Introduction to Game Center

Overview

Mike Lampell

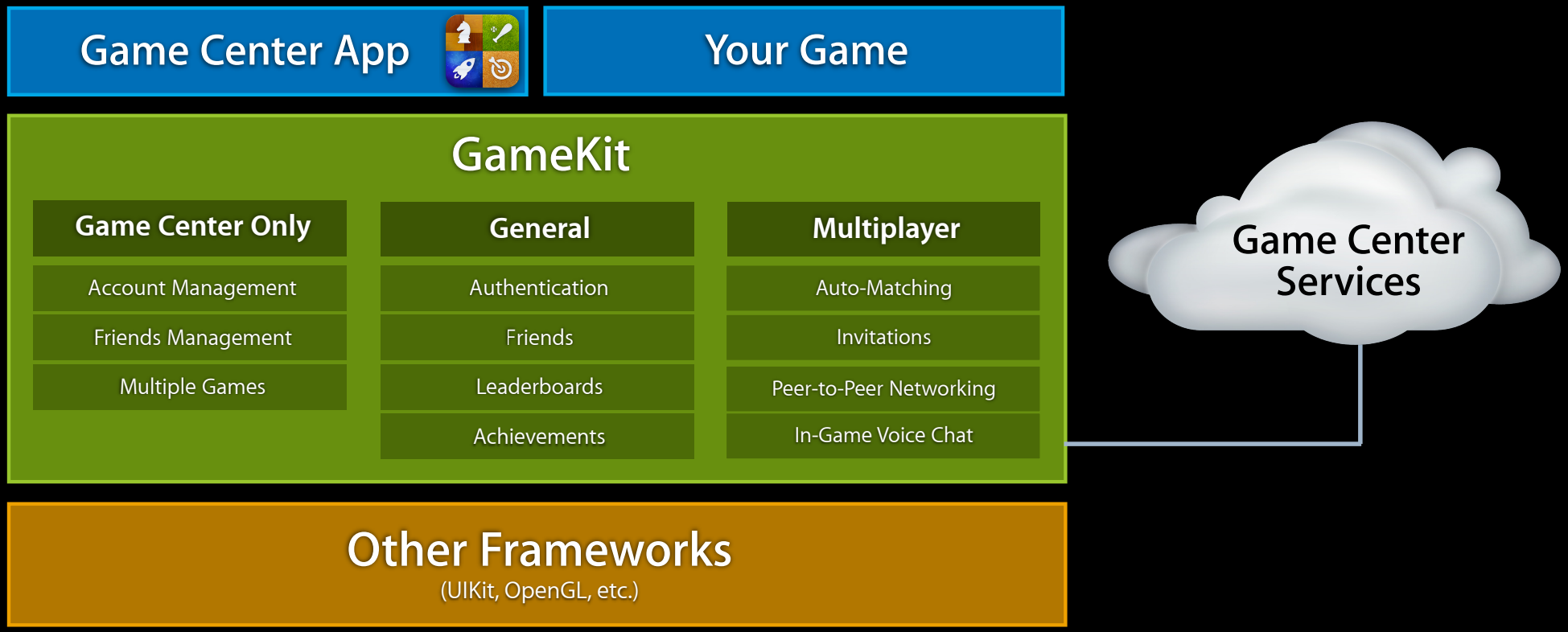
These are confidential sessions—please refrain from streaming, blogging, spitting, or throwing sharp object.

Introduction

Overview of Game Center and GameKit

- Preview
- Game Center app
- GameKit framework
- Game Center Services

Game Center Overview



Related Sessions

Game Center Techniques, Part 1	Pacific Heights Tuesday 3:15PM
Game Center Techniques, Part 2	Pacific Heights Tuesday 4:30PM
Game Design and Development for iPhone OS, Part 1 (Repeat)	Presidio Friday 9:00AM
Game Design and Development for iPhone OS, Part 2 (Repeat)	Presidio Friday 10:15AM

What You'll Learn

- Definition of a Game Center game
- Definition of a Game Center player
- Game Center app overview
- GameKit framework overview
- Development vs. production

Definitions

Game Center Game

Definition

Required

- Register Bundle Identifier
- Player Authentication

Optional

- Leaderboards
- Achievements
- Multiplayer

Game Center Game

Features

- Invite notifications with purchase/upgrade option
- Listed in Game Center with purchase option
- Friend comparisons of scores and achievements
- Secure player registration and authentication
- Friend relationships

Game Center Player

Definition

Required

- iTunes Account/Apple ID
- Unique Nickname

Optional

- Status Message
- Friends

Game Center Player

Features

- Available in games
  - Nickname
  - Unique Player ID
  - Underage
  - Friends
- Available in Game Center app
  - Status message
  - Games played and statistics for those games
  - Recently played

Game Center App Overview

Game Center App Overview

Built in app to promote social gaming

- Player account creation and modification
- Create and manage friend relationships
- View friend details
- View game details
- Purchase games
- Launch games with or without invites

Game Center

Me tab

- Player overview
- Status management
- Account management
  - Log out/log in
  - Create account
  - Change account settings

Game Center

Games tab

- List of Game Center enabled games that this player has played
- Ordered by last played
- Summation of stats per game
- Buy other Game Center games

Game Center

Friends tab

- List of Game Center friends
- Ordered by most recently authenticated
- Status and game last played

Game Center

Friend's details

- Three categories
- Listed by most recently played
- Option to purchase games you don't own

Game Center

User's and Friend's Game Details

- Comparison overview
- Leaderboard
- Achievements
- User's Game Details

Invitations

Inviter

Invitee

Demo
Invite with Tanks

Albert Ho

Invitations

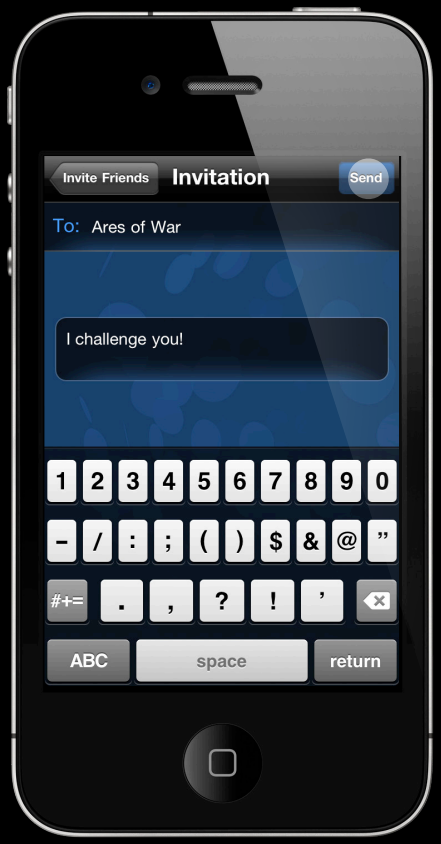
Inviter

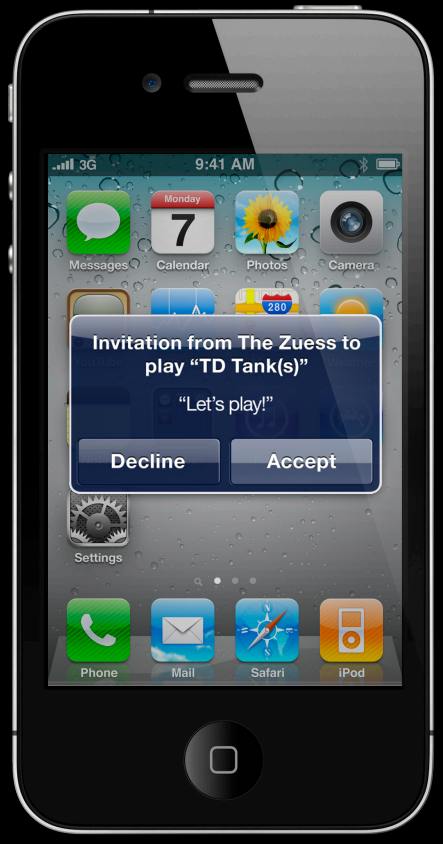
Invitee

Invitations

Inviter

Invitee





Invitations

Inviter

Invitee

Invitations

Inviter

Invitee

Invitations

Inviter

Invitee

GameKit Framework

GameKit Framework

Game Center App

Your Game

GameKit

Game Center Only	General	Multiplayer
Account Management	Authentication	Auto-Matching
Friends Management	Friends	Invitations
Multiple Games	Leaderboards	Peer-to-Peer Networking
	Achievements	In-Game Voice Chat

Other Frameworks

(UIKit, OpenGL, etc.)

GameKit Framework Overview

Framework to enhance game development

- Authenticating a user
- Submitting scores and displaying leaderboards
- Submitting and displaying achievements
- Establishing multiplayer games
- In game voice chat

GameKit

Authenticating a user

- As soon as UI can be presented
- Asynchronous
  - Connectivity
  - Account login
  - Account creation
- Player information includes
  - Unique ID
  - Nickname

GameKit

Leaderboards

- Display
  - Standard UI—landscape/portrait
  - Custom UI
- Features
  - Filter by friends or all players
  - Filter by time—today, this week, all time
  - Query number of entries
  - Retrieve ranges

GameKit

Leaderboards—set up

- Enable
- Sort order
- Suffix
- Format
- Languages

Leaderboards—usage

- One leaderboard for all versions of your app
- Do not download all entries!

GameKit

Developer specified leaderboards

- Multiple leaderboards set up in iTunes Connect
  - Localized labels
  - All or default selection
- Automatic overall leaderboard
- Scores submitted with optional category
- Query server based upon category and any of the standard filters

GameKit

Achievements

- Display
  - Standard UI—landscape/portrait
  - Custom UI
- Features
  - Before and after achieved states
  - Progress on achievements
  - Hidden achievements

GameKit

Achievements—usage

- One set per app—not versioned
- Set up through iTunes Connect

Coming Soon

GameKit

Multiplayer

- Game invitations
- Auto-matching
- Multiplayer UI
- Matchmaking only
- In-game voice chat

GameKit

Multiplayer—game invitations

- Invite if friend has the app
- Invite if friend does not have the app

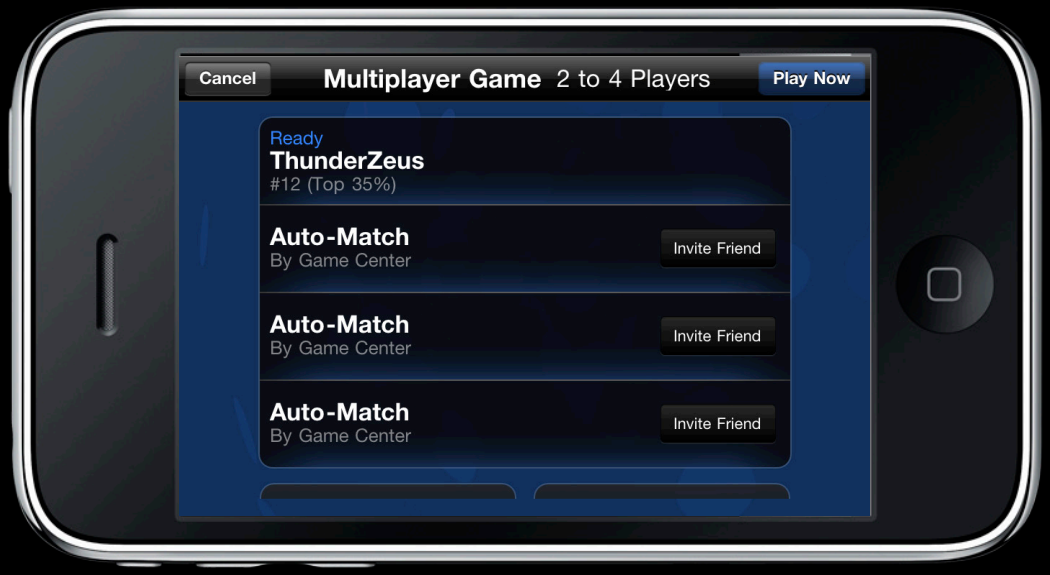
GameKit

Multiplayer—Auto-Matching

- Players launch game
- Players select to be auto-matched
- Match-making server finds best matches
- P2P or server based connections established
- Play!
- Player groups
- Player attributes

GameKit

Multiplayer—Auto-Matching



GameKit

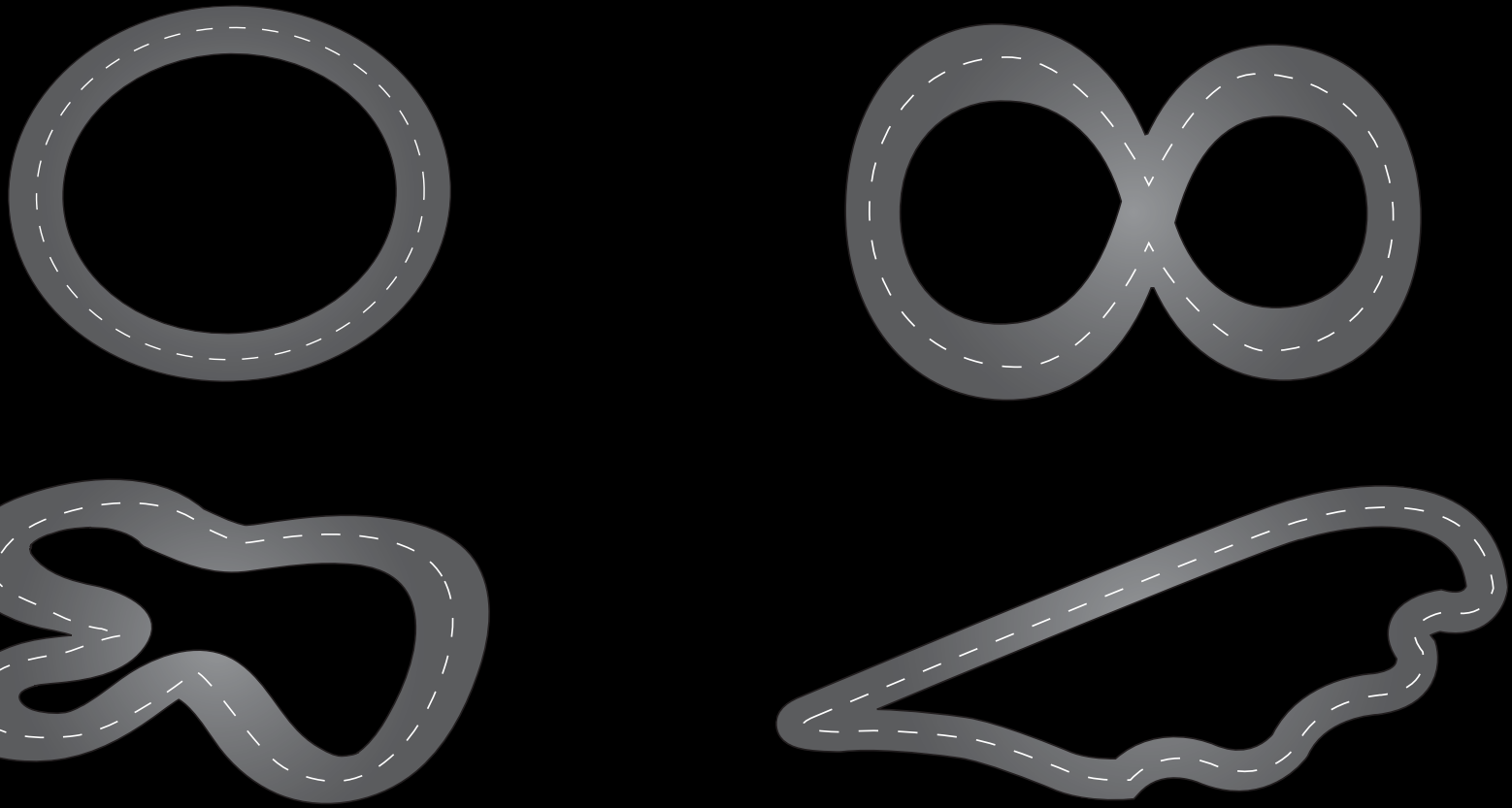
Multiplayer—Auto-Matching

GameKit

Multiplayer—Auto-Matching—P2P or Hosted

GameKit

Multiplayer—Auto-Matching with player groups



GameKit

Multiplayer—Auto-Matching with player groups

Auto-Matching

Multiplayer—Auto-Matching with player attributes

- Fighter
- Magic-User
- Cleric
- Thief

GameKit

Multiplayer—Auto-Matching with player attributes

GameKit

Multiplayer—UI

- Adjust the number of people you want to play with—Game sets the min and max
- Invite Friends with personalized messages
- Auto-Match
- Combo Match

GameKit

In Game Voice Chat

- Control participation
- Adjust/mute the volume of a channel

Development vs. Production

Development vs. Production

Sandbox

- Development area
  - New titles
  - New versions of current titles

Development (Sandbox) vs. Production

Accounts and servers

- Separate nickname namespace
- Separate Game Center servers
  - Matching
  - Leaderboards
  - Achievements

Development (Sandbox) vs. Production

Game Center App

Game 1
Game 2
Game 3

Accounts

Production Services

Game 1
Game 2
Game 3

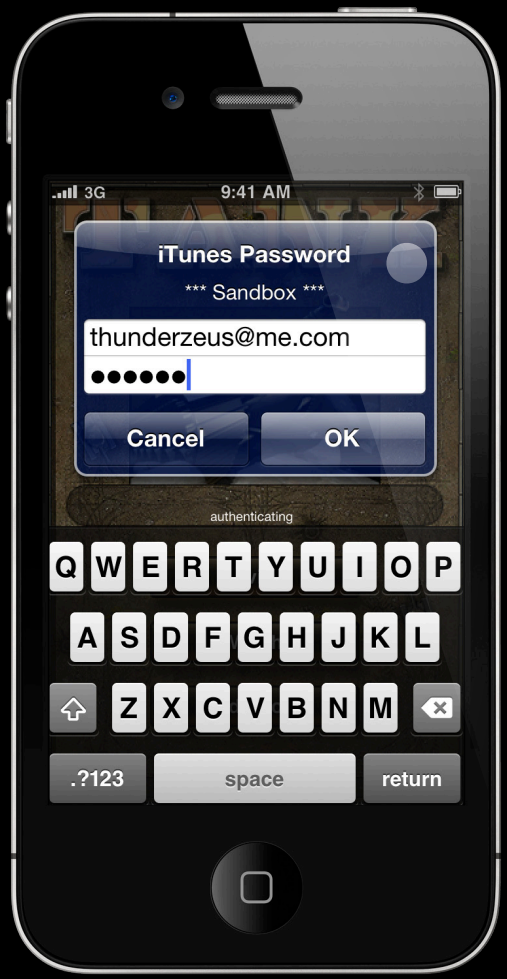
Accounts

Development Services

Development (Sandbox) vs. Production

Switching

- Not an issue until you have production and sandbox Game Center games
- Logout with Game Center app
- Launch app
- Log in



Development

After iOS 4 release

- Download the development IPSW for your device and install via iTunes (just like Beta)
- Device IPSW's will be available at http://developer.apple.com
- Game Center is still a preview
- No AppStore submissions

Summary

Mike Lampell

Summary

- Easy ways to enhance social gameplay
  - Player identification
  - Leaderboards
  - Achievements
  - Game invites and auto-matching
- Flexibility
- Skinability
- Viral distribution options

Labs

Game Center Lab	Graphics & Media Lab B Wednesday 2:00PM
Game Center Lab (Repeat)	Graphics & Media Lab D Friday 12:45PM
Game Design for iPhone OS Lab	Graphics & Media Lab A Wednesday 2:00PM
Game Design for iPhone OS Lab (Repeat)	Graphics & Media Lab A Friday 11:30AM

More Information

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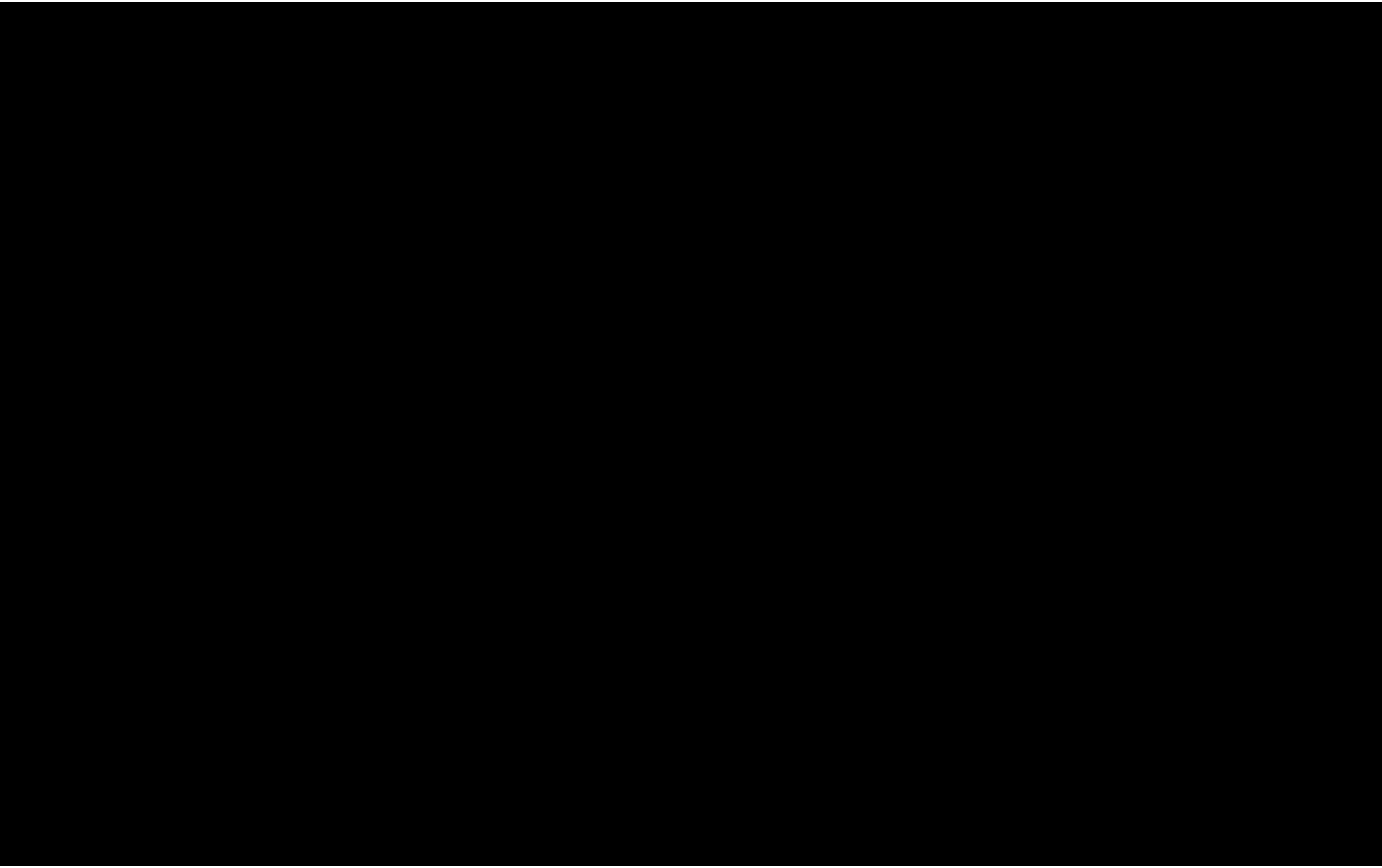
Apple Developer Forums
http://devforums.apple.com

Q&A

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