GDC

# Development on a Shoestring: Ultra Low Budget Indie Gamedev

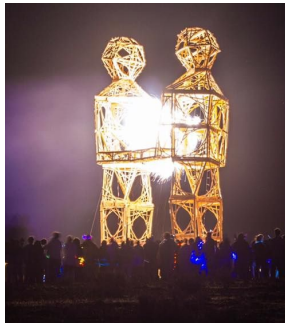
**Oded Sharon**
CEO, Corbomite Games

# Who is Oded Sharon?

39 years old

## Too many hobbies

Maker



Fireworks

Burner )'(

## Super Geek

(Or: Why should you listen to me?)

# Indie Game Developer!

- Making games for 18 years.
- Multiple Genres and platforms.
- Alone in my pajamas at home.
- Lead a company of 20 people.

# What didn’t I make?

# What will we talk about?

Lots of shoestrings!

20 minutes /
100 slides
= 12 seconds

# What will we talk about?

- Design Considerations
- Limited Resources
- Tools and tech
- PR and Marketing
- Case Studies (Bolt Riley/ Herbert's Quest)

# Showstring Roundtable

Running for the 3rd year in a row!
(Right after this talk, Room 122)

This talk is based on:

Things I learned from roundtable sessions.

Things I learned from my own experience.

# GDC Vault

This talk will be available later on GDC Vault.

(Including all the links)

# Where to begin?

# Game Design

# Passion!

It’s the ultimate motivator!

Work on game for a while.

Your time being spent on
Something you love.

## Watch :

TEDxBlackRockCity - Dan Ariely - Money Changes Everything
https://www.youtube.com/watch?v=oV0cbCFGAtU

Bolt Riley - A Point and Click Reggae Adventure.

# Worked on it since 2011

# You'll hear more Later.

# Scope

# Scope

## List of most expensive video games to develop

From Wikipedia, the free encyclopedia

*This list is incomplete; you can help by expanding it.*

The following is a **list of the most expensive video games** ever developed, with a minimum total cost of US$50 million and sorted by the total cost adjusted for inflation.

| Rank | Name | Year | Developer | Publisher | Platform | Development cost (million US$) | Marketing cost (million US$) | Total cost (million US$) | Total cost with 2017 inflation (million US$) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | *Call of Duty: Modern Warfare 2* | 2009 | Infinity Ward | Activision | PC, PS3, Xbox 360 | 50 | 200 | 250[1] | 279 |
| 2 | *Grand Theft Auto V* | 2013 | Rockstar North | Rockstar Games | PC, PS3, PS4, Xbox 360, Xbox One | 137[2] | 128 | 265[3] | 272 |
| 3 | *Final Fantasy VII* | 1997 | Square | Square Enix, Sony Computer Entertainment (PS), Eidos Interactive (PC) | PS, PC | 45[4] | 100[5] | 145 | 216 |
| 4 | *Star Wars: The Old Republic* | 2011 | BioWare | Electronic Arts, LucasArts | PC | 200[6] | 11 | 200+[7] | 213+ |
| 5 | *Star Citizen* | TBD | Cloud Imperium Games | Cloud Imperium Games | PC | 142+[8][9] | | 142+ | 142+ |
| 6 | *Destiny* | 2014 | Bungie | Activision | PS3, PS4, Xbox 360, Xbox One | <140[10] | <140[10] | 140[10][11][12] | 142 |
| 7 | *Grand Theft Auto IV* | 2008 | Rockstar North | Rockstar Games | PS3, Xbox 360, PC | 100[13] | | 100+[13][14] | 111+ |
| 8 | *Too Human* | 2008 | Silicon Knights | Microsoft Game Studios | Xbox 360 | 100[13] | | 100[13] | 111 |
| 9 | *APB: All Points Bulletin* | 2010 | Realtime Worlds | Electronic Arts, Realtime Worlds, Deep Silver (PS4, XB1) | PC, PS4, Xbox One | | | 100[15] | 110 |
| 10 | *Red Dead Redemption* | 2010 | Rockstar San Diego | Rockstar Games | PS3, Xbox 360 | 80-100[16] | | 100[17] | 110 |
| 11 | *Max Payne 3* | 2012 | Rockstar Studios | Rockstar Games | PC, Xbox 360, PS3 | 105[18] | | 105[18] | 110 |
| 12 | *Deadpool* | 2013 | High Moon Studios | Activision | PS3, PS4, Xbox 360, Xbox One, PC | | | 100[19] | 103 |

https://en.wikipedia.org/wiki/List_of_most_expensive_video_games_to_develop

# Scope

Match to team's abilities and resources!

# F2P vs Premium?

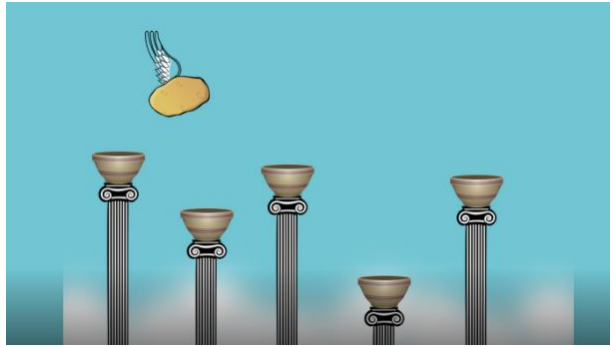
Depends on team's marketing abilities, experience, and resources (and passion).

No right answer.

# New vs Old?

## Experimental?

## Me Too!

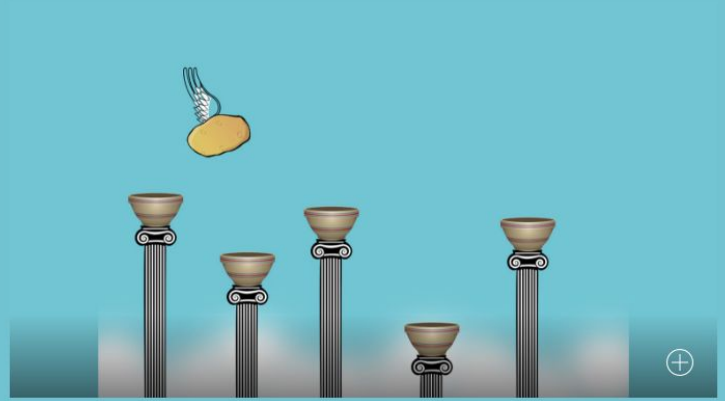


https://www.kickstarter.com/projects/soundguy/flappy-potato-salad

t a project For you KICKSTARTER

Page theme

# Flappy Potato Salad



Potato Salad + Flappy Bird = Flappy Potato Salad. A Flappy Bird-like game about making potato salad.

Play Game!

Created by

Oded Sharon

17 backers pledged $106 to help bring this project to life.

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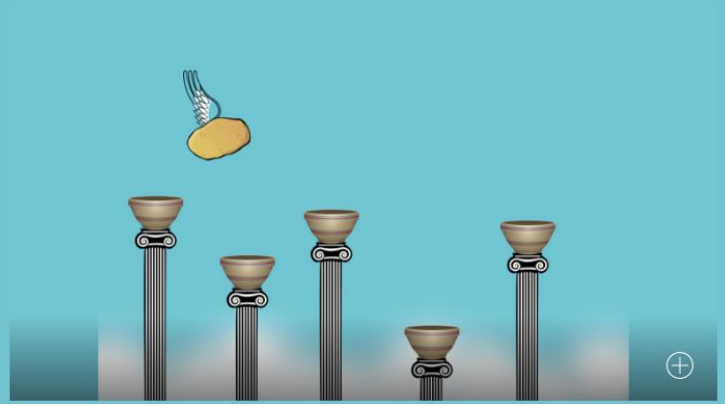
Page theme

# Flappy Potato Salad

Total work: 1 day



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# Flappy Potato Salad

Total work: 1 day

Free Assets.

Potato Salad + Flappy Bird = Flappy Potato Salad. A Flappy Bird-like game about making potato salad.

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Page theme

Flappy Potato Salad

Total work: 1 day

Total profit: $150

Free Assets.

Potato Salad + Flappy Bird = Flappy Potato Salad. A Flappy Bird-like game about making potato salad.

Play Game!

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Total work: 1 day

Total profit: $150

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Play Game!

Created by

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17 backers pledged $106 to help bring this project to life.

# Prototype and MVP!

Try and throw away bad ideas early =
Spend less money on failures.

Playtest early,
And
playtest often.

# Resources!

Ideal team:

Programmer

Artist

Sound

Designer?

# Who are you?!

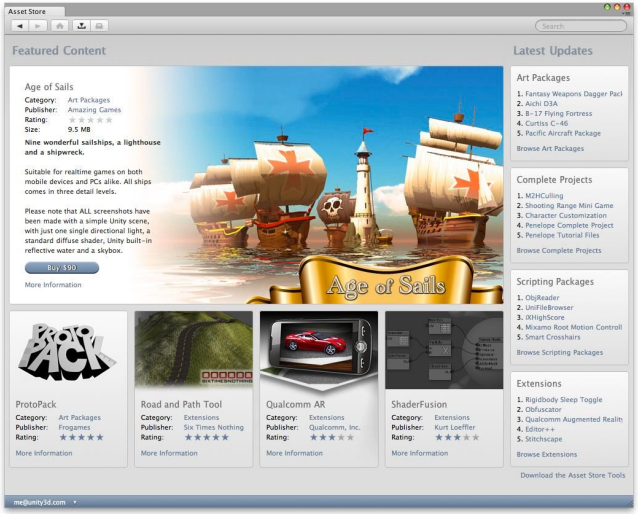
# How to do things without a Programmer?

Frameworks and visual coding! (and full games!)

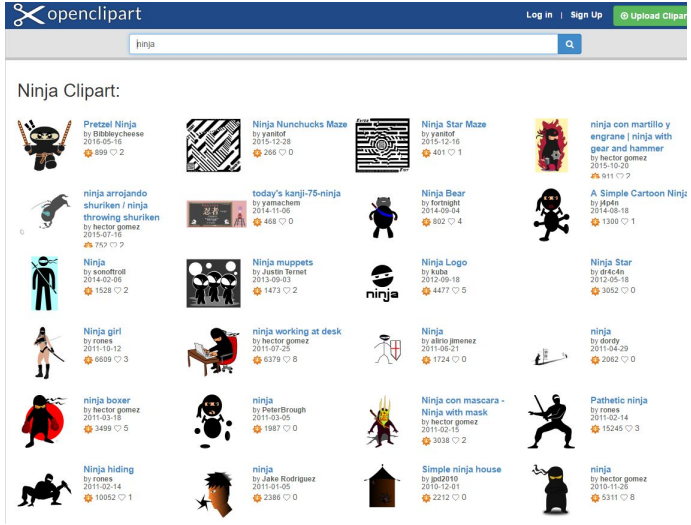
# How to do things without an artist?

Find art at:

Asset stores

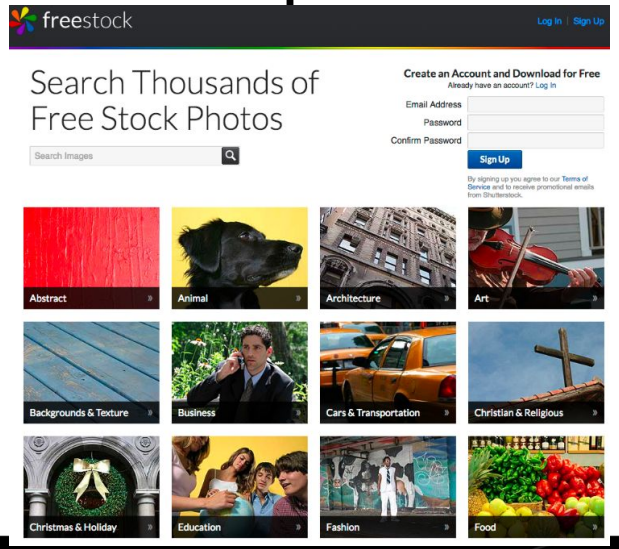



Royalty free (EG. Openclipart)

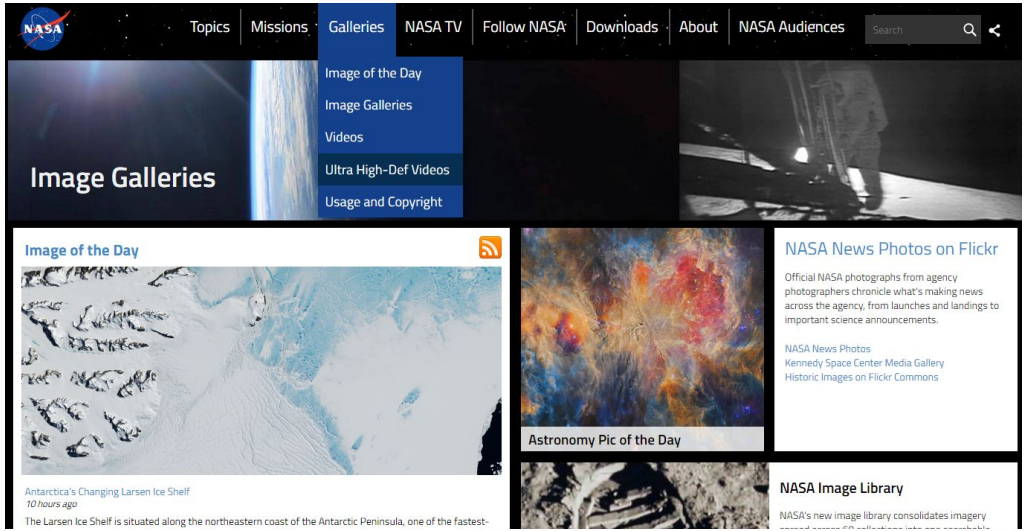


# More free art resources

## Stock photos

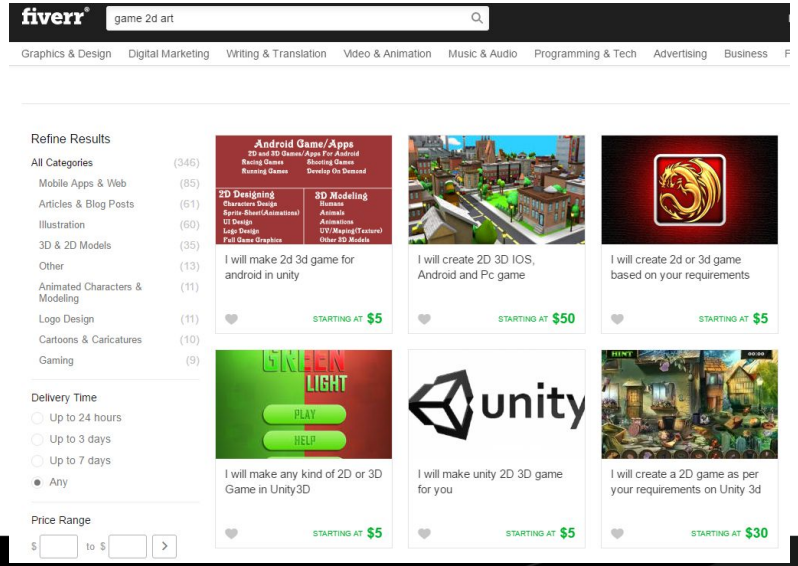



## NASA

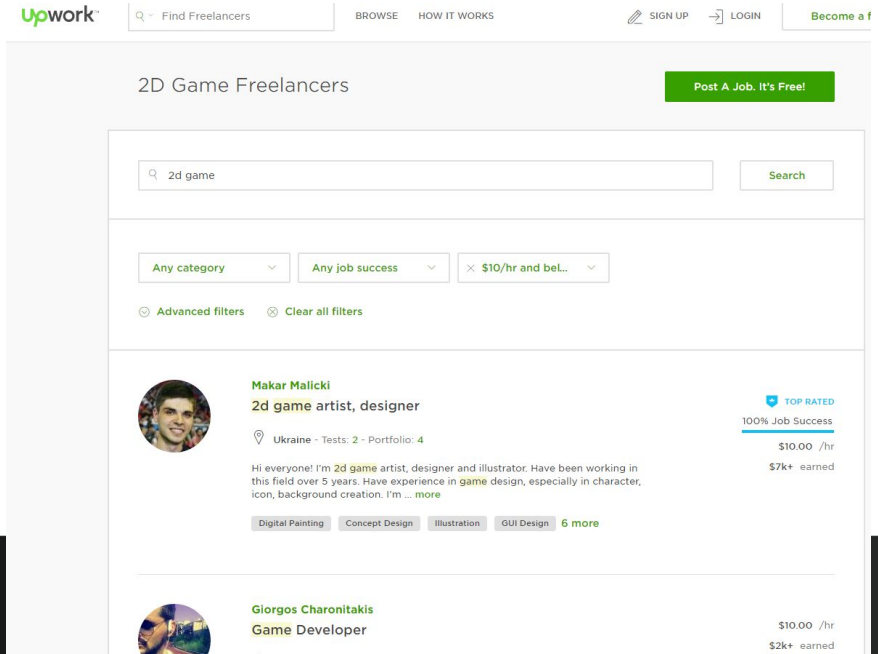


# Cheap Artists

## Fiverr




## Upwork

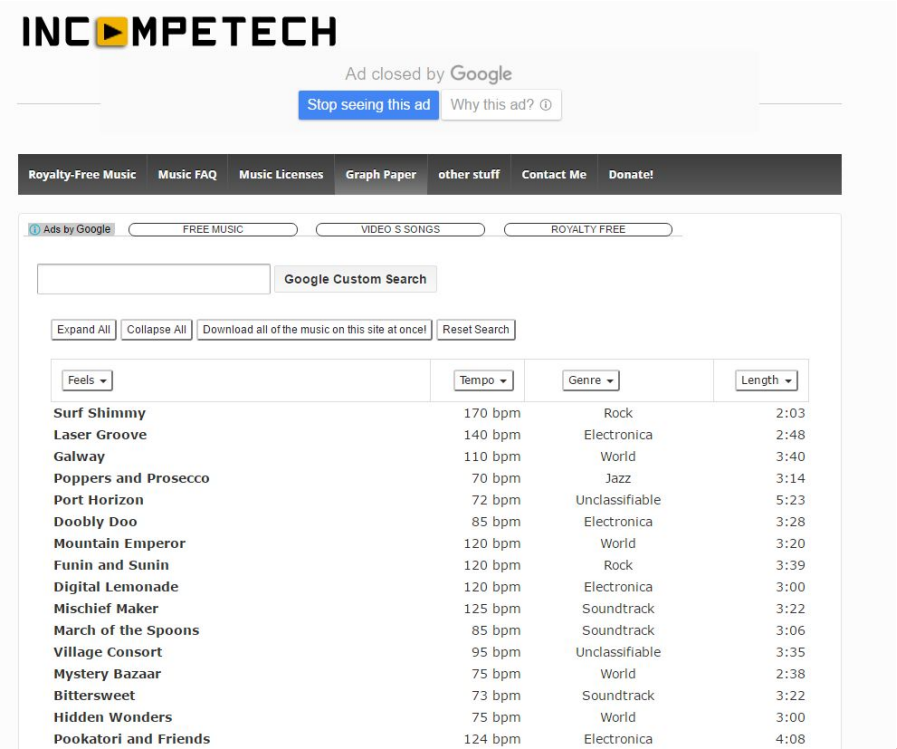


# Cheap Sound

Royalty free music: Kevin Macleod

Free sound libraries

Free sound editor: Audacity

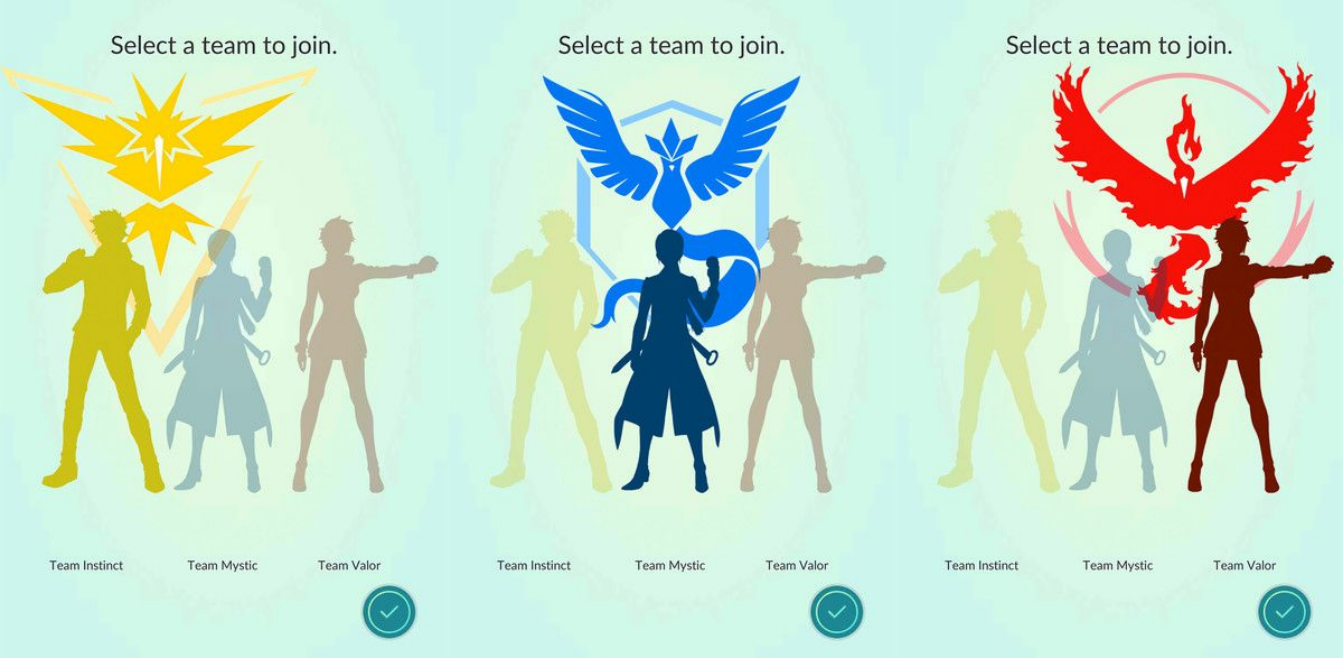



| Feels | Tempo | Genre | Length |
|---|---|---|---|
| Surf Shimmy | 170 bpm | Rock | 2:03 |
| Laser Groove | 140 bpm | Electronica | 2:48 |
| Galway | 110 bpm | World | 3:40 |
| Poppers and Prosecco | 70 bpm | Jazz | 3:14 |
| Port Horizon | 72 bpm | Unclassifiable | 5:23 |
| Doobly Doo | 85 bpm | Electronica | 3:28 |
| Mountain Emperor | 120 bpm | World | 3:20 |
| Funin and Sunin | 120 bpm | Rock | 3:39 |
| Digital Lemonade | 120 bpm | Electronica | 3:00 |
| Mischief Maker | 125 bpm | Soundtrack | 3:22 |
| March of the Spoons | 85 bpm | Soundtrack | 3:06 |
| Village Consort | 95 bpm | Unclassifiable | 3:35 |
| Mystery Bazaar | 75 bpm | World | 2:38 |
| Bittersweet | 73 bpm | Soundtrack | 3:22 |
| Hidden Wonders | 75 bpm | World | 3:00 |
| Pookatori and Friends | 124 bpm | Electronica | 4:08 |

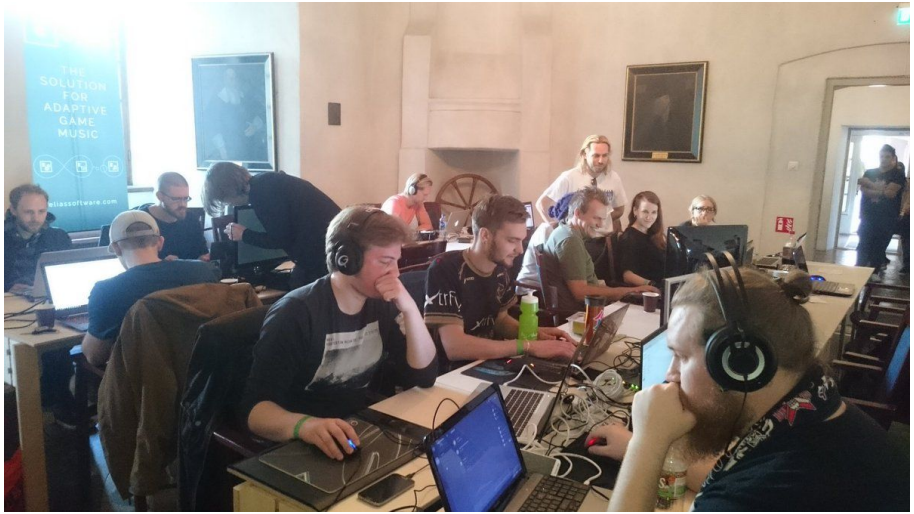
# No Designer?

# No Designer?

# Finding Teammates



# Game Jams



# Experiment with new ideas.

http://www.castlegamejam.com/en_GB/2017/teams/the-conspiratea/

ABORT
KEEP TALKING
and NOBODY EXPLODES

# Keep Talking and Nobody Explodes (Oculus Rift + Razer Hydra)

Team

Bomb defusing game using an Oculus Rift, a Razer Hydra, and two or more people! The objective of the game is for one player (wearing an Oculus Rift) to defuse a bomb by describing it to other player(s) and correctly following their instructions. The other player(s) must sift through instructions to find the correction action for the Rift player to take. Communication is key to survival! Add more players to the "helping" side for chaotic results.

**Jam Site:** Algonquin College - Game Dev

**Jam Year:** 2014

**Diversifiers:**

Can You Come And Play?: The game has a local multi-player mode

**Platforms:** MS Windows

**Tools And Technologies:** Unity (any product)

**Technology Notes:**
Requires an Oculus Rift and a Razer Hydra.

**Installation Instructions:**

Game **requires** an Oculus Rift and a Razer Hydra.

One player should start the executable while wearing the Rift and using the Hydra.

The other player(s) should have access to the bomb specification manual (BombManual.pdf) (either digital or hardcopy). The other player(s) should **not** be able to see the game screen.

# Popular Jams

# Popular Jams

# Tech and tools!

# Tech and tools

# Other free/cheap game engines

Defold.

Twine.

…

# Other free/cheap game engines

Defold. Construct 2. Game Maker.

Twine. AGS. Game Salad. RPG Maker.

...

# Other free/cheap game engines

Defold. Construct 2. Game Ma

Twine. AGS. Game Salad. RP

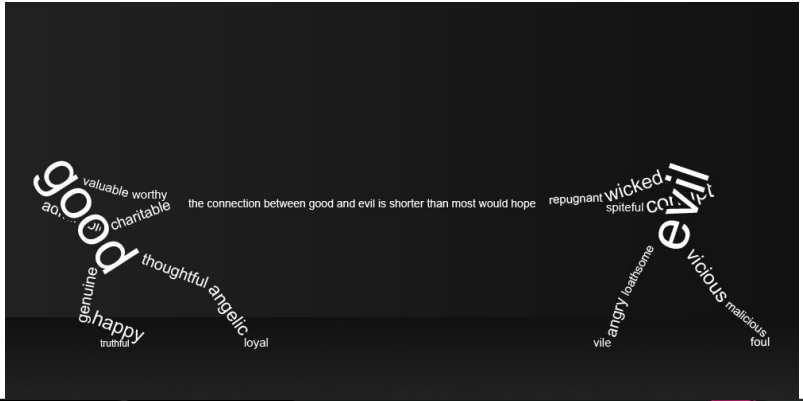
… many more.

(Full resource list at end of talk.)

# Use Specific Frameworks?

Good: Cheap. Fast. Maintained.

Bad: Limitation. Bugs.



# Team management tools

Trello

Slack

Git

# Keep everything online!

Google Drive

Dropbox

# Servers + BAAS

$5 / Month.

# Free stuff

As a developer, you can get tons of free hardware and premium software!

# Free Hardware I got.

# Where to get stuff?

Conferences. Promotions. Awards.

Or apply directly.

SURROUND SOUND
DOLBY HEADPHONE
TECHNOLOGY FOR PC
TV BUNDLE
android
chromecast
Google
CREATIVE
intel
REALSENS
Divoom
AuraBox
LEAP
MOTION
SAMSUNG
Gear VR
Innovator Edition for S6
Gear VR

# Where to get stuff?

Conferences. Promotions. Awards.

Or apply directly.

Example:

Oculus:

https://developer.oculus.com/hardware-request/

# Free Programs

Microsoft Bizspark

Intel software partner

Facebook FBStart

Many more.

# PR and Marketing

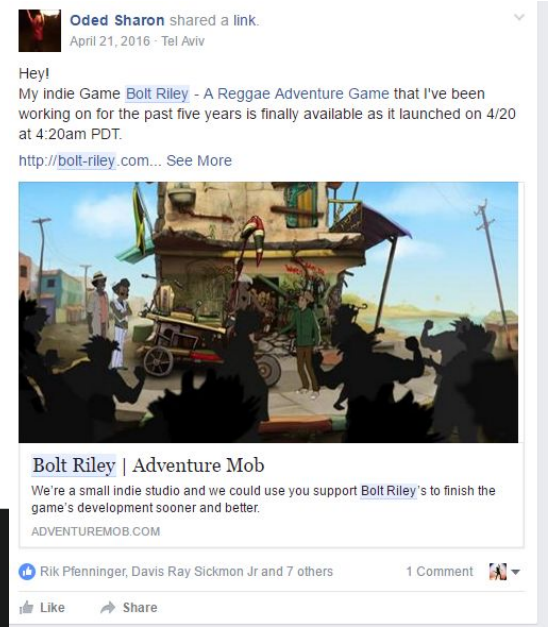
# Free PR and Marketing

Indie PR is very covered online.

Resource list at the end.

# Online Marketing

Posting in Facebook groups, and twitter is free.



# PR? Do it yourself!

Adventure MOB.

Home About Blog Games Jobs Contact Like 371 Follow @AdventureMob

Quotes:
"An interesting team-up." – Rock Paper Shotgun
"Looks like fun" – AppAdict
"I love the story, and the artwork is really great." – Indie Statik
"Need your help!" – JamaicanMusic.com
"It's got a unique hook as far as games go. " – Cliqist
"That's definitely something new for the adventure game world; I absolutely love this concept and the artwork is gorgeous." – Nerdy But Flirty
"For somebody, I'm sure, that'll be the best $10,000 they ever spent." – PCGamesN
"Do you love point and click adventure games? Is reggae your jam? Then *this* is the Kickstarter for you!" – Twinfinite
"Can there be anything cooler than becoming a Reggae Legend?" – Gamezone
"From what I can see at the moment, it looks a visually beautiful game." – The Daily Chill
"I hope they hit it as I don't know of a game quite like this." – Gaming on Linux
"the soundtrack sounds terrific." – KickstartVentures
"Shut up and take my money." – Fry from Futurama

Links:

http://www.polygon.com/2013/10/27/5035600/reggae-adventure-game-co-designed-by-quest-for-glory-devs-seeks
http://gamex.co.il/news/2766
http://www.jeuxvideo.com/news/2013/00068707-bolt-riley-le-jeu-d-aventure-reggae-sur-kickstarter.htm
http://worthplaying.com/article/2013/10/25/news/90519/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+worthplaying+%28WorthPlaying.com+-

# Use #hashtags

What's popular now?

https://ritetag.com/best-hashtags-for/gameart

# Relevant Hashtags

Short Term visibility

#gaming #indie #indiedev #gamedev #steam #art #game #picoftheday

Long term visibility

#indiegame #letsplay #unity3d #indiegames #gameart #gameplay #madewithunity #trailer #conceptart

special:

#IndieDevHour -Wednesday nights, starting at 7pm (GMT).

#ScreenshotSaturday - every Saturday

#wipwednesday - hashtag for ‘work in progress’

(Thanks Alon Kaplan @AlonKaplan for the tips used in @Moduwar)

# Facebook ad + Steam sale

Account: Oded Sharon

**Campaign**: [10/01/2016] Promoting http://bit.ly/BoltRileySteam - Copy Video

Search | Filters | Oct 1, 2016 – Oct 16, 2016

Performance | Demographics | Placement

2,434 Results: Link Clicks
78,128 People Reached
$100.43 Amount Spent
Custom

2,434 Results: Link Clicks $0.04 Cost 1.68% Result Rate

Campaign On

[10/01/2016] Promoting http://bit.ly/BoltRileySteam - Copy Video

Set up a rule to monitor your campaign. Turn it off automatically or get email alerts when your rule conditions are met. Learn more.

Create Rule

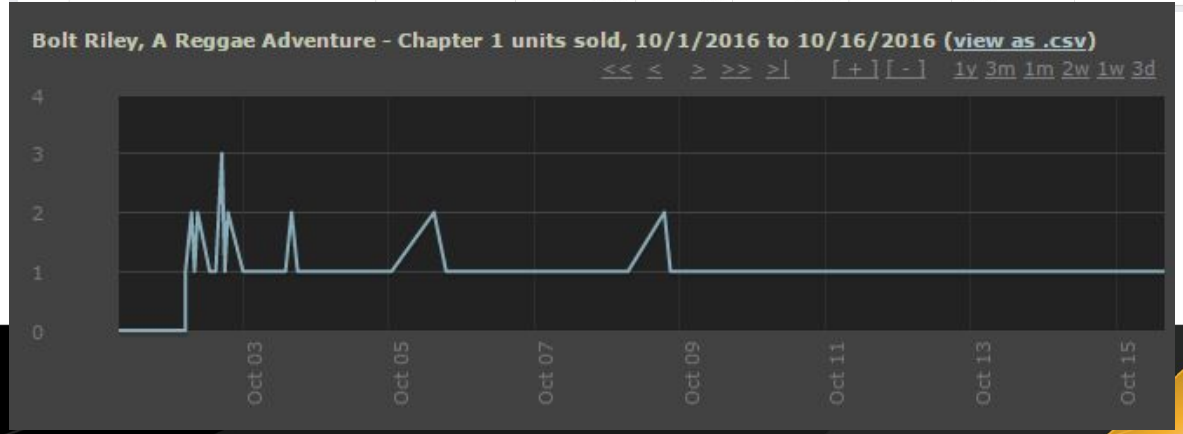
Delivery: Completed

Objective: Traffic

See Post

Ad Sets in this Campaign | + Create Ad Set | Columns: Performance | Breakdown | Export

| Ad Set | Delivery | Results | Reach | Cost | Budget | Amount Spent | Schedule |
|---|---|---|---|---|---|---|---|
| [10/01/2016] Promoting http://bit.ly/BoltRileySteam - Copy [10/01/2016] Promoting http://bit.ly/BoltRileySteam - Copy Video | Completed | 2,434 Link Clicks | 78,128 | $0.04 Per Link Click | $9.00 Daily | $100.43 | Oct 3, 2016 – Oct 15, 2016 13 days |
| Results from 1 Ad Set | | 2,434 Link Clicks | 78,128 People | $0.04 Per Link Click | | $100.43 Total Spent | |



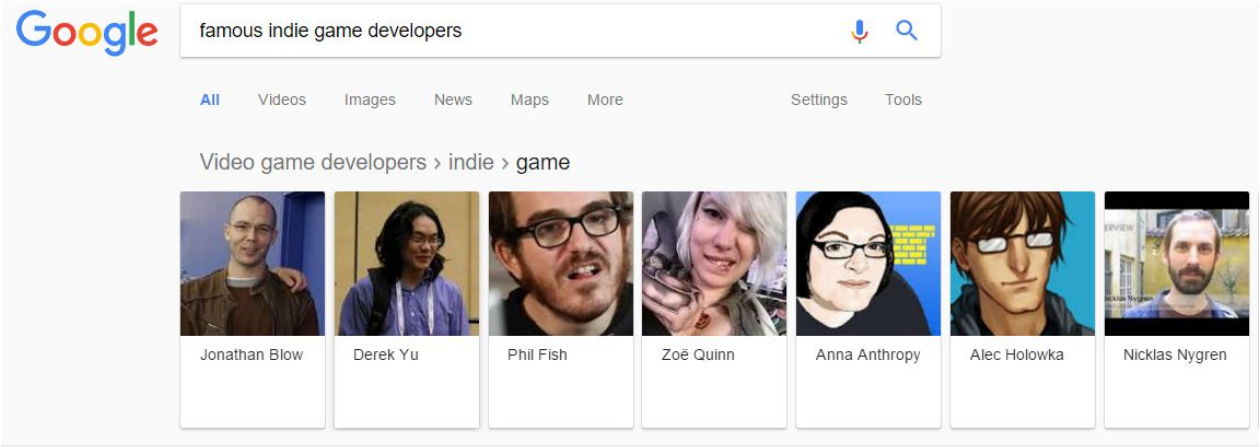
# Facebook ad + Steam sale

$456.43 total spent of $500.00 account limit

| | |
|---|---|
| **Steam revenue** | **$250** |
| - *Bolt Riley, A Reggae Adventure - Chapter 1* | $250 |

# Develop Personal Brand

## Become an indie star.




List of indie game developers - Wikipedia
https://en.wikipedia.org/wiki/List_of_**indie_game_developers**
This is a list of **independent** video **game developers**, individuals or teams which produce **indie** ... This list is not intended to be exhaustive with respect to developers or their games, and includes only **notable** developers with **notable** games.

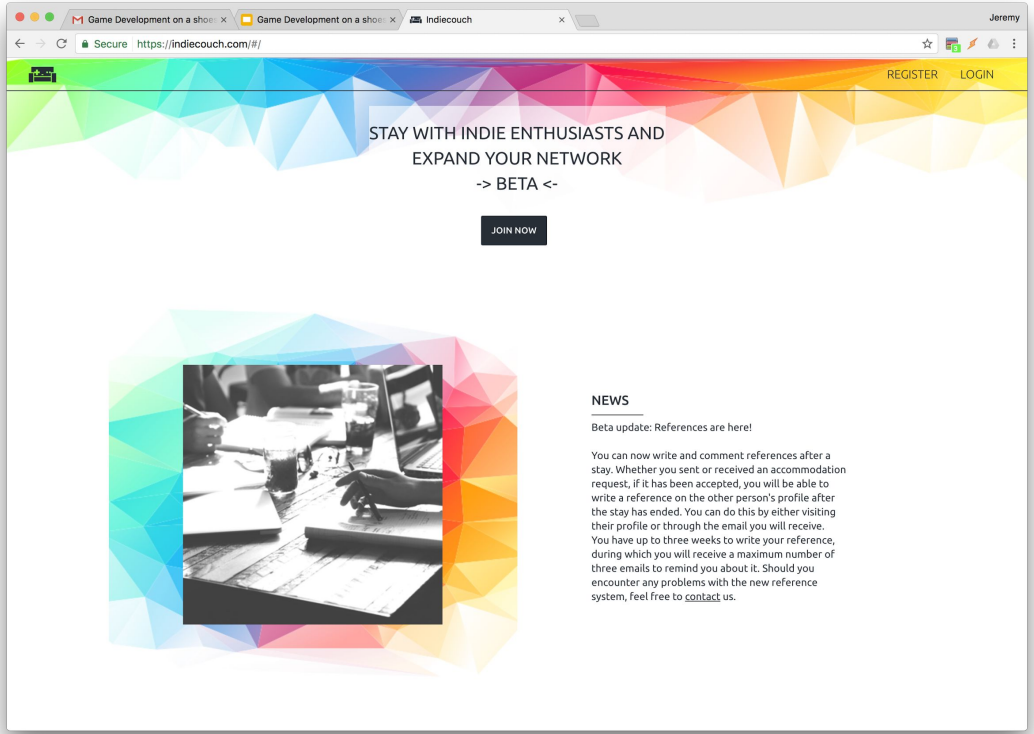
TAXI
#HoverCabby

GDC

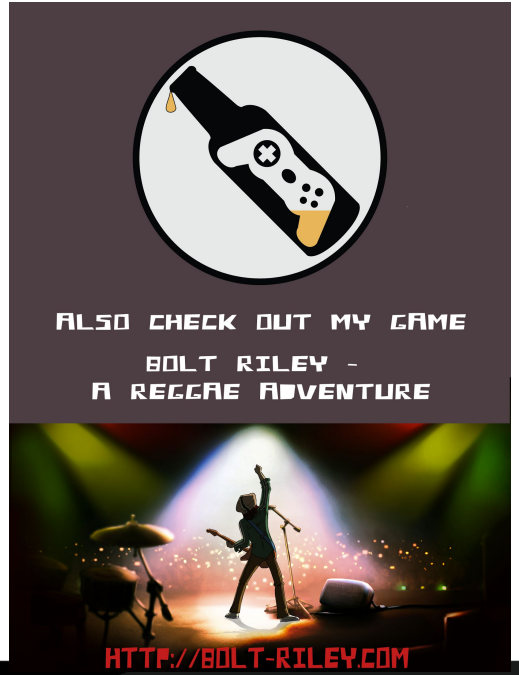
# Conferences and Awards

# Couchsurfing

indiecouch.com



# Fellowship of Parties



# Learning from Failures!

# Failures

If you keep failing, you might eventually succeed.

# Bolt Riley's Failure

# Impressing Collaboration

# Numbers

Original budget : $300,000.
Company burn rate $60k / month.
Company shut down after 5 months.
75% complete game.

# What now?

KICKSTARTER

# Kickstarter FAIL!

## Bolt Riley - A Reggae Adventure Game

by Oded Sharon

Home | Updates 18 | Backers 1,082 | Comments 1,954 | Tel Aviv, Israel | Video Games

**Funding Unsuccessful** This project's funding goal was not reached on November 25.

Share | Tweet | Embed

**1,082**
backers

**$51,668**
pledged of $120,000 goal

**0**
seconds to go

Paul Trowe, Andrew Alcott, and 97 more people you follow are backers.

Project by
**Oded Sharon**
Tel Aviv, Israel
Contact me

First created · 181 backed

Oded Sharon 3365 friends

“If at first you don’t succeed, Skydiving is not for you.”

# What now?

# Bolt Riley - A Reggae Adventure Game, Chapter 1.

by Oded Sharon

Home | Updates 7 | Backers 757 | Comments 436 | Tel Aviv, Israel | Video Games

**Funded!** This project was successfully funded on August 9.

**757**
Backers

**$32,104**
pledged of $31,668 goal

**0**
seconds to go

Chris Casey, Blair Erickson, and 98 more people you follow are backers.

Project by
**Oded Sharon**
Tel Aviv, Israel

# SUCCESS!

What now?

# Finish the game….!

(and get OUYA $32K FTG fund money)

THE VERGE TWEET SHARE

Polygon and Motherboard have spoken to multiple developers who bet on the
the Free the Games Fund, a $1 million initiative that suppor

Polygon NEWS REVIEWS FEATURES VIDEOS FORUMS OPINION PLATFORMS

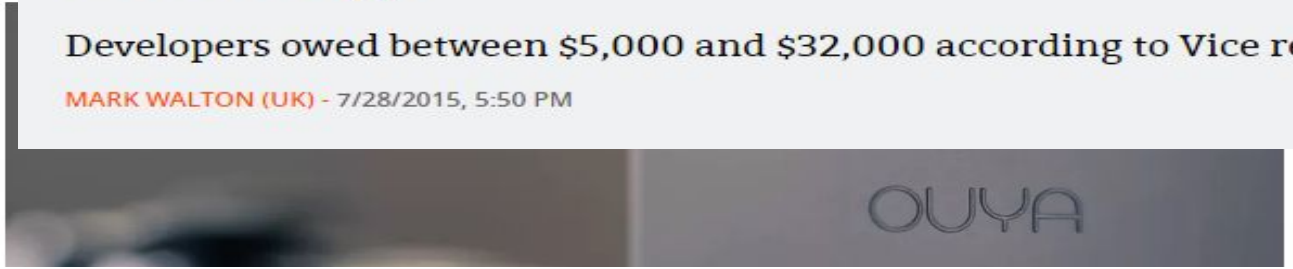
ars TECHNICA BIZ & IT TECH SCIENCE POLICY CARS GAMING & CULTURE FORUMS

*OPPOSABLE THUMBS —*

# Indie devs say Ouya still owes thousands in unpaid "Free the Games Fund" earnings

Developers owed between $5,000 and $32,000 according to Vice report.

MARK WALTON (UK) - 7/28/2015, 5:50 PM



???????

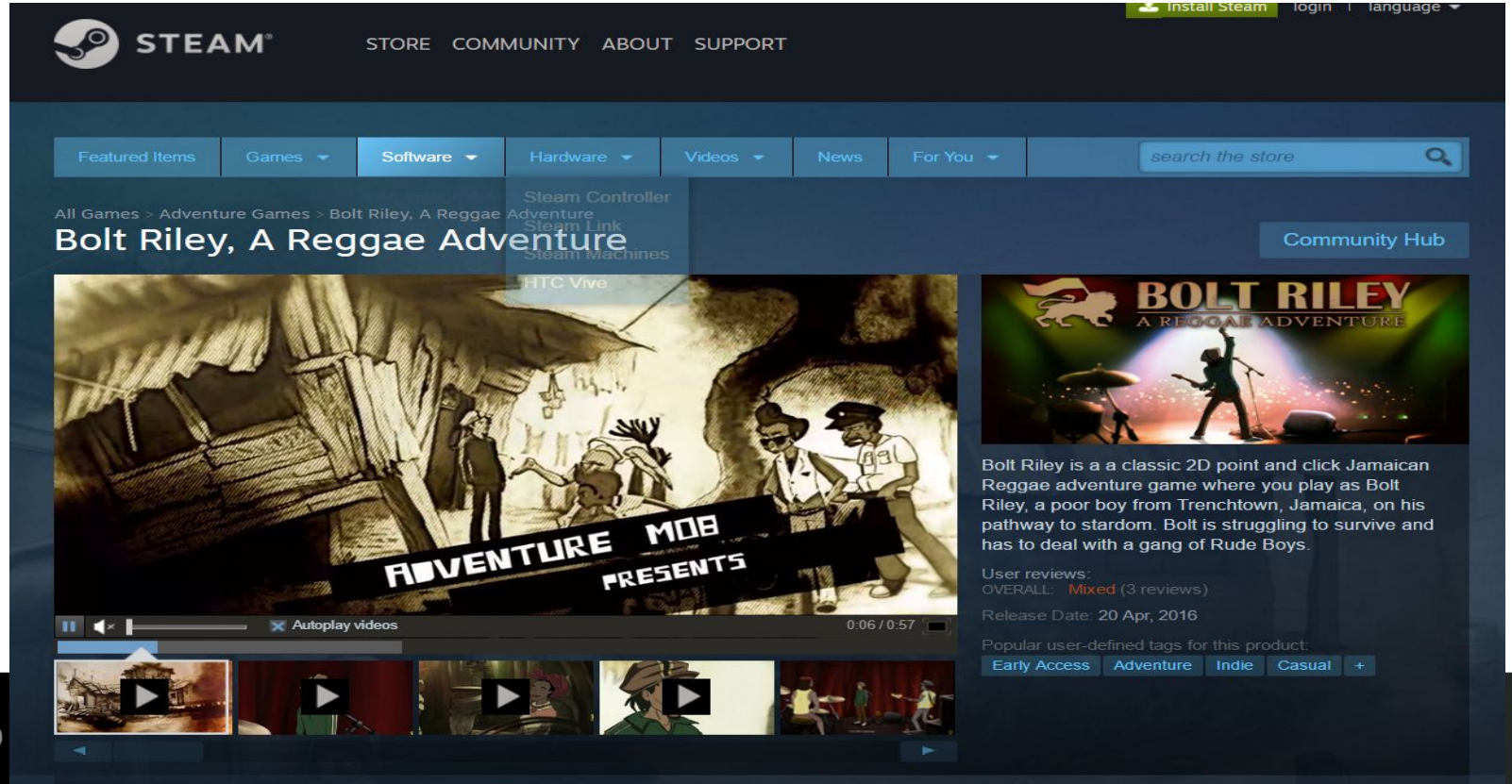


UBM

# Razer Will Honor Ouya Devs 'Free The Games' Fund Agreements

by Kevin Carbotte July 29, 2015 at 11:12 PM - Source: Razer

# Launched on Steam and Forge!






UBM

# Lessons from Failure

Art is expensive

Experience in crowdfunding

Experience in Adventure Creator

Experience with Fiverr/Upwork

Working with Publishers is risky.

"The art of flying lies in learning how to throw yourself at the ground and miss."

– **Douglas Adams, Life, the Universe and Everything**

# How to make a game for $377

# Unity Asset Store Sale

# Did the math.

$377 total assets.

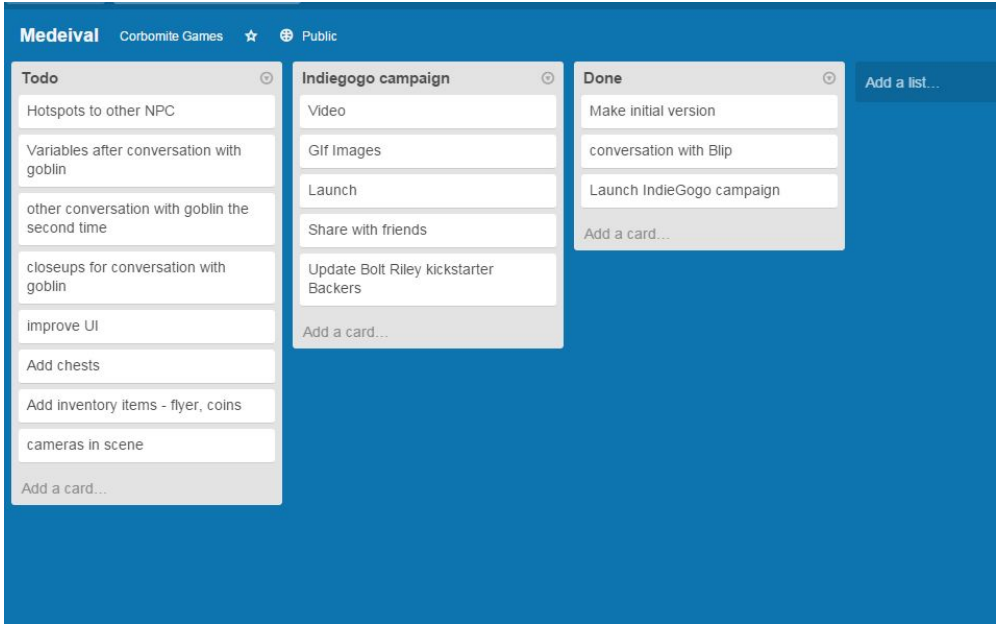
Medival Asset Sale

File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive

=SUM(B4:B17)

| | A | B | C | D |
|---|---|---|---|---|
| 1 | Name | Price | type | link |
| 2 | | | | |
| 3 | | | | |
| 4 | GUI pack | $2.25 | GUI | https://www.assetstore.unity3d.com/en/#!/content/17387 |
| 5 | village | $25.00 | env | https://www.assetstore.unity3d.com/en/#!/content/12682 |
| 6 | audio | $12.50 | audio | https://www.assetstore.unity3d.com/en/#!/content/19769 |
| 7 | make you | $35.00 | env | https://www.assetstore.unity3d.com/en/#!/content/7101 |
| 8 | village interior | $30.00 | env | https://www.assetstore.unity3d.com/en/#!/content/17033 |
| 9 | buildings | $5.25 | env | https://www.assetstore.unity3d.com/en/#!/content/6097 |
| 10 | weapon particle | $10.00 | fx | https://www.assetstore.unity3d.com/en/#!/content/20401 |
| 11 | characters | $137.50 | char | https://www.assetstore.unity3d.com/en/#!/content/18165 |
| 12 | village asset | $7.50 | env | https://www.assetstore.unity3d.com/en/#!/content/23517 |
| 13 | cute warrior | $5.00 | char | https://www.assetstore.unity3d.com/en/#!/content/8756 |
| 14 | loot pack | $25.00 | item | https://www.assetstore.unity3d.com/en/#!/content/23897 |
| 15 | guards | $47.50 | char | https://www.assetstore.unity3d.com/en/#!/content/8345 |
| 16 | fantast assets | $7.50 | env | https://www.assetstore.unity3d.com/en/#!/content/14327 |
| 17 | tavern | $27.50 | env | https://www.assetstore.unity3d.com/en/#!/content/18768 |
| 18 | | | | |
| 19 | | | | |
| 20 | total env | $137.75 | | |
| 21 | total char | $190.00 | | |
| 22 | sub | $327.75 | | |
| 23 | | | | |
| 24 | total | $377.50 | | |

# Real Time Planning



# Indiegogo campaign

INDIEGOGO Explore How It Works Equity Offerings NEW START A CAMPAIGN Sigr

InDemand

## Herbert's Quest: A Medieval Madness Adventure Game

A hilarious little point and click adventure game that satires crowd funding and medieval RPG games.

Oded Sharon
Tel Aviv-Yafo, Israel
About

**$1,202** USD total funds raised
186% funded on December 17, 2014

STORY UPDATES (7) COMMENTS (51) BACKERS (82)

PERKS

FEATURED

# Used Adventure Creator (Unity)

# One week of work (Live!)

# Hopefully launch in 2017.

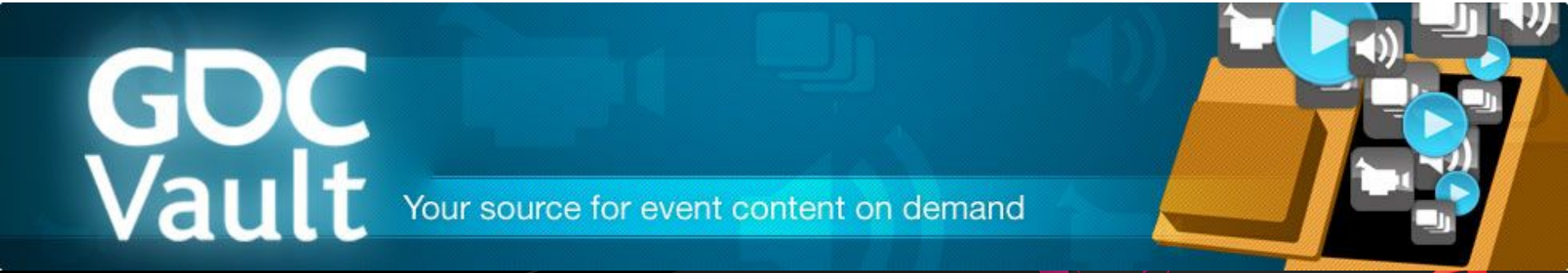
# Resources!

Next few slides will have bunch of links.

# Resources!

Don’t worry.

They will be available on GDC Vault later.



# Resources!

But:

you can take a picture.

# Useful PR and Marketing Resources

Articles:

5 low-cost marketing tips for indie game developers
http://www.gamasutra.com/blogs/IevgenLeonov/20150402/240332/5_lowcost_marketing_tips_for_indie_game_developers.php

Five PR tips

http://www.gamasutra.com/view/news/196115/Five_PR_tips_indies_really_need.php

Chartboost's Tips
https://www.chartboost.com/blog/2016/04/insider-insight-low-cost-pr-practices-for-indie-mobile-game-developers/

# Useful PR and Marketing Resources

Talks:

Guerilla marketing talk from GDC EU 2016
http://www.gdcvault.com/play/1023809/Guerrilla-Marketing-Games-PR-with

Guerilla Marketing Talks.

http://www.indiegamesplay.fr/en/sessions/guerrilla-marketing-games-pr-with-little-money-much-insanity-and-maximum-impact/

Everyone can do PR:

http://www.gdcvault.com/play/1023322/Everyone-Can-Do-PR-The

https://gamebridgeu.wordpress.com/2016/11/12/indie-games-pr/

Chris Dwyer - cost effective marketing

# www.pixelprospector.com

List for game tools:

http://www.pixelprospector.com/the-big-list-of-game-making-tools/

List for PR:

http://www.pixelprospector.com/the-big-list-of-indie-game-marketing/

Tons of more free resources at their website

http://www.pixelprospector.com/indie-resources/

# More Resources

Ludum Dare

http://ludumdare.com/compo/tools/

Global Game Jam

http://globalgamejam.org/jammer-resources

David Arcila's huge list

https://game-development.zeef.com/david.arcila

# Highly recommended talk!

Darius Kazemi, Tiny Subversions - XOXO Festival (2014) - YouTube

https://www.youtube.com/watch?v=l_F9jxsfGCw

# Have something to add?

Come discuss more:

Game Dev on a Shoestring Roundtable right after this!

Room 122, North Hall

# Thank you.

Contact me:

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