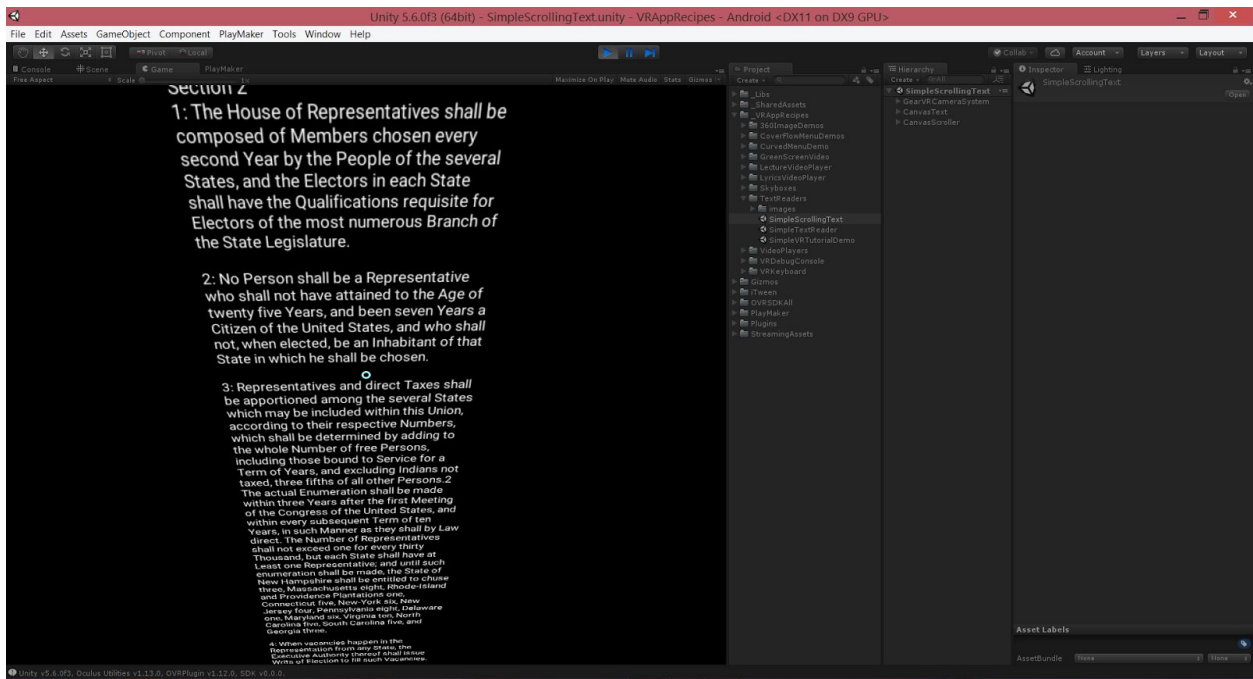
LyricsVideoPlayer

Video player that shows subtitles from an 'srt' file.



TextReaders

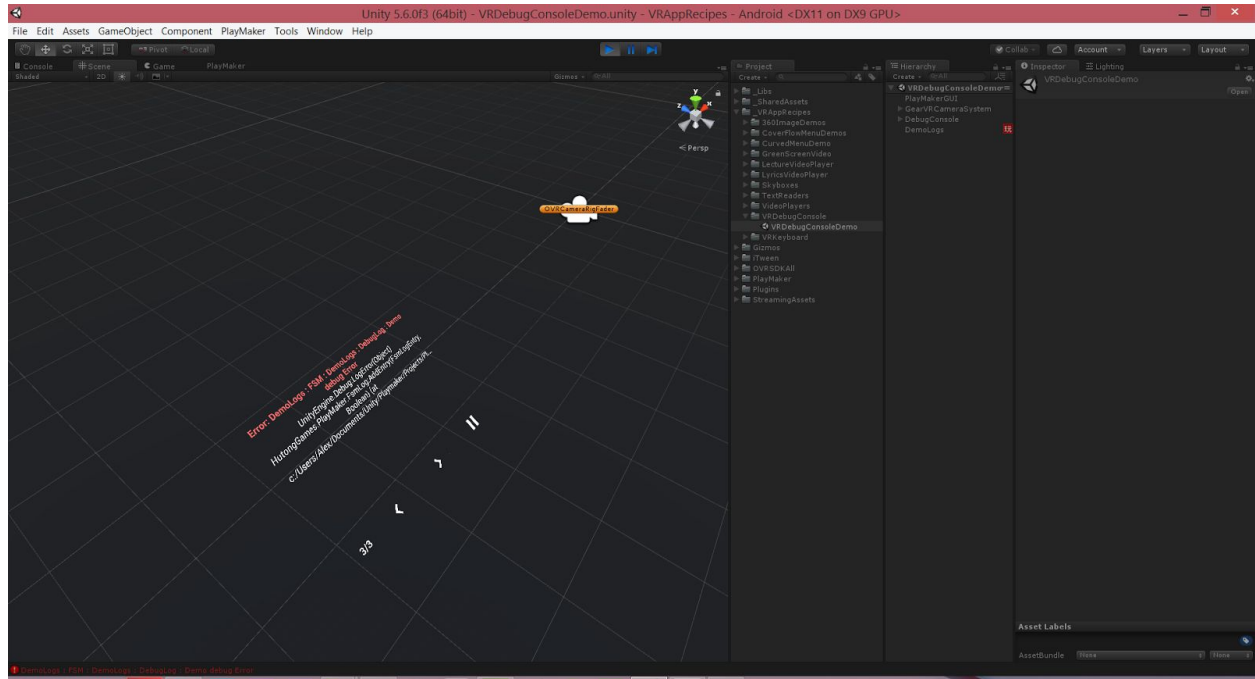
Simple Scrolling Text - display long scrolling text in VR



SimpleTextReader - display text with typing effect

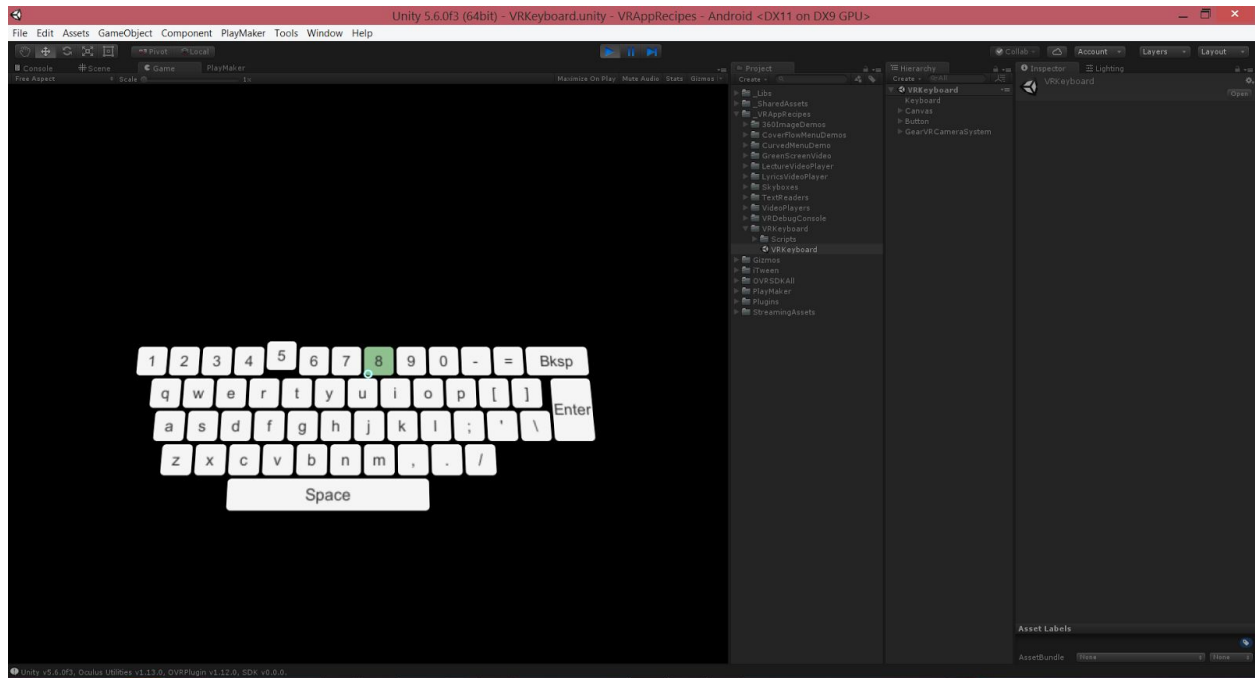
VRDebugConsole

A simple solution to see debug console messages in GearVR while the app is running.

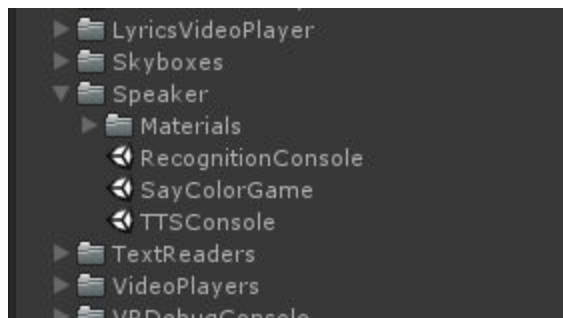


VR Keyboard

A sample keyboard in VR. Solution from Oculus SDK.



Unity Speaker - speech recognition and text to speech generation

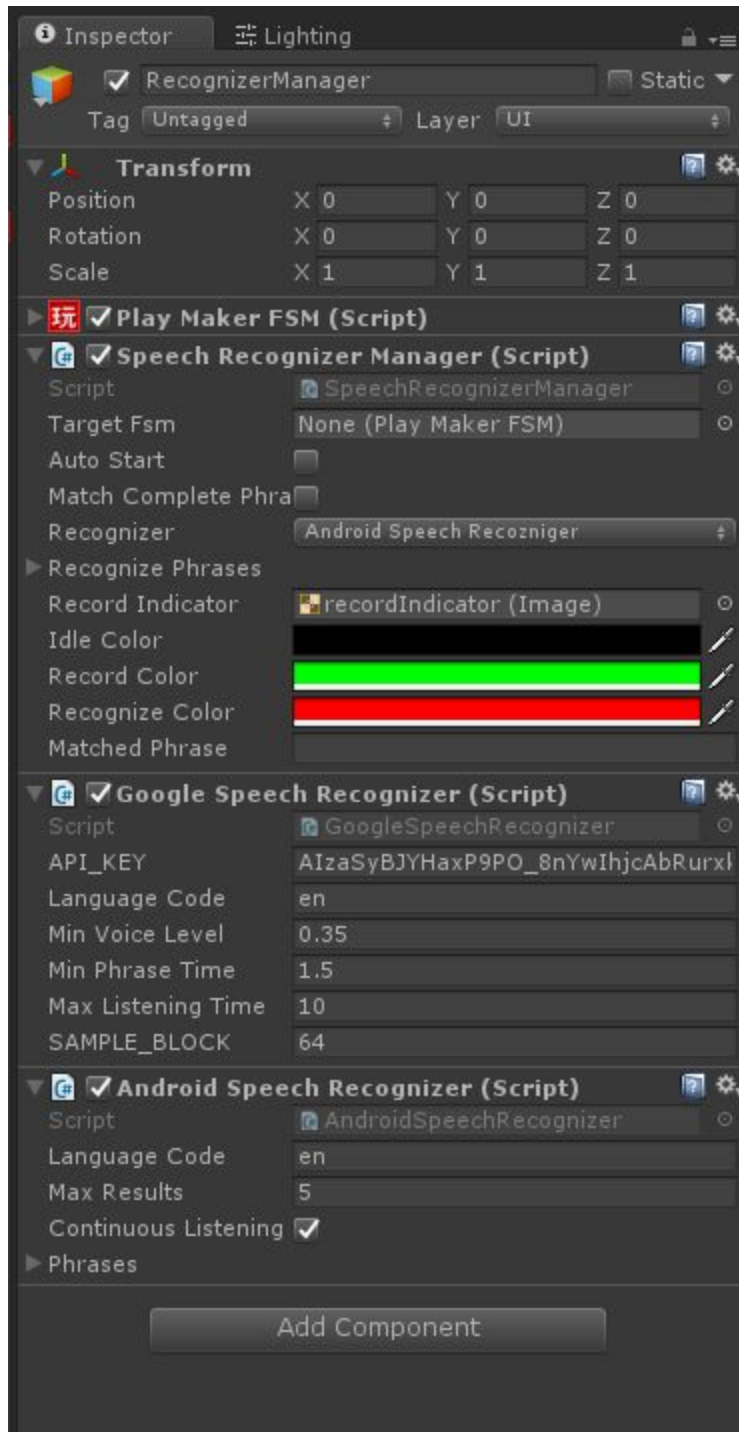


There are 3 scenes that demo how to use speech recognition and text to speech generation:

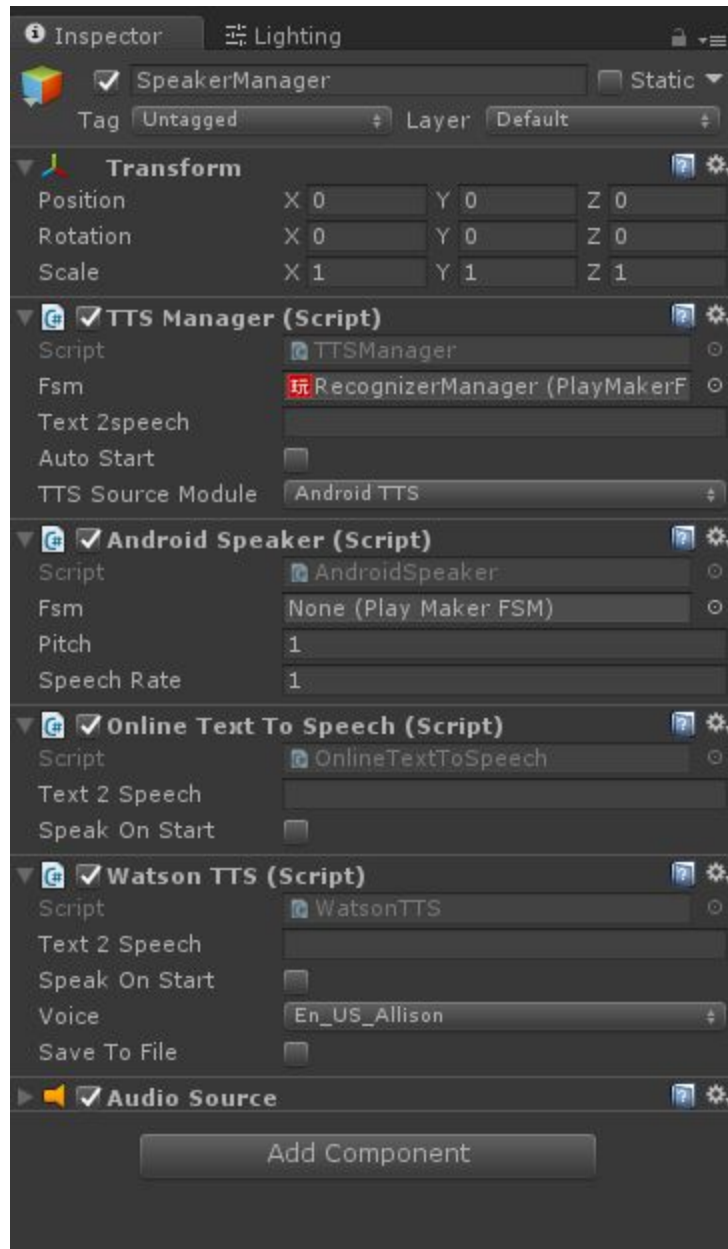
RecognitionConsole - simple console to test results from recognition services

TTSCONSOLE - simple console to test text to speech generation

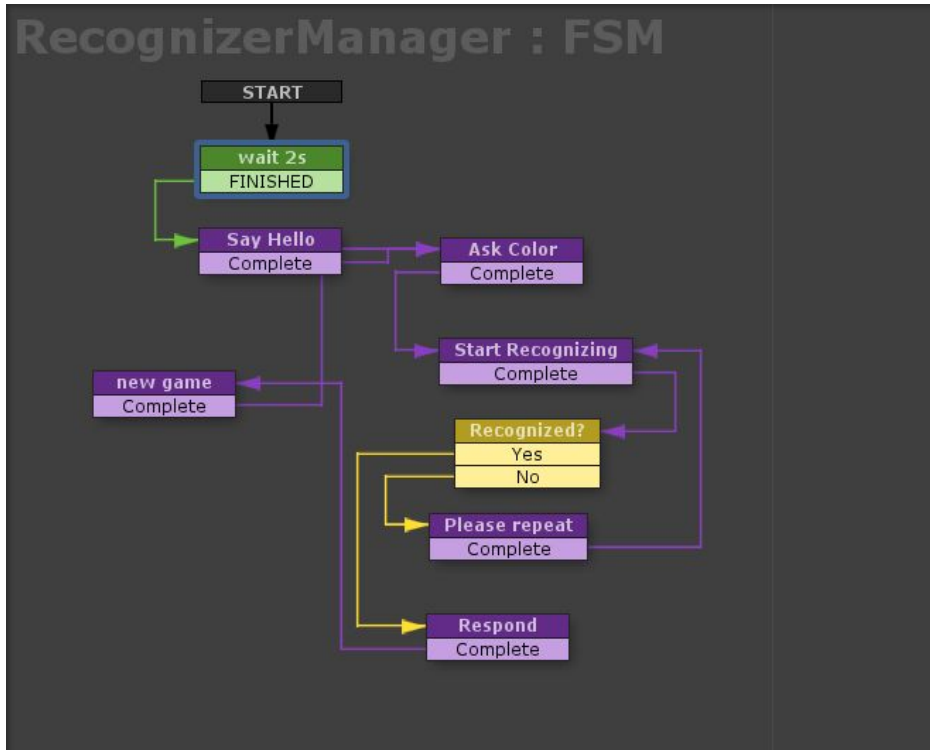
SayColorGame - demo game - it will tell you to name a color, recognize your speech and react to it



SpeechRecognitionManager - component that provides a simple wrapper around speech recognition services. You can switch between Google Speech Recognier and Android Speech Recognizer.



TTSTManager - wrapper component to manage text to speech engines.

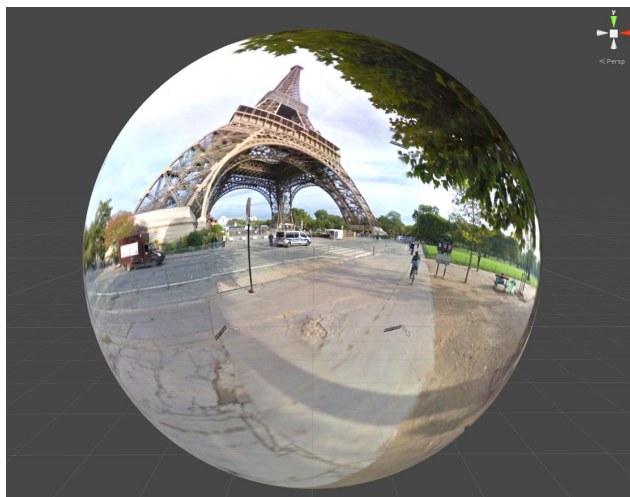


In **SayColorGame** you will find an example of how to use Speech in Playmaker

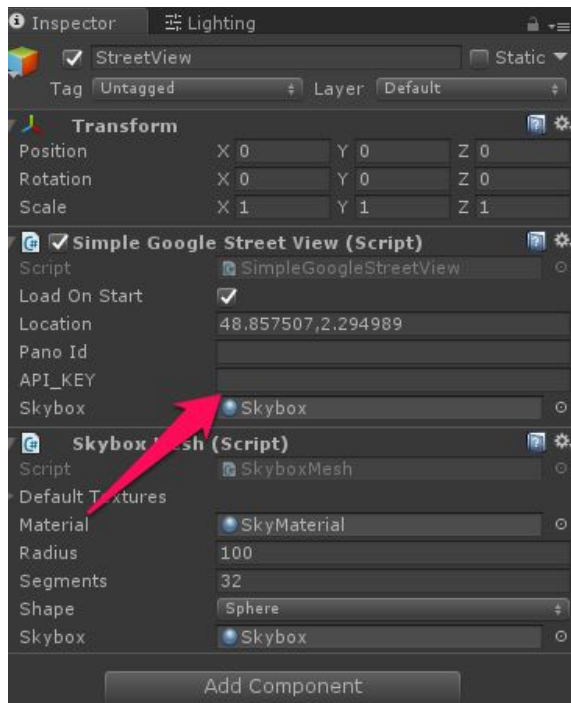
GoogleStreetView API

SimpleStreetView

Scripts and demo how to pull Google Street View panorama image and display it in your scene

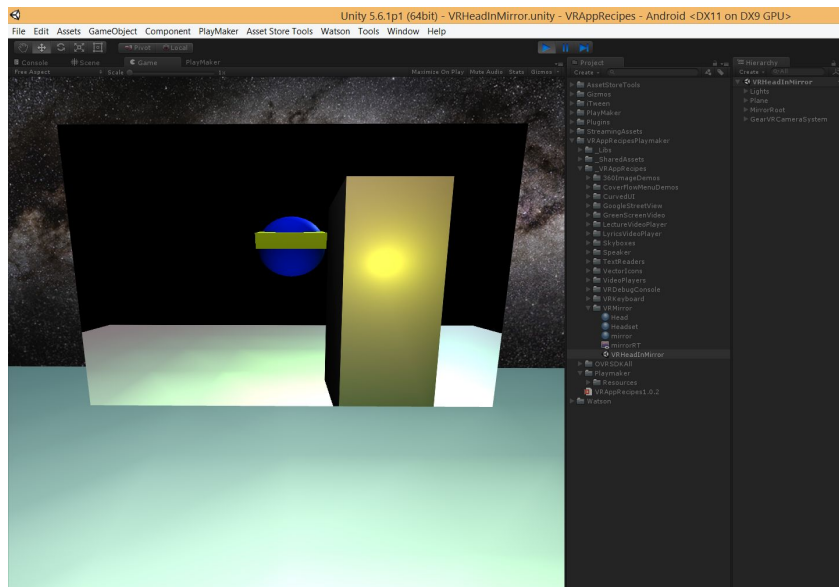


To run this scene, make sure you fill in your Google Street View API Key:



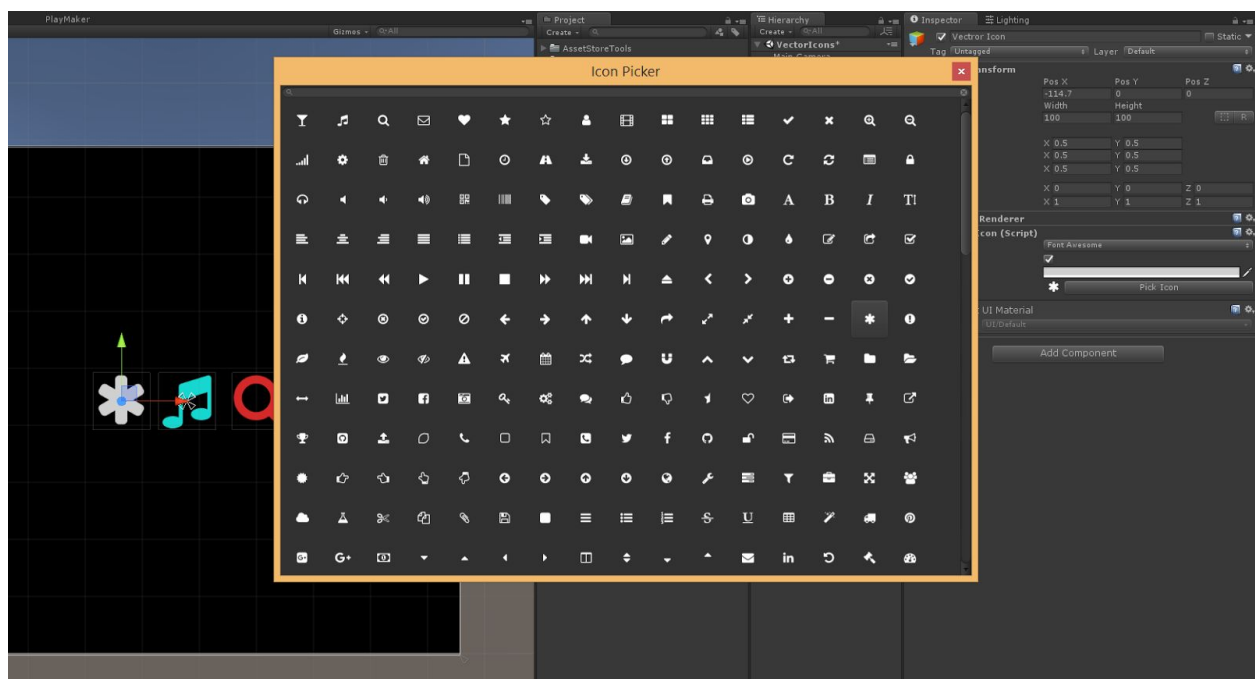
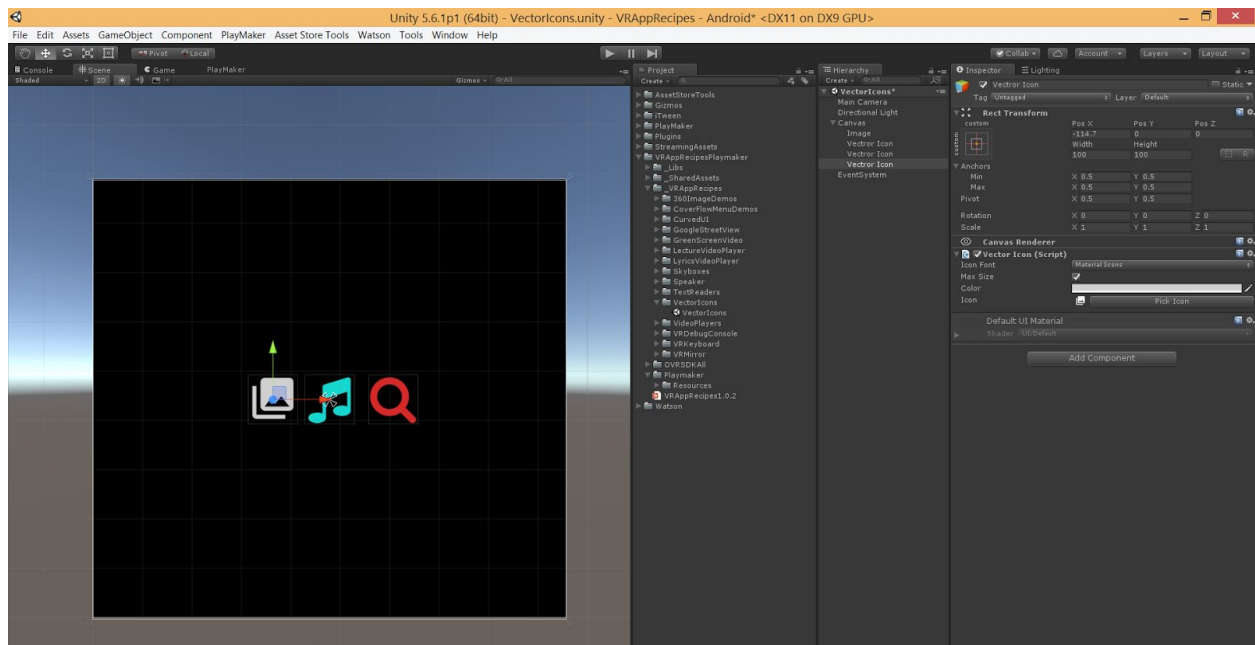
Mirror in VR demo

Seeing your virtual self in a mirror in VR makes your app more immersive. This demo scene includes a simple demo of how to make a mirror with a separate camera and render texture.



Vector Icon component

For any UI, including UI in virtual reality we need icons. Vector Icon component will let you use hundreds of professional vector icons from **Font Awesome** and **MaterialDesign** fonts. See the demo scene for example.

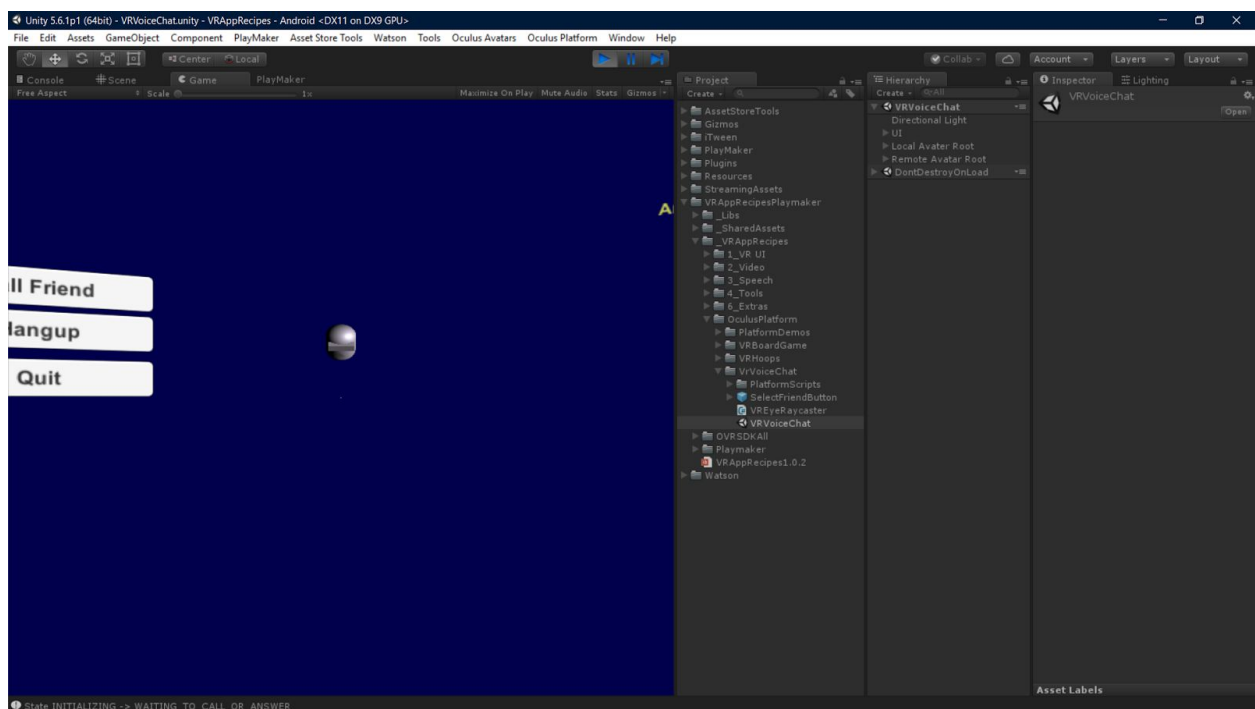


OVR Platform - creating social VR apps

Oculus provides a robust SDK for creating social apps and games. I included complete OVR SDK 1.14 and all their demos provided as separate projects.

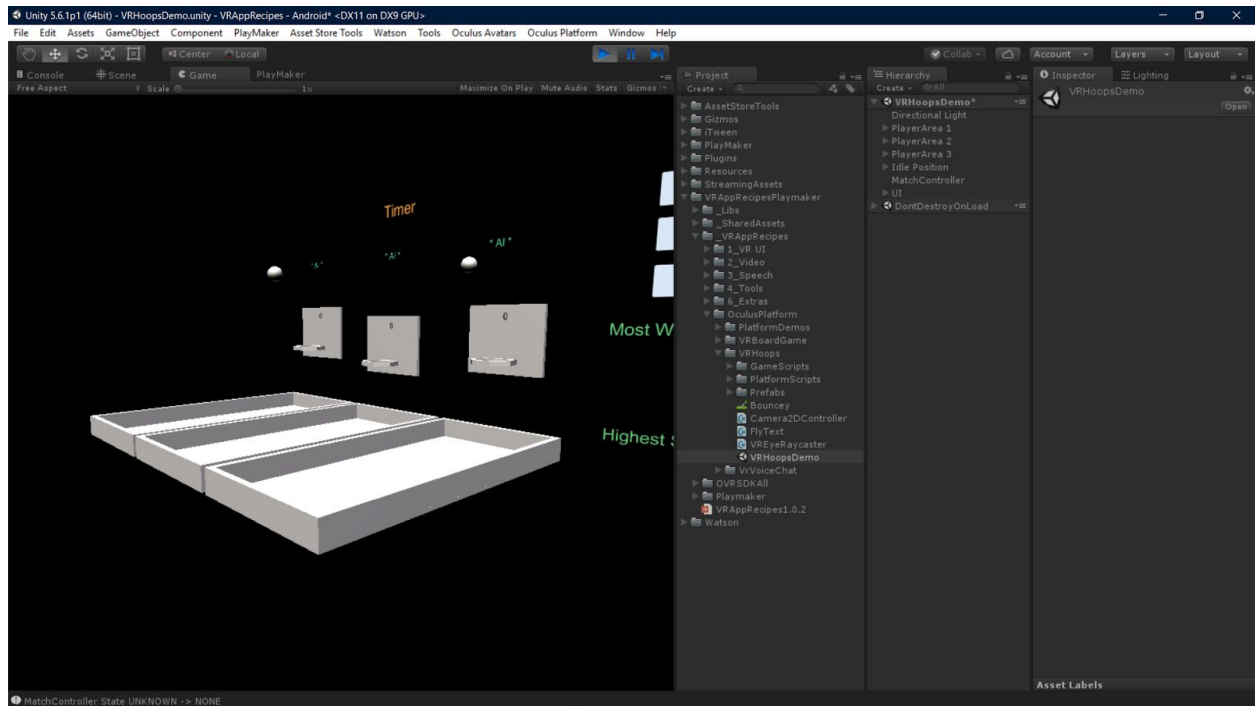
Vr Voice Chat

Demo scene that shows how to create a virtual room with voice chat.



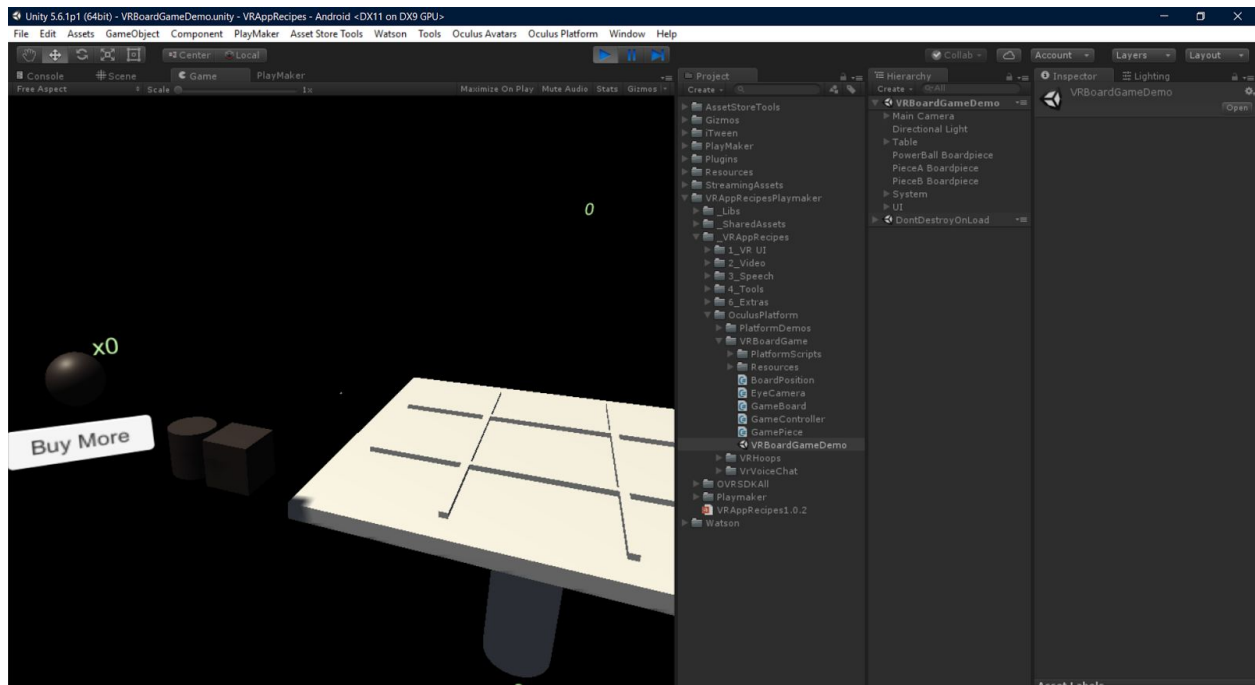
Vr Hoops

Multiplayer hoops game with achivements, leaderboard and matchmaking.



Vr Board Game

Another multiplayer demo game with matchmaking and in-app purchases



Platform Tester

A simple scene with a console, buttons that will help you test different platform features

