OUTSIDE THE BROWSER SURVIVAL GUIDE

The Challenges of Hybrid Apps and Games

HTML5

ludei

GPU TECHNOLOGY CONFERENCE
WHO ARE YOU?

Iker Jamardo (@judax)
VP of Engineering @ Ludei
Passionate about software, tech products and videogames
3 YEARS AGO,
WE HAD A VISION INTO THE FUTURE...
WE DID NOT WANT TO CONTINUE DEVELOPING USING DIFFERENT TECHNOLOGIES
WE BELIEVED IN THE WEB...
...AND WE LOVED MAKING AND PLAYING GAMES
HTML5 (AND WEBGL) FOR GAME DEVELOPMENT WAS THE VISION
WE MADE HTML5 WORK FOR GAME DEVELOPMENT

Success.
IT WAS EARLY

(not everybody shared the vision at the time)
TODAY WE HAVE

20,000+ GAME DEVELOPERS

1,800+ GAMES PUBLISHED
AND MORE THAN 100 FLAPPY BIRD CLONES :( :)

http://blog.ludei.com/why-flappy-bird-should-have-been-an-html5-game/
WHY HTML5

Number #1 reason: Cross-platform
WHY HTML5

But cross-platform is not just devices or OS, but stores!

- iOS App Store
- Google Play
- Amazon
- OUYA
- Windows
- MacOSX App Store
- Steam
- Facebook
- Chrome Store
- Mozilla Marketplace
- Tizen Store
- ...

WHY HTML5

...and emerging browser based markets.

Spil Games
Kik
Click Jogos
Clay.io
MarketJS
MundiJuegos
Kongregate
...

...
WHY HTML5

Allows rapid prototyping
WHY HTML5

All the benefits from the web:

- Well established infrastructure
- Widely known platform
- Content on demand in it's nature
WHY HTML5

WebGL
WHY HTML5

Still can access all the native features from JS:

In-App Payments
Native Ad Networks
Push Notifications
Social Network Native SDKs
Analytics
Crash Reports
...

Develop your own extensions
WHY HTML5

Great tools are available

ImpactJS
Construct2
Goo
PlayCanvas
PixiJS
PandaJS
KiwiJS
Haxe
Phaser
...

...
WHY HTML5

Big companies are betting on and supporting it

NVidia
Qualcomm
Google
Amazon
Apple
Microsoft
Intel
Samsung
Nickelodeon
Disney
...

...
CHALLENGES FOR HTML5 DEVELOPERS
CHALLENGE #1

PERFORMANCE
LUDEI’S APPROACH

FAST (AND ONLY) JAVASCRIPT EXECUTION ENVIRONMENT TO CREATE CANVAS 2D AND WEBGL IOS AND ANDROID NATIVE APPS
CHALLENGE #2

DEVICE (AND BROWSER) FRAGMENTATION
LUDEI’S APPROACH

A CONSISTENT SET OF HTML5 FEATURES AND APIS

ACROSS MANY DEVICES AND OS VERSIONS
CHALLENGE #3

STORE/PLATFORM FRAGMENTATION
LUDEI’S APPROACH

A NATIVE HYBRID APP WRAPPER

iOS, Android, Windows Phone, Windows, MacOSX, Linux
LUDEI’S APPROACH
THE COCOONJS CLOUD COMPILER
One click to multiple platform deployment
CHALLENGE #4

WORKFLOW
Test -> Debug -> Deploy
LUDEI’S APPROACH

THE COCOONJS LAUNCHER APP

Browser-like experience on the device

Remote debugging of your JavaScript

Native extensions/plugins testing

Cordova/PhoneGap compatible
CHALLENGE #5

MAKE MONEY
LUDEI’S APPROACH

CROSS-PLATFORM VALUE ADDED SERVICES

Monetization
(ads & IAPs)

Engagement
(notifications and social networks)

Analytics

Multiplayer

A/B testing

Online app update

...
CHALLENGE #6

DEVELOPERS NEED MORE CONTROL
ADVANCED FEATURES TO PROVIDE MORE CONTROL TO HTML5 GAME DEVELOPERS

Image, canvas and sound synchronous memory deallocation

Extended features for performance boost
(screencanvas, devicemotion setup, CSS matrix serialisation, ...)

Vibration, gamepad API, ...
SHOW ME SOME DEMOS!!!