Csound on Android

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Introduction

- Csound History
- Csound on Android – Platform Introduction
- CsoundObj API
- Demonstration
- Csound Platform Benefits
- Future Plans
Csound History

- Music-N Language
- Command-line application
- Csound 5: API created for application development
- OLPC-XO
- Mobile Csound Platform
Csound on Android

- Native Code (compiled using Android NDK)
  - Core Csound
  - C code compiled by SWIG
  - Android-specific C++ code

- Java Code
  - SWIG generated wrapper classes
  - CsoundObj API
CsoundObj API

- Convenience classes for running Csound
- Pre-configured to handle audio I/O with OpenSL or AudioTrack
- CsoundValueCacheable interface for reading/writing values from/to Csound at block boundaries
- Out of the box wrappers for UI Widgets, Sensors
- Cross-Platform API (iOS, Java Swing)
Demonstration

- Library Project
- Examples Project Walkthrough
- CSD Player – Premade Channels
Csound Platform Benefits

- Cross-Platform
  - Desktop (Mac OSX, Windows, Linux)
  - Mobile (Android, iOS, OLPC)
- Csound code as Domain Specific Audio Engine Code
- 1st class support for supported platforms
- Advancements Propagate
Future Plans

- Csound 6
- Refactoring/clean up of internal code
- Developments to extend Csound API
  - Open up classes of applications designed for using Csound
  - i.e. Realtime instrument modification
Download

- Binaries:
  

- Source: Available in main Csound GIT repo:

  [git://csound.git.sourceforge.net/gitroot/csound/csound](git://csound.git.sourceforge.net/gitroot/csound/csound)
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Questions?

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- Csound: http://www.csounds.com