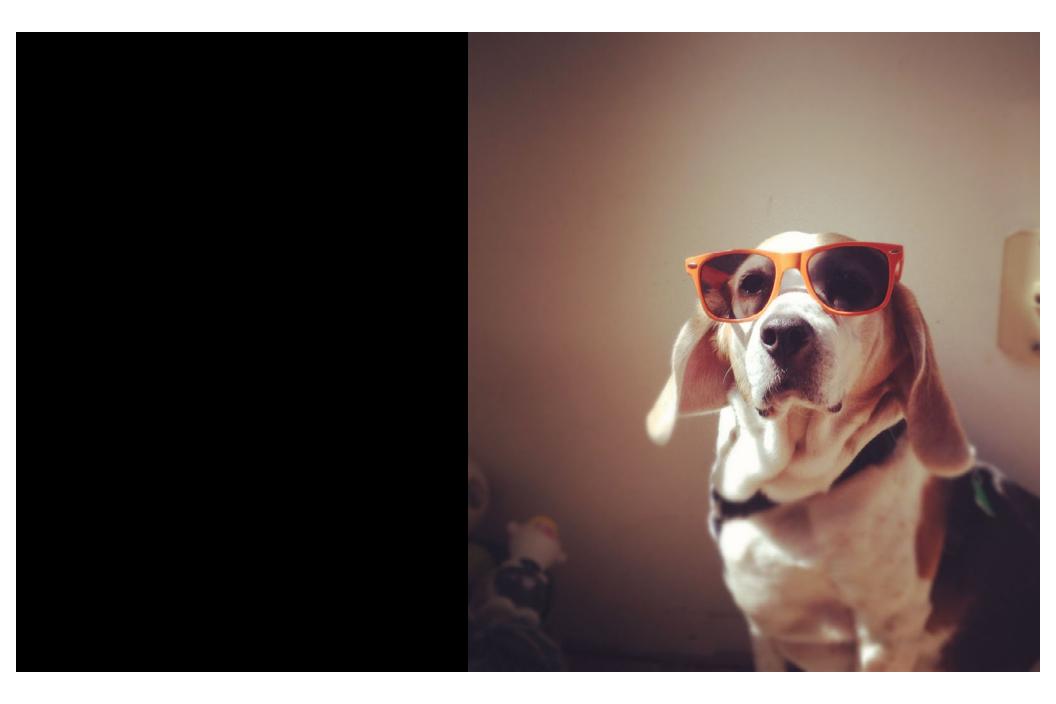
## Producing Rich Media Advertisements for iAd iAd Producer

Session 605 Scott Stevenson Software Engineer

**Chi Wai Lau** Software Engineer

These are confidential sessions—please refrain from streaming, blogging, or taking pictures

# "We're building an iAd."



# "Let's do this."





#### • Rich interactive ads



#### • Rich interactive ads



- Rich interactive ads
- Built on WebKit



- Rich interactive ads
- Built on WebKit
- Mini websites



- Rich interactive ads
- Built on WebKit
- Mini websites
- App keeps running



- Rich interactive ads
- Built on WebKit
- Mini websites
- App keeps running

- Rich interactive ads
- Built on WebKit
- Mini websites
- App keeps running

#### WebKit

- Rich interactive ads
- Built on WebKit
- Mini websites
- App keeps running



- Rich interactive ads
- Built on WebKit
- Mini websites
- App keeps running





#### • Expert iAd creator



- Expert iAd creator
- Built-in magic



- Expert iAd creator
- Built-in magic



- Expert iAd creator
- Built-in magic
- Full cycle





#### • Familiar



- Familiar
- Stellar results



- Familiar
- Stellar results
- Fine-grained control





#### Animation



#### **Events**



#### **Events**



#### **Object Library**



#### **Object Library**



#### **Object List**



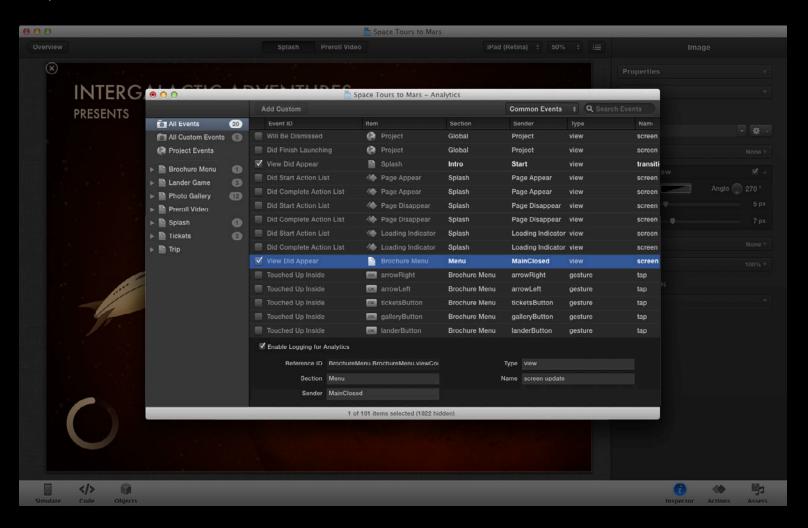
#### **Object List**



# Analytics

* INTERGE PRESENTS	All Events All Custom Events Project Events Brochure Menu Lander Game Photo Gallery Preroll Video	800	Add Custom Event ID Will Be Dismissed Did Finish Launching	Space Tours to Mars – An Item Project			; i≡ • • •	Properties	Image T
INTERG A	All Events All Custom Events Project Events Brochure Menu Lander Game Photo Gallery Preroll Video	6 0	Add Custom Event ID Will Be Dismissed Did Finish Launching	Item			+ Q Sear		
PRESENTS	All Events All Custom Events Project Events Brochure Menu Lander Game Photo Gallery Preroll Video	6 0	Add Custom Event ID Will Be Dismissed Did Finish Launching	Item			¢ Q Sear	ch Events	
PRESENTS	All Events All Custom Events Project Events Brochure Menu Lander Game Photo Gallery Preroll Video	6 0	Add Custom Event ID Will Be Dismissed Did Finish Launching	Item			+ Q Sear	ch Events	
	All Custom Events  Project Events  Brochure Menu  Ander Game  Photo Gallery  Preroll Video	6 0	Event ID Will Be Dismissed Did Finish Launching		Section				
	All Custom Events  Project Events  Brochure Menu  Ander Game  Photo Gallery  Preroll Video	6 0	Will Be Dismissed				Туре	Nami	
	<ul> <li>Project Events</li> <li>Brochure Menu</li> <li>Lander Game</li> <li>Photo Gallery</li> <li>Preroll Video</li> </ul>		Did Finish Launching		Global	Project	view	screen	- *
	<ul> <li>Brochure Menu</li> <li>Lander Game</li> <li>Photo Gallery</li> <li>Preroll Video</li> </ul>			Project	Global	Project	view	screen	None
	<ul> <li>Lander Game</li> <li>Photo Gallery</li> <li>Preroll Video</li> </ul>		View Did Appear	Splash	Intro	Start	view	transiti	
	<ul> <li>► Photo Gallery</li> <li>► Preroll Video</li> </ul>		Did Start Action List	Appear	Splash	Page Appear	view	ow	M .
	Preroll Video		Did Complete Action List	Age Appear	Splash	Page Appear	view	screen	📕 🛛 Angle 🔵 270 °
			Did Start Action List	A Page Disappear	Splash	Page Disappear		screen 🛡	5 p)
			Did Complete Action List	A Page Disappear	Splash	Page Disappear		screen 🗖	7 p
	Splash	00	Did Start Action List	Coading Indicator	Splash	Loading Indicator		soreen	/ P
	F Tickets	6	Did Complete Action List	A Loading Indicator	Splash	Loading Indicator		screen	None
- free	🕨 🖿 Trip		View Did Appear	Brochure Menu	Menu	MainClosed	view	screen	
-			Touched Up Inside	arrowRight	Brochure Menu	arrowRight	gesture	tap	
P			Touched Up Inside	arrowLeft	Brochure Menu	arrowLeft	gesture	tap N	
			Touched Up Inside	ticketsButton	Brochure Menu	ticketsButton	gesture	tap	
			Touched Up Inside	galleryButton	Brochure Menu	galleryButton	gesture	tap	
			Touched Up Inside	anderButton	Brochure Menu	landerButton	gesture	tap	
				ander Dutton	Diocitare mena	lander Button	gesture	ταρ	
			Enable Logging for Analytics						
			Reference ID Brochure	Menu.BrochureMenu.viewCoi		Type view			
			Section Menu			Name screen update			
			Sender MainClos	ed					
		-		of 101 items selected (1822 hid	iden)				
وماحد ويطرحهم فالتع									
								6	) 🌰 🖳

#### Analytics



#### iAd Producer Overview Customization

000	🔂 Space Tours to Mars – Global.css
Edited Code	Go to Method 🗘
BANNERS Banner.css Banner.js AD UNIT Giobal.js Project.js Brochure Menu Trip. Trip. Trip. Trip. Trip.js galleryView.js Fickets Photo Gallery EAD Callery ALANGER Game IMPORTED FILES Animations.css Kextra-styles.css Validator.js	<pre>/* Funt diobally accessible CSS for the ad unit in this file. */ input::webkit-input-placeholder, ifindas::webkit-input-placeholder {     padding=left: 2em; } valid::after {     color: rgba(0, 128, 0, 0.5);     float: left;     margin: -1.25em 0.25em;     font-sizei l.5em;     font-sizei l.5em; } </pre>

## iAd Producer Overview Customization

#### • iAd JS framework

000	🔁 Space Tours to Mars – Global.css
Edited Code	Go to Method 🗧
BANNERS Banner.css Banner.js AD UNIT Global.is Project.js Brochure Menu Trip.js GalleryView.js Trip. Trip. Trip. Trip. Construction Constructi	<pre>1 /* Put globally accessible CSS for the ad unit in this file. */ input; input;-webkit-input-placeholder, isindex::-webkit-input-placeholder {     padding-left: Zem;     }     .valid::after {         color: rgba(0, 128, 0, 0.5);         content: */;         font-size: 1.5em;     }     .invalid::after {         color: rgba(120, 0, 0, 0.5);         content: */;         margin: -1.25cm 0.25cm;         font-wize: 1.5em;     } } </pre>

## iAd Producer Overview Customization

- iAd JS framework
- CSS styles and keyframes

00	🔁 Space Tours to Mars - Global.css
Edited Code	Go to Method 🗧
BANNERS Banner.css Banner.js AD UNIT Global.css Global.js	<pre>1 /+ Put globally accessible CSS for the ad unit in this file. +/ 2 input, 3 input; webkit-input-placeholder, 4 isindexi:=webkit-input-placeholder { 5 pudding=left:=zem; 7 8 .valid::after { 9 color: ropa(0, 128, 0, 0.5); 10 content: */; 11 float: left; 12 margin:=1.25em;25em;</pre>
<ul> <li>Project.js</li> <li>Brochure Menu</li> <li>Trip.js</li> <li>galleryView.js</li> <li>Tickets</li> <li>Photo Gallery</li> <li>Lander Game</li> <li>IMPORTED FILES</li> <li>animations.css</li> <li>extra-styles.css</li> <li>tweaks.css</li> <li>Validator.js</li> </ul>	<pre>infont-size: 1.5em; if font-size: 1.5em; if i</pre>

## iAd Producer Overview Customization

- iAd JS framework
- CSS styles and keyframes
- Code Editor

000	🔁 Space Tours to Mars – Global.css
Edited Code	Go to Method 🗧
BANNERS Banner.css Banner.js AD UNIT Global.js Project.js Brochure Menu Trip.js Brochure Menu Trip.js Difference Difference Difference Brochure Menu Frip.js Difference Di	<pre>/ /* Put globally accessible CSS for the ad unit in this file. */ / input://webkit-input-placeholder, / isindex:-revekit-input-placeholder {     padding-left: 2em;     //</pre>



• Test on an iOS device



- Test on an iOS device
- Simulator support



- Test on an iOS device
- Simulator support
- Remote Web Inspector



# **Animation and Objects**

# World-class rich-media ads. Code optional.

## Actions Interactive elements



## Actions Interactive elements

• Visual animation actions



## Actions Interactive elements

- Visual animation actions
- Functional actions



## Action Lists Choreographed sequences



## **Action Lists**

#### Choreographed sequences

• Precisely timed groups of actions



## **Action Lists**

Choreographed sequences

- Precisely timed groups of actions
- Page build-in, build-out



## Action Lists

#### **Choreographed sequences**

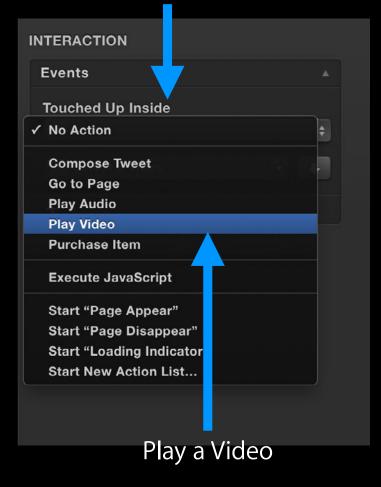
- Precisely timed groups of actions
- Page build-in, build-out
- Also control using iAd JS



## **Events** Respond to user interaction

Events	
Touched Up Inside	
✓ No Action	\$
Compose Tweet	
Go to Page	
Play Audio	
Play Video	
Purchase Item	
Execute JavaScript	
Start "Page Appear"	
Start "Page Disappear"	
Start "Loading Indicator"	
Start New Action List	

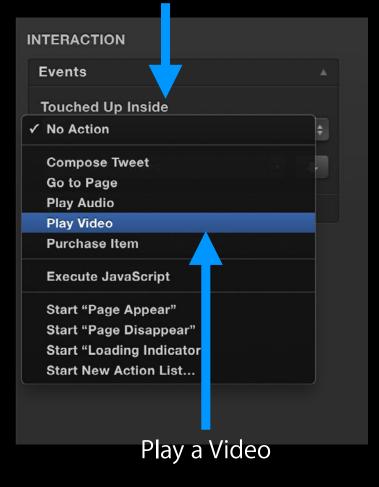
## **Events** Respond to user interaction



### **Events**

### Respond to user interaction

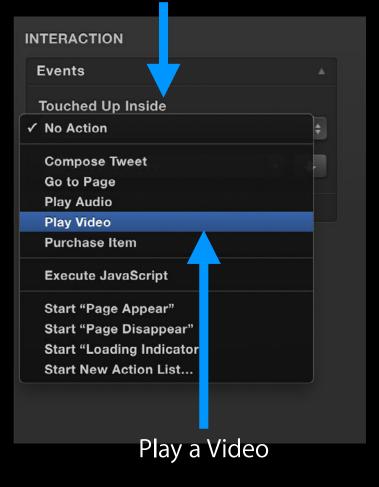
"Code-free coding"



## **Events**

### **Respond to user interaction**

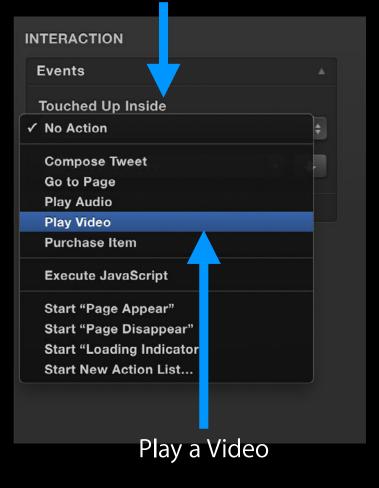
- "Code-free coding"
- Start actions or action lists



## **Events**

### **Respond to user interaction**

- "Code-free coding"
- Start actions or action lists
- Optionally run JavaScript







• Essentials



- Essentials
- Media



- Essentials
- Media
- Collections



- Essentials
- Media
- Collections
- Specialized



## Demo Animation and Objects

**Chi Wai Lau** Software Engineer

# **Customizing Behavior**

## "This is great, but I want control."

## Customizing JavaScript

00	🔁 Space Tours to Mars – Global.css
Edited Code	Go to Method ‡
BANNERS Banner.css Banner.js AD UNIT Giobal.js Giobal.js Project.js Brochure Menu Trip.js GalleryView.js Tickets Photo Gallery Lander Game IMPORTED FILES Aminations.css Kara-styles.css Validator.js	<pre>/* Put globally accessible CSS for the ad unit in this file. */ input: input:.webkit-input-placeholder; infudx::webkit-input-placeholder; infut-weight: bold; infut-weight: bold;</pre>

# Customizing

### JavaScript

#### • iAd JS

000	🕤 Space Tours to Mars - Global.css
Edited Code	Go to Method 🗧
BANNERS Banner.css Banner.js AD UNIT Global.css	<pre>1 /+ Put globally accessible CSS for the ad unit in this file. +/ 2 input; 3 input::-webkit-input-placeholder, 4 isindex::-webkit-input-placeholder { 5 padding-left: 2ee; 6 } 7 8 .valid::after { 9 coller:rgs(0, 128, 0, 0.5); 10 content: '/'; 11 filet.left; 12 } 13 } 14 } 15 } 15 } 15 \$ 15 \$ 16 \$ 16 \$ 16 \$ 16 \$ 16 \$ 16 \$ 16 \$ 16</pre>
<ul> <li>Global.js</li> <li>Project.js</li> <li>Brochure Menu</li> <li>Trip</li> <li>Trip.js</li> <li>galleryView.js</li> <li>Tickets</li> <li>Photo Gallery</li> <li>Lander Game</li> <li>IMPORTED FILES</li> <li>animations.css</li> </ul>	<pre>in tonin: 1 ft; in argin: -1.2sem 0.2Sem; font-weight: bold; font-weight: bold; if if invalid::after { color: roba(120.0, 0, 0.0.5); content: **; float: left; margin: -1.2Sem 0.2Sem; font-weight: bold; font-wise: 1.Sem; } </pre>
extra-styles.css tweaks.css Validator.js	

# Customizing

### JavaScript

- iAd JS
  - Extend with callbacks

000	🔁 Space Tours to Mars – Global.css
Edited Code	Go to Method 🗧
BANNERS Banner, css Banner, is AD UNIT Giobal., is Project., is Brochure Menu Trip. Trip.js galleryView, js Tickets Photo Gallery Lander Game IMPORTED FILES animations.css tweaks.css Validator. js	<pre>/* Put globally accessible CSS for the ad unit in this file. */ input::=webkit-input-placeholder. isindex:=webkit-input-placeholder {     padding=left: 2em; } .valid::after {     color: rgba(0, 128, 0, 0.5);     float: left;     margin: -1.25em 0.25em;     font-sciet1.5em; } invalid::after {     color: rgba(128, 0, 0.5);     color: rgba(128, 0, 0.5);     float: left;     font-sciet1.55em; } font-weight: bold; font-sciet1.55em; } } </pre>

# Customizing

## JavaScript

- iAd JS
  - Extend with callbacks
  - Custom classes

00	🔂 Space Tours to Mars – Global.css
Edited Code	Go to Method ‡
BANNERS Banner.css Banner.js AD UNIT Global.js Global.js Project.js Brochure Menu Trip.js GalleryView.js Tickets Photo Gallery Lander Game IMPORTED FILES Aminations.css Extra-styles.css Validator.js	<pre>/* Put globally accessible CSS for the ad unit in this file. */ input:.webkit-input-placeholder, isindex::webkit-input-placeholder {     padding=left: 2em; } valid::after {     color: rgba(0, 120, 0, 0.5);     content: '&lt;';     float: left:         margin: -1.25em 0.25em;         font-weight: bold;         font-</pre>

• iAd.View is your go-to class

iAd.View is your go-to classPresentation

- iAd.View is your go-to class
  - Presentation
  - Event handling

- iAd.View is your go-to class
  - Presentation
  - Event handling
- view.layer = DOM element

- iAd.View is your go-to class
  - Presentation
  - Event handling
- view.layer = DOM element
- this.viewController.outlets.myView

#### Customizing css

• Static CSS file in asset library

	Code ‡
	animations.css 13 KB Last modified Jun 12, 2012
animations.css	
extra-styles.css	
tweaks.css	
Validator.js	

- Static CSS file in asset library
- Custom styles

· * ·
d, 1px ▼
None 🔻
None <b>v</b>
100% 🔻

- Static CSS file in asset library
- Custom styles
- Custom keyframes

4.0 Spaceship Custom	
Custom	
particleShift	
Select a keyframe set from a CSS file in your Asset Library	
Start After Previous Action 💠	
Delay 0s ‡ Duration 1s ‡	
Easing Default +	

- Static CSS file in asset library
- Custom styles
- Custom keyframes
- Dynamic in JavaScript with layer

4.0	🖉 🖉 Sp	aceship		Custom							
С	ustom										
	particleShi	ft			Ŧ						
	Select a keyframe set from a CSS file in your Asset Library										
	Start	After Previo	us Action		÷						
	Delay	0s ‡	Duration	1s	4						
	Easing	Default			¢						

## Demo Customizing behavior

**Chi Wai Lau** Software Engineer

## Performance and Deployment

# "This is really fast."

and a second sec	-		-		Deb	ugger							
😫 💽 💽	0	) 🐒	1 🔍	1						(Q			
lements Resources Network	Scripts Ti	neline Pro	files Audit	s Console							Sea	rch Networ	ĸ
ame ith	Method	Status Text	Туре	Size Transfer	Time Latency	Timeline	867ms	1.30s	1.73s	2.175	2.60s	3.04s	3.47s
Menu.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	2.86KB 2.86KB	20ms	0							
Menu.css /238E8CEE-30C0-43D1-A76	GET	200 OK	text/css	7.56KB 7.56KB	23ms 20ms	•							
button-large@2x.png /238E8CEE-30C0-43D1-A76	GET	200 OK	image/	12.27KB 12.27KB	35ms	0							
horiz-dots@2x.png /238E8CEE-30C0-43D1-A76	GET	200 OK	image/	3.17KB 3.17KB	35ms 35ms	0							
menu-masthead@2x.png /238E8CEE-30C0-43D1-A76	GET	200 OK	image/	119.92KB 119.92KB	36ms 35ms	۲							
index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	181ms 180ms								
index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	165ms 164ms								
index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	165ms 165ms								
button-large-hilite@2x.png /238E8CEE-30C0-43D1-A76		200 OK	image/	11.89KB 11.89K8	85ms 85ms								
requests   297.33KB transferr													
			lesheets l		and and a set	10 Family	WebSocket	s Other					A3

#### Memory

	0	and a second	server and			Deb	ugger							
4		<u>)</u>	ð 🙎	<u>ì</u>	. 🌆						٩	6	rch Network	
Eleme Name Path	ents Resources Network S	Method	Status Text	files Audit	Size	Time Latency	Timeline	867ms	1.30s	1.73s	2.175	2.60s	3.04s	3.475
	Menu.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	2.86KB 2.86KB	20ms 20ms	•	ee/ms	1,303	4.733	2.173	2.003	3.045	340
	Menu.css /238E8CEE-30C0-43D1-A76	GET	200 OK	text/css	7.56KB 7.56KB	23ms 20ms	•							
	button-large@2x.png /238E8CEE-30C0-43D1-A76	GET	200 OK	image/	12.27KB 12.27KB	35ms	0							
	horiz-dots@2x.png /238E8CEE-30C0-43D1-A76	GET	200 OK	image/	3.17KB 3.17KB	35ms 35ms	0							
	menu-masthead@2x.png /238E8CEE-30C0-43D1-A76-	GET	200 OK	image/	119.92KB 119.92KB	36ms 35ms	۲							
	index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	181ms 180ms								
	index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	165ms 164ms							_	
	index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	165ms 165ms								
	button-large-hilite@2x.png /238E8CEE-30C0-43D1-A76-	GET	200 OK	image/	11.89KB 11.89KB	85ms 85ms								
9 req	uests   297.33KB transferred	4												
		Docum	ents Sty	lesheets l	mages S	cripts XI	R Fonts	WebSocket	s Other					<u>A</u> 3

- Memory
- Drawing

000					Deb	ugger						_	
😫 💽 💽	0	😤 (	<u>n</u>	. 🌆						٩		ch Network	
Elements Resources Network Name Path	Scripts Ti Method	Status Text	Type	Size	Time Latency	Timeline							
Menu.html /238E8CEE-30C0-43D1-A	76 GET	200 OK	text/html	2.86KB 2.86KB	20ms 20ms	0	867ms	1.30s	1.73s	2.17s	2.60s	3.04s	3.47s
Menu.css /238E8CEE-30C0-43D1-A	76- GET	200 OK	text/css	7.56KB 7.56KB	23ms 20ms	•							
button-large@2x.png /238E8CEE-30C0-43D1-A	76. GET	200 OK	image/	12.27KB 12.27KB	35ms	0							
horiz-dots@2x.png /238E8CEE-30C0-43D1-A	76: GET	200 OK	image/	3.17KB 3.17KB	35ms 35ms	0							
menu-masthead@2x.png /238E8CEE-30C0-43D1-A	76- GET	200 OK	image/	119.92KB 119.92KB	36ms 35ms	۲							
index.html /238E8CEE-30C0-43D1-A	76. CET	200 OK	text/html	46.55KB 46.55KB	181ms 180ms						4		
index.html /238E8CEE-30C0-43D1-A	76: GET	200 OK	text/html	46.55KB 46.55KB	165ms 164ms							0	
index.html /238E8CEE-30C0-43D1-A	76: GET	200 OK	text/html	46.55KB 46.55KB	165ms						4		
button-large-hilite@2x.p /238E8CEE-30C0-43D1-A		200 OK	image/	11.89KB 11.89KB	85ms 85ms								
9 requests   297.33KB transfe	rred												
	Docur	nents Sty	lesheets	mages S	cripts XI	R Fonts	WebSocket	s Other					<u>A</u> 3

- Memory
- Drawing
- Fetches

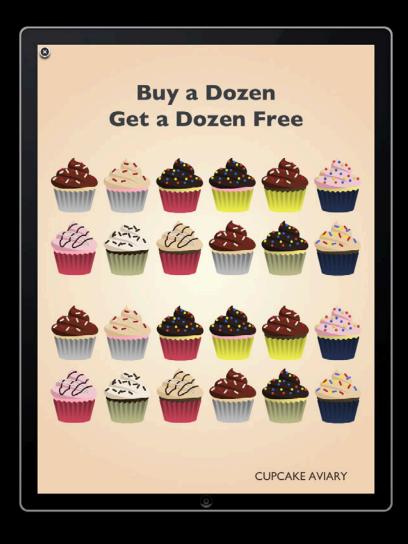
000	-				Deb	ugger								
	0 (	🤔 (	<u>n</u> Q							(9				
Elements Resources Network Scripts Timeline Profiles Audits Console Search Netwo													rk	
Name Path	Method	Status Text	Туре	Size Transfer	Time Latency	Timeline	867ms	1.30s	1.73s	2.175	2.60s	3.04s	3.475	
<u>Menu.html</u> /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	2.86KB 2.86KB	20ms 20ms	•								
Menu.css /238E8CEE-30C0-43D1-A76-	GET	200 ОК	text/css	7.56KB 7.56KB	23ms 20ms	•								
button-large@2x.png /238E8CEE-30C0-43D1-A76-	GET	200 OK	image/	12.27KB 12.27KB	35ms 35ms	0								
horiz-dots@2x.png /238E8CEE-30C0-43D1-A76:	GET	200 OK	image/	3.17KB 3.17KB	35ms 35ms	0								
menu-masthead@2x.png /238E8CEE-30C0-43D1-A76-	GET	200 OK	image/	119.92KB 119.92KB	36ms 35ms	۲								
index.html /238E8CEE-30C0-43D1-A76	GET	200 OK	text/html	46.55KB 46.55KB	181ms 180ms									
index.html /238E8CEE-30C0-43D1-A76:	GET	200 OK	text/html	46.55KB 46.55KB	165ms 164ms									
index.html /238E8CEE-30C0-43D1-A76-	GET	200 OK	text/html	46.55KB 46.55KB	165ms 165ms									
button-large-hilite@2x.png /238E8CEE-30C0-43D1-A76-	GET	200 OK	image/	11.89KB 11.89KB	85ms 85ms									
9 requests   297.33KB transferred	4						_				_	_		
	Docum	ents Sty	lesheets I	Images S	cripts XI	R Fonts	WebSocket	s Other					<u>A</u> 3	

• Minimize and concatenate scripts

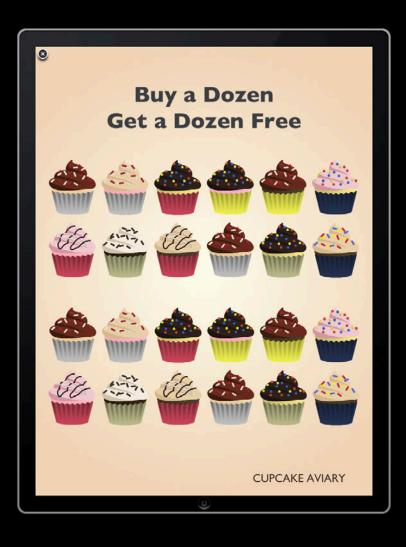
- Minimize and concatenate scripts
- Preload images

- Minimize and concatenate scripts
- Preload images
- Set display property to 'none'

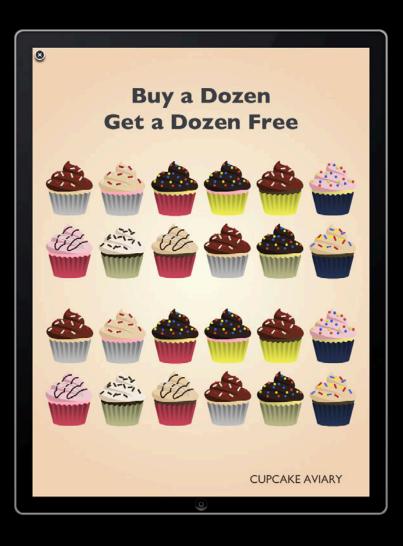
• 2,000 pixel limit



- 2,000 pixel limit
- Combine views



- 2,000 pixel limit
- Combine views
- Use 'display: none' when you're done



Check validations

- Check validations
- Test locally on iOS device

- Check validations
- Test locally on iOS device
- Talk to your iAd rep

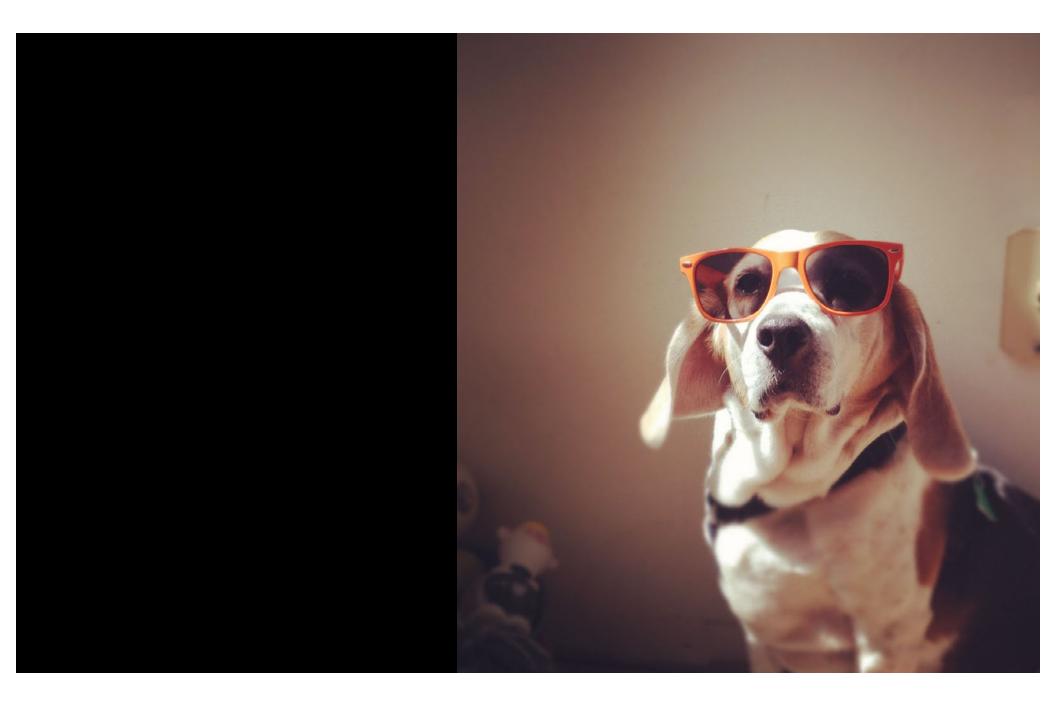
- Check validations
- Test locally on iOS device
- Talk to your iAd rep
- Upload to iAd test server

- Check validations
- Test locally on iOS device
- Talk to your iAd rep
- Upload to iAd test server
- Receive email

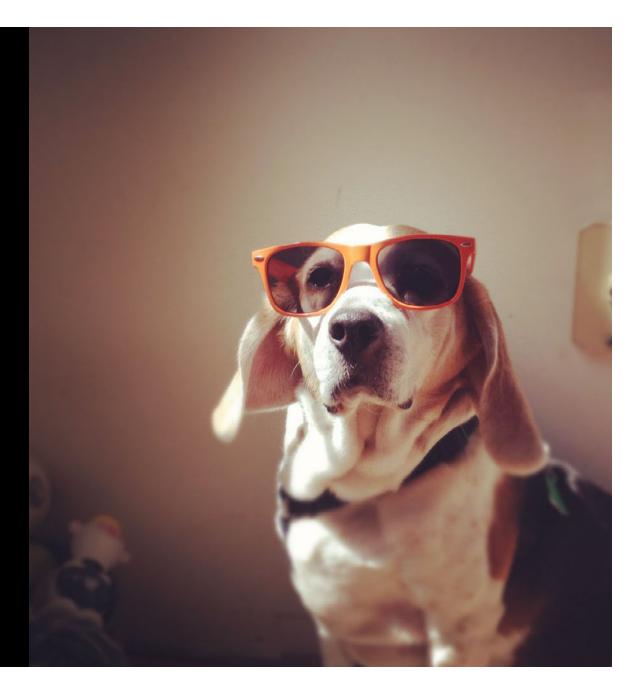
- Check validations
- Test locally on iOS device
- Talk to your iAd rep
- Upload to iAd test server
- Receive email
- Test over the air

### Demo Performance and deployment

**Chi Wai Lau** Software Engineer

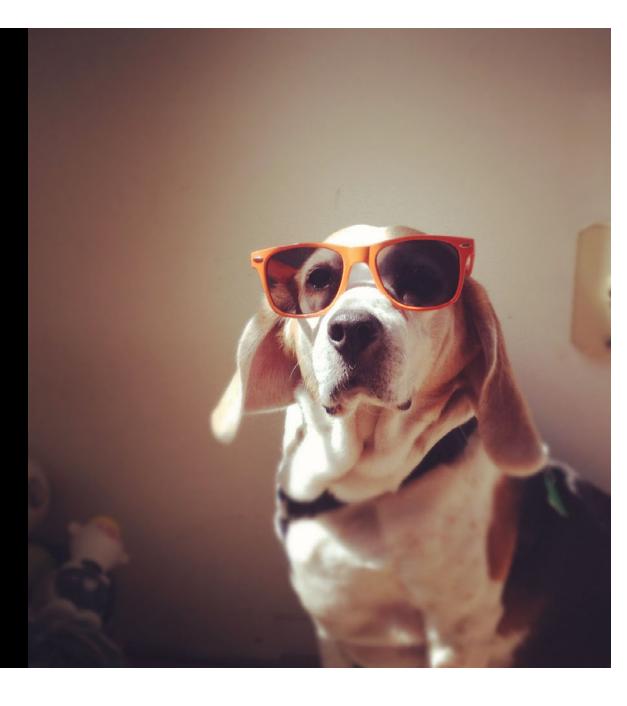


## "Like I said, let's do this."

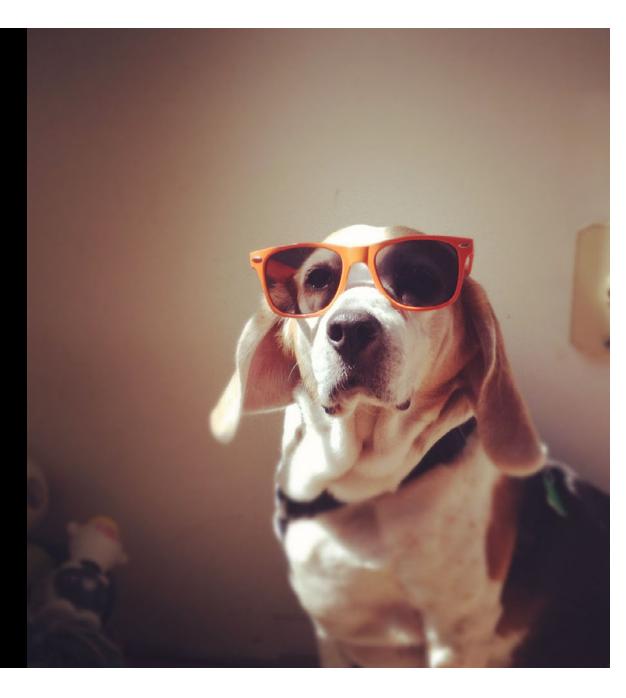




• Download iAd Producer



Download iAd ProducerOpen the sample projects



- Download iAd Producer
  Open the sample projects
  Tell us what you think

#### **More Information**

Mark Malone iAd Technologies Evangelist mgm@apple.com

**Documentation** iAd Producer Help http://help.apple.com/iadproducer

#### Apple Developer Forums

http://devforums.apple.com

#### Labs

iAd Lab

Safari & Web Lab Friday 10:15AM

# **ÉWWDC**2012