QCAR SDK Release Notes [QCAR v1.0.6]

Last update: August 8, 2011

Introduction

This file contains general release notes for the QUALCOMM Augmented Reality SDK.

QCAR v1.0.6 – Maintenance release

Bugfixes / Features

- Optimized performance of both the synchronous & asynchronous rendering modes
- Fixed a bug where a NullPointerException was thrown when calling setFlashTorchMode
- Fixed an issue where false positives detections occurred for some targets
- Reduced jitter in augmentations for both ImageTargets and MultiTargets
- Added support for Android 3.x (Honeycomb)

QCAR v1.0.0

Bugfixes / Features

- Added support for controlling the camera flash mode
- Added support for controlling the camera focus mode
- Added support for synchronous and asynchronous video rendering (bound to the camera capture frame rate vs. fixed rate)
- Fixed an issue where the augmented content is not rendered in the correct location in portrait mode
- Fixed issue where Virtual Buttons don't always work with OpenGL 1.1 in the Dominoes sample app
- Renamed MultiImageTarget to MultiTarget
- Improved overall tracking and detection performance
- Improved redetection performance of recently lost targets
- Improved detection and tracking of Frame Markers
- Improved video background rendering performance
- Improved robustness of Virtual Buttons
- Changed default Virtual Button sensitivity to LOW
- Added support for the vast majority of devices running Android 2.1 and above. See list of supported devices available at developer.qualcomm.com/ar
- Simplified building of sample apps: Sample apps now use Android NDK functionality to copy the QCAR shared libraries to the libs folder
- Extended sample applications to control flash and auto focus via application GUI
- Added new tracking targets for Virtual Button and MultiTarget sample apps
- Improved the Image Target ratings mechanism on the Target Management System (TMS)
- Fixed a bug where the TMS would not accept images of certain sizes
- New Android permissions required: ACCESS_WIFI_STATE and READ_PHONE_STATE

Known issues

- The following screen orientations that are available in Android 2.3 (Gingerbread) and above are not supported by the QCAR SDK
    - SCREEN_ORIENTATION_REVERSE_LANDSCAPE
    - SCREEN_ORIENTATION_REVERSE_PORTRAIT
- After resuming a previously paused sample app, the last rendered frame prior to pausing will be very briefly displayed. The reason for this is that Android doesn't seem to clear the back buffer upon onResume(). You can work around this in your application by calling glClear(GL_COLOR_BUFFER_BIT). You may need to call it multiple times to handle the case where double buffering is enabled.
- On certain devices, the video preview rendering and the rendering layer order may be mismatched after another application overlays the QCAR rendering window.

QCAR v0.10.0 – BETA2

Bugfixes / Features

- Added support for multi-image target reconfiguration (add / remove / reconfigure parts on the fly)
- Added support for virtual button reconfiguration (add / remove / reconfigure buttons on the fly)
- Updated existing sample applications:
    - Reconfigurable virtual buttons
    - Reconfigurable multi-image targets
    - Added dialog boxes to display QCAR initialization errors
    - Removed Shared library and moved shared code into individual sample apps to create independent stand-alone projects

Known issues

- Rare application freeze and "CPU may be pegged" issue has been observed on Android 2.2 (Froyo). This has been observed by others working with camera and OpenGL on Android
- Video preview rendering and rendering layer order mismatched after another application overlayed QCAR rendering window Camera-JNI and mPreviewLock messages appear in logcat output on Android 2.1
- Application in 'portrait mode' may result in displaced augmentations

