



SMARTPHONE & TABLET GAMES SUMMIT

From an iPhone to an Android

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11
Online



What is Appy?





What is Appy?



- Appy is an independent developer and publisher
- Primarily iOS focused
- 10 million downloads



Who am I?



Who am I?

- Large English Chap
- “Executive Producer” at Appy
- Worked on loads of games and conversions



Who am I?





What is FaceFighter?



What is FaceFighter?





What is FaceFighter?



What is FaceFighter?



What is FaceFighter?

- Easy to play 1st person fighting game
- Your friends are your foes!
- Developed for iOS - released June 2009
- 2D Sprites / OpenGL
- Several versions / millions of downloads



Conversion expectations

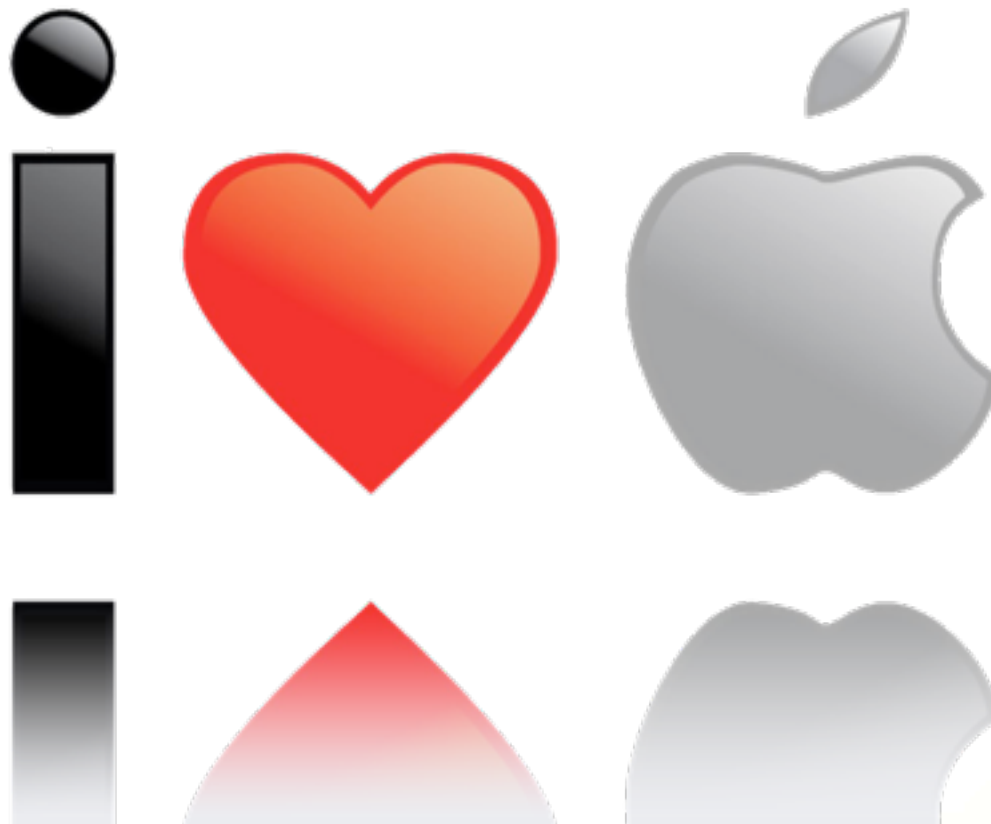


Conversion expectations

- FaceFighter Gold & Lite for Android 2.1 and up
- Simultaneous release for Christmas 2010
- Retain performance & playability of iOS SKU
- Minor differences OK / no Multiplayer?
- Moderate concern about compatibility issues
- Submission easier and quicker than iOS



Disclaimer!





Disclaimer!



- We're focused on iOS development
- Needed Android experts to do the job!



I am also (sometimes) stupid!





Preparing for Kick-Off!



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- Find the right development partner
- Send them the iOS code and get it building!
- Evaluation by the Developer
- Produce Milestones
- Discuss design changes...



Some initial design changes



Some initial design changes

- UI changes due to Android differences
- Removal of multi-player confirmed!
- Database changes
- Installation options



GGGGGG GO!



GGGGGG GO!

- Development began on 21st September 2010
- Intended submission was 26th October 2010
- Actual submission of FaceFighter Gold was December 22nd 2010 at 5.56 AM.
- Here's what happened!



Squeezing a Quart into a Pint-pot





Squeezing a Quart into a Pint-pot



- 24MB useable heap on Droid class devices
- 20 texture pages, 4MB each (uncompressed)
- No unified useable compression scheme...



Squeezing a Quart into a Pint-pot



Squeezing a Quart into a Pint-pot

- Initially brute forced texture sizes to 25% of original just to run
- Used native compression for PVRTC and ATITC compliant devices
- Used filter on manifest for incompatible devices



Squeezing a Quart into a Pint-pot



Squeezing a Quart into a Pint-pot

- Each UI screen dumped from RAM on exit
- Java memory alloc / de-alloc not great
- Only loaded one opponent face at a time
- Camera caching craziness...



Keyboards that just work!





Keyboards that just work!

- Different keyboards - not intentional
- Cursor not always visible
- Not obvious how to exit some keyboards
- Back button could break the App!
- Sense ignored flags telling keyboards to close



Middleware: It mostly just worked!



Middleware: It mostly just worked!

- Used OpenFeint
- Not as feature rich as OpenFeint iOS but no rotation compliance to worry about...
- Minor issues with Adwhirl
- Flurry, Facebook and Twitter painless!



Various other bits and bobs



Various other bits and bobs

- Broken multi-touch on some devices
- Stupid resolutions (640x360) on some devices
- Audio was very buggy
- Installation space requirements confusing
- Email App incompatibility
- Decided to focus on shipping FaceFighter Gold first as we were behind...





Then - along came Android 2.3...





Then - along came Android 2.3...

- Bitmap handling caused crashes
- Threading issues caused crashes
- Changes to way OpenGL surfaces handled caused crashes
- Changes to flags broke compression compatibility checking...
- Broke the pause menu... looked like a crash!



More bits and bobs



More bits and bobs

- APPALLING screenshot taking process
- Google Android Store was painless & no wait!
- Amazon store was the opposite



Post-Submission



Post-Submission

- First incompatibility report from a customer was a couple of hours after it was shipped!
- Released several updates to fix issues
- Problems continue to be reported
- Too many devices for us to realistically support



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Conclusion: What I liked





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- Great partner - despite being late
- Delivered high-quality conversion
- Getting builds easy - no provisioning!
- Instant submission and update on Google Android store



Conclusion: In hindsight...

FIDDLESTICKS!





Conclusion: In hindsight...

- Should've released FaceFighter Lite first
- Should've been more aware of memory issues upfront
- Disappointing sales and high piracy rate
- Constant compatibility issues



Thanks! Bye! Email Me!





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