
Get Across!
a tile-based multiplayer puzzle game

Presentation Outline

- Explain Game Mechanics
  - What is Get Across? What makes it a game?
- Discuss Player.IO
  - What worked and what didn't
- Logging Results
  - Lots of Yummy Graphs and numbers
- Game Improvements
  - What did the data teach us? How did we fix problems?
- Lessons Learned
  - It's been a looooong quarter, what did we learn?
- Questions

The Game

mechanics & implementation

Intro & Mechanics

Get Across is a **multiplayer puzzle game** with tile-based movement.

The goal is to get to the **red star**.

The player also has **Action Points (AP)** which can be spent moving over certain terrain, or casting abilities.

The Player

Novice

Cook

Monster Bacon

Crafter

Build Bridge

Planter

Red Flower

The Map

The Map – various elements

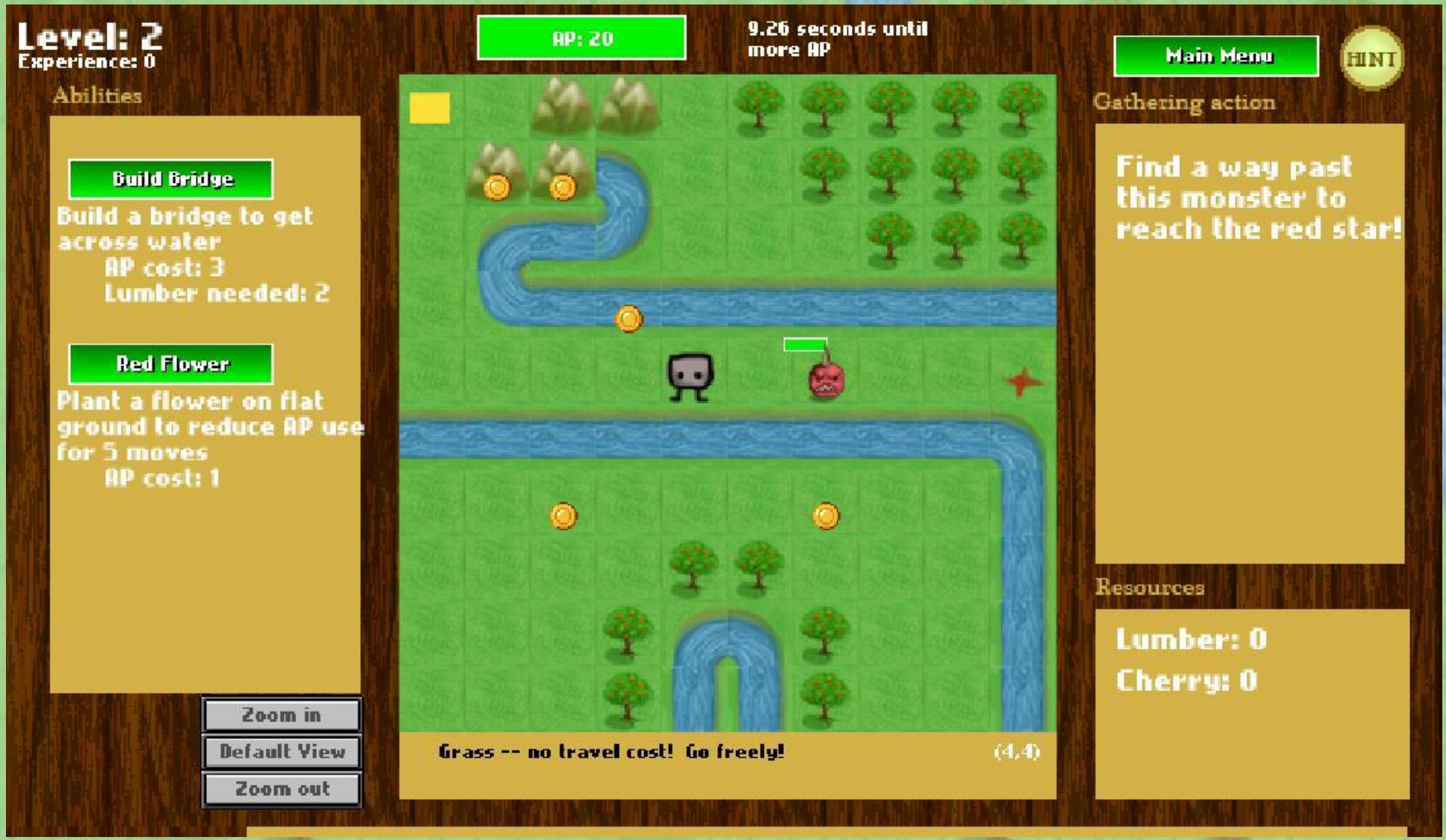
- different elements provide challenges

- every class has a tile only they can cross
  - **Crafter** can cross River with bridge
  - **Planter** can cross Bramble with bloom
  - **Cook** can cross Hungry Snake with Snake Snack

Abilities – what are they used for?

- To get across terrain -- i.e. bridges over water
- Replenish AP -- i.e. red flower

Multiple Ways to Solve a Level



Multiple Ways to Solve a Level

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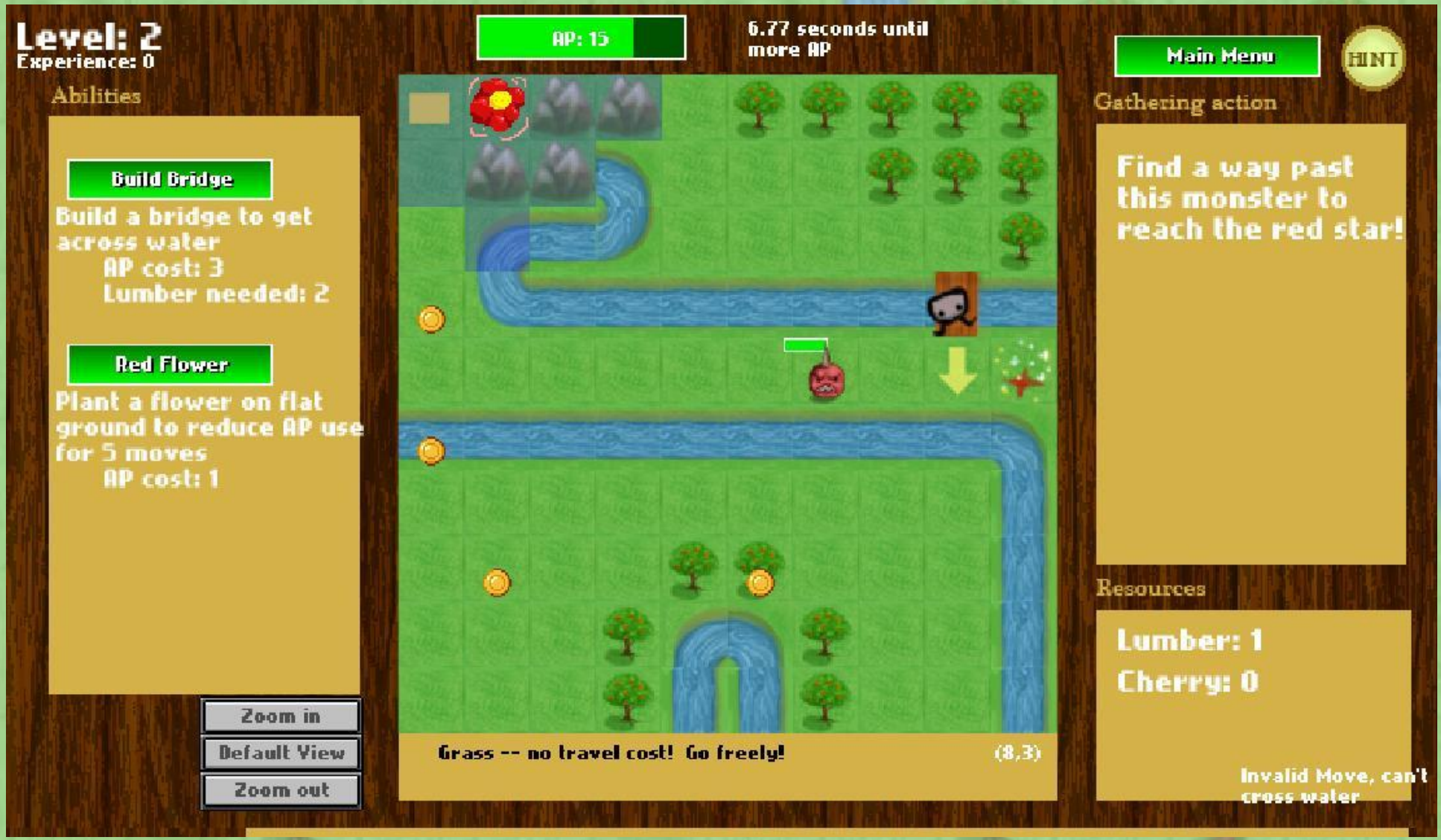


Rewards

- More experience = more Skill Points (SP)
- SP can purchase new abilities
- Gathering coins can buy new avatar skins

Avatars

Novice

Cook

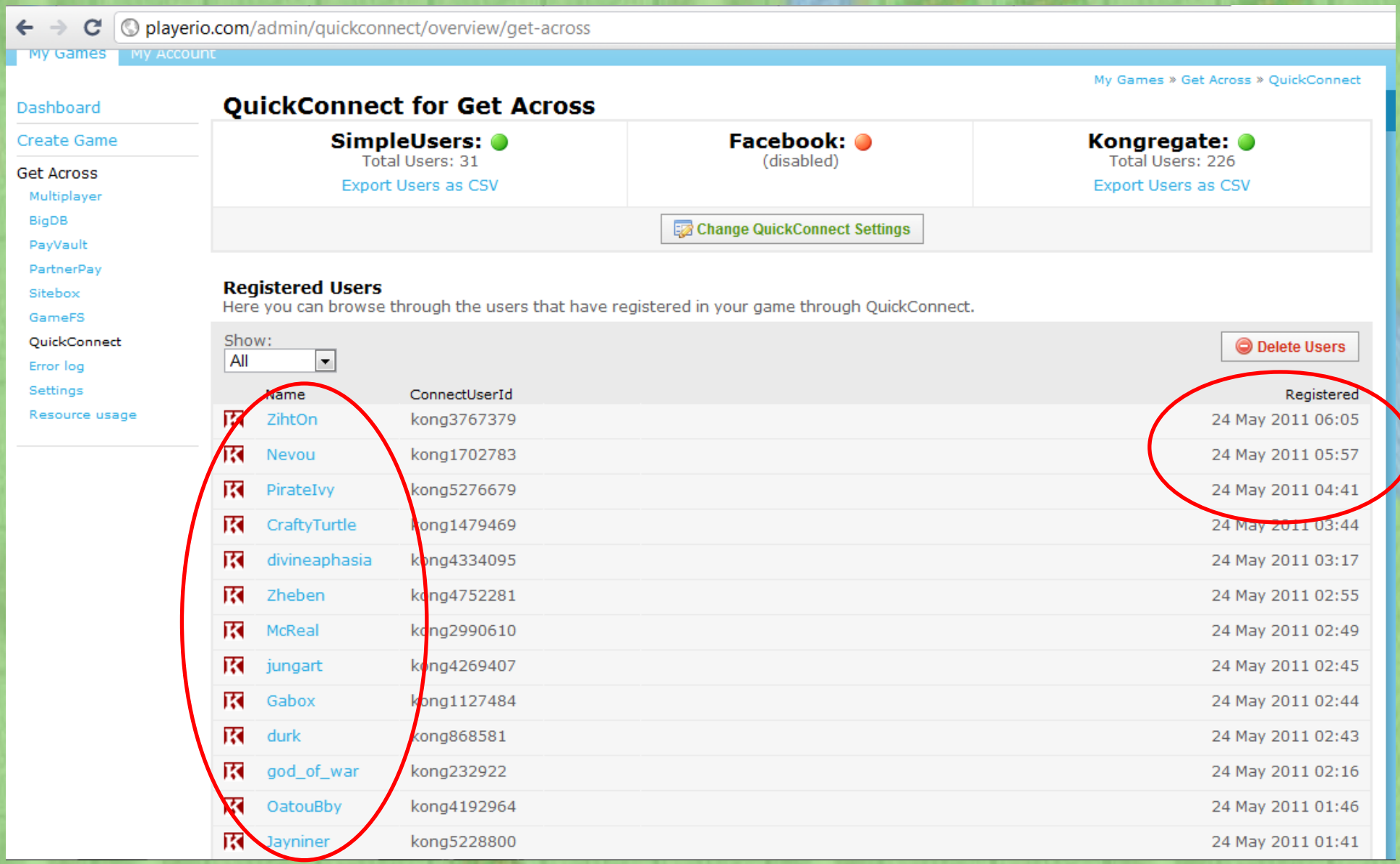
Crafter

Planter

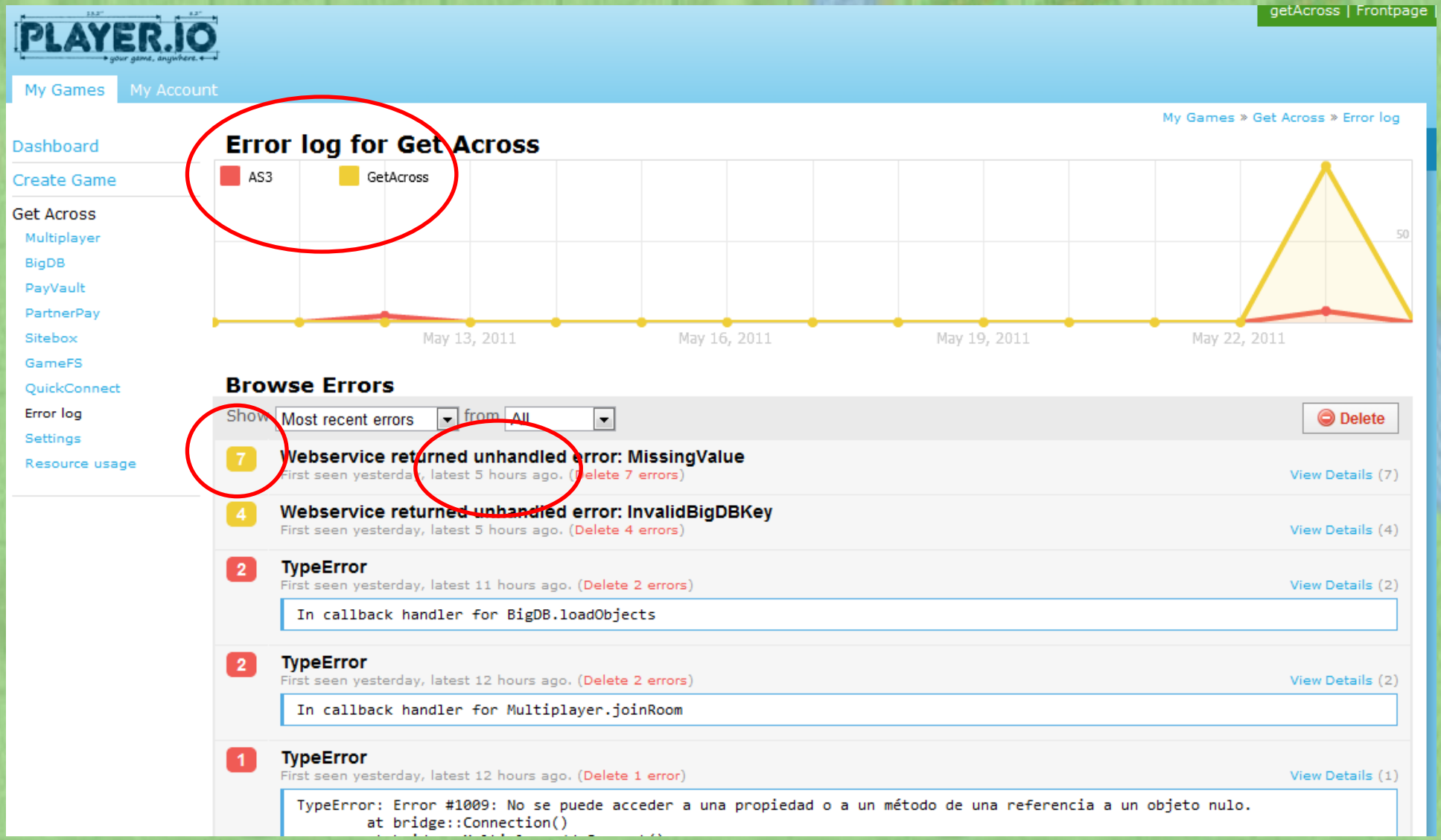
Player.IO

- scalable noSQL database
- use their servers to host synchronous multiplayer games
- support for Kongregate and Facebook releases
- helpful, error log can note errors, times, frequencies

Player.IO – Users

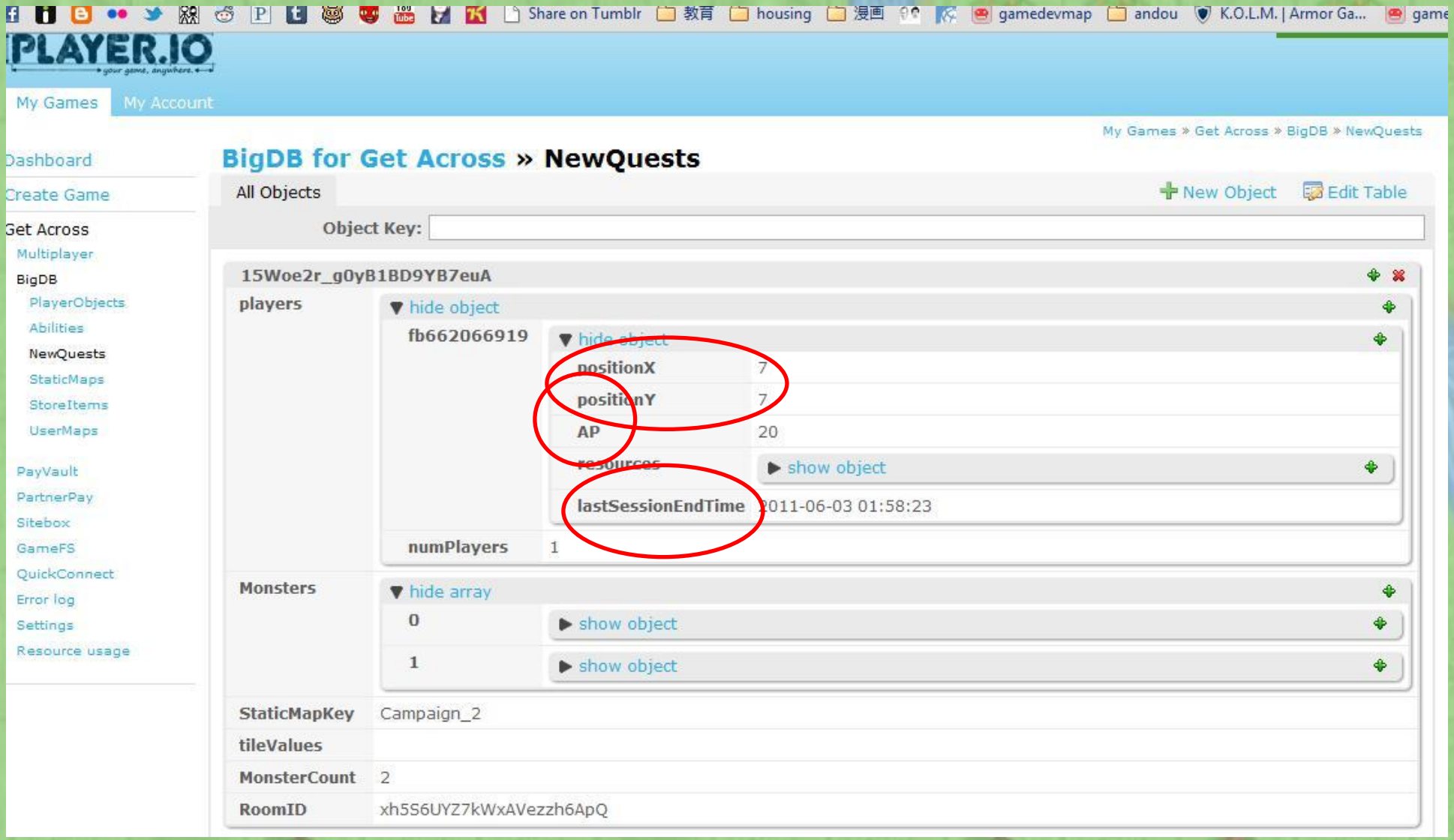


Player.IO -- Error Log

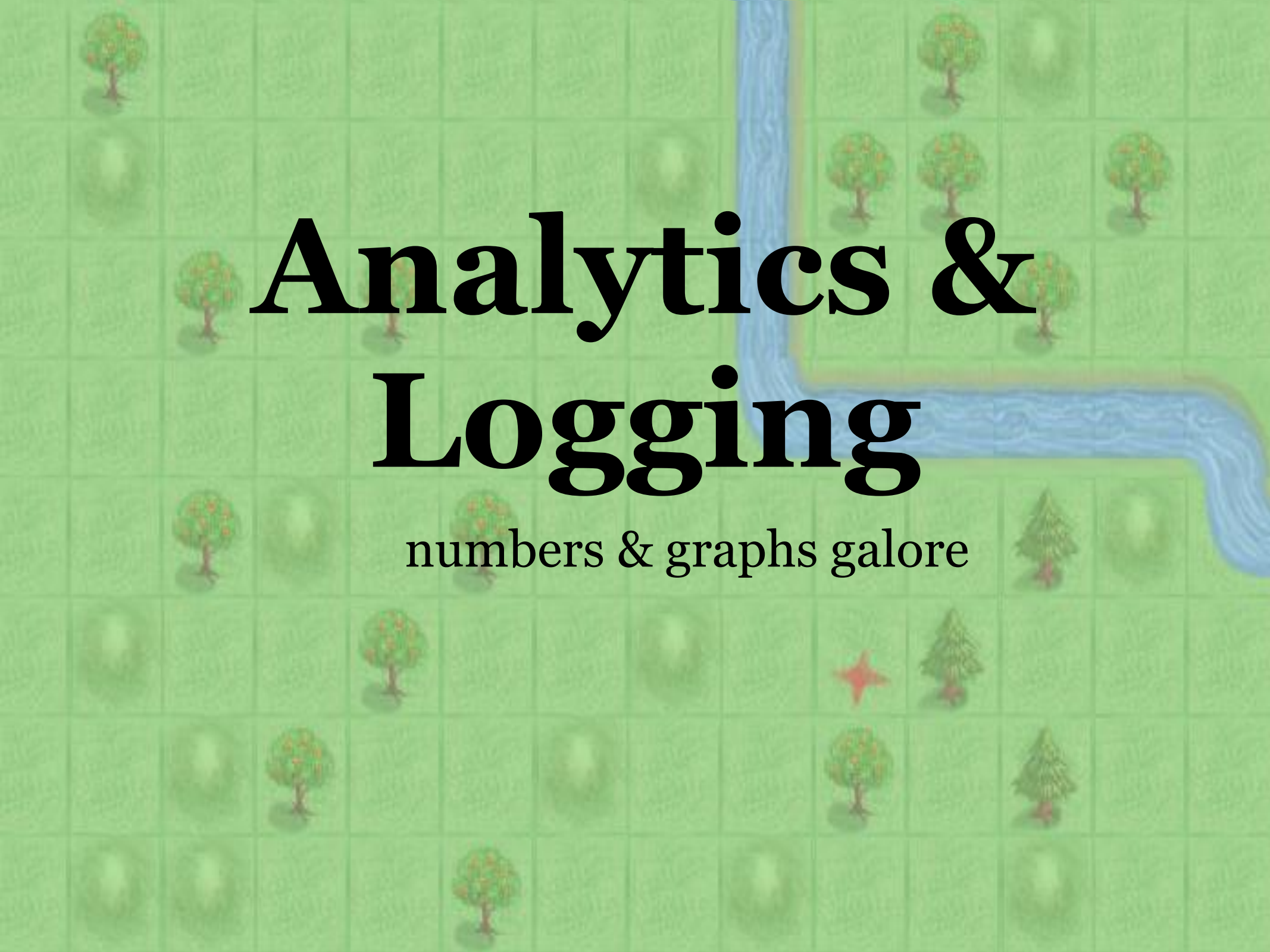


you can put your own debug code to show too!

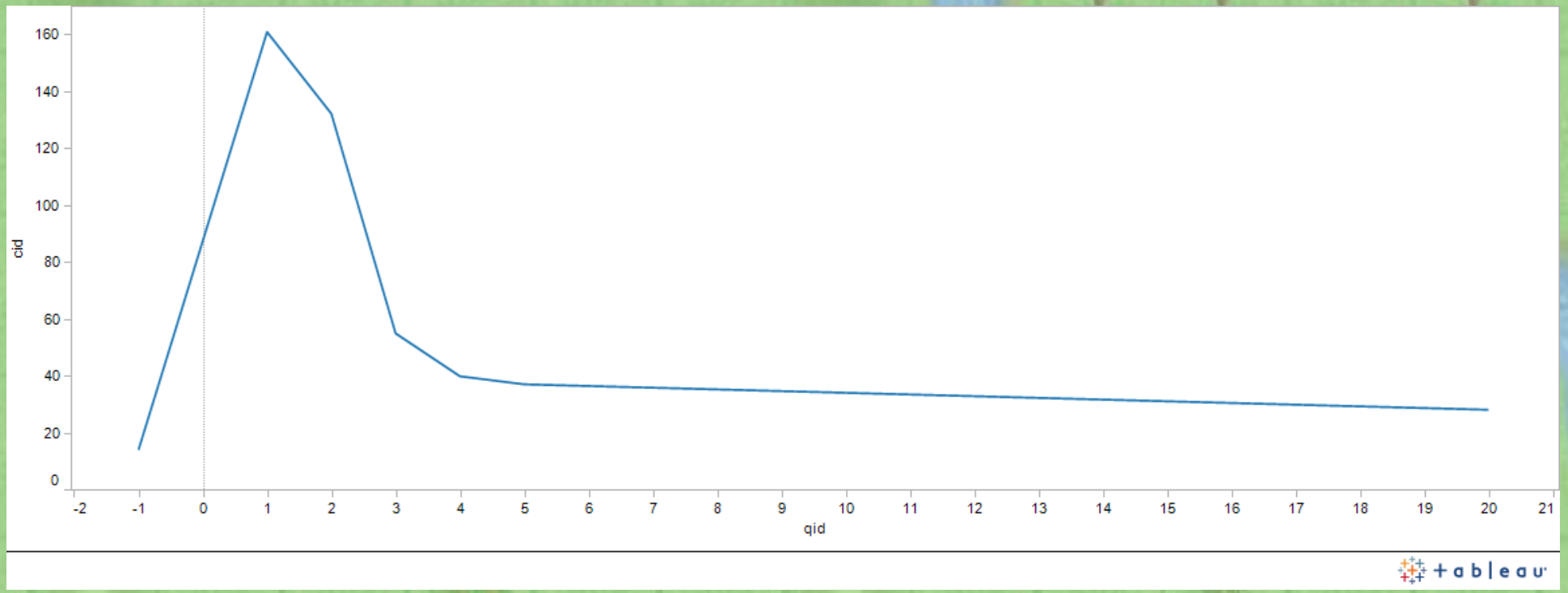
Player.IO -- Persistent User Data



we could save player's last position & state, and add back AP depending on how long a player was gone

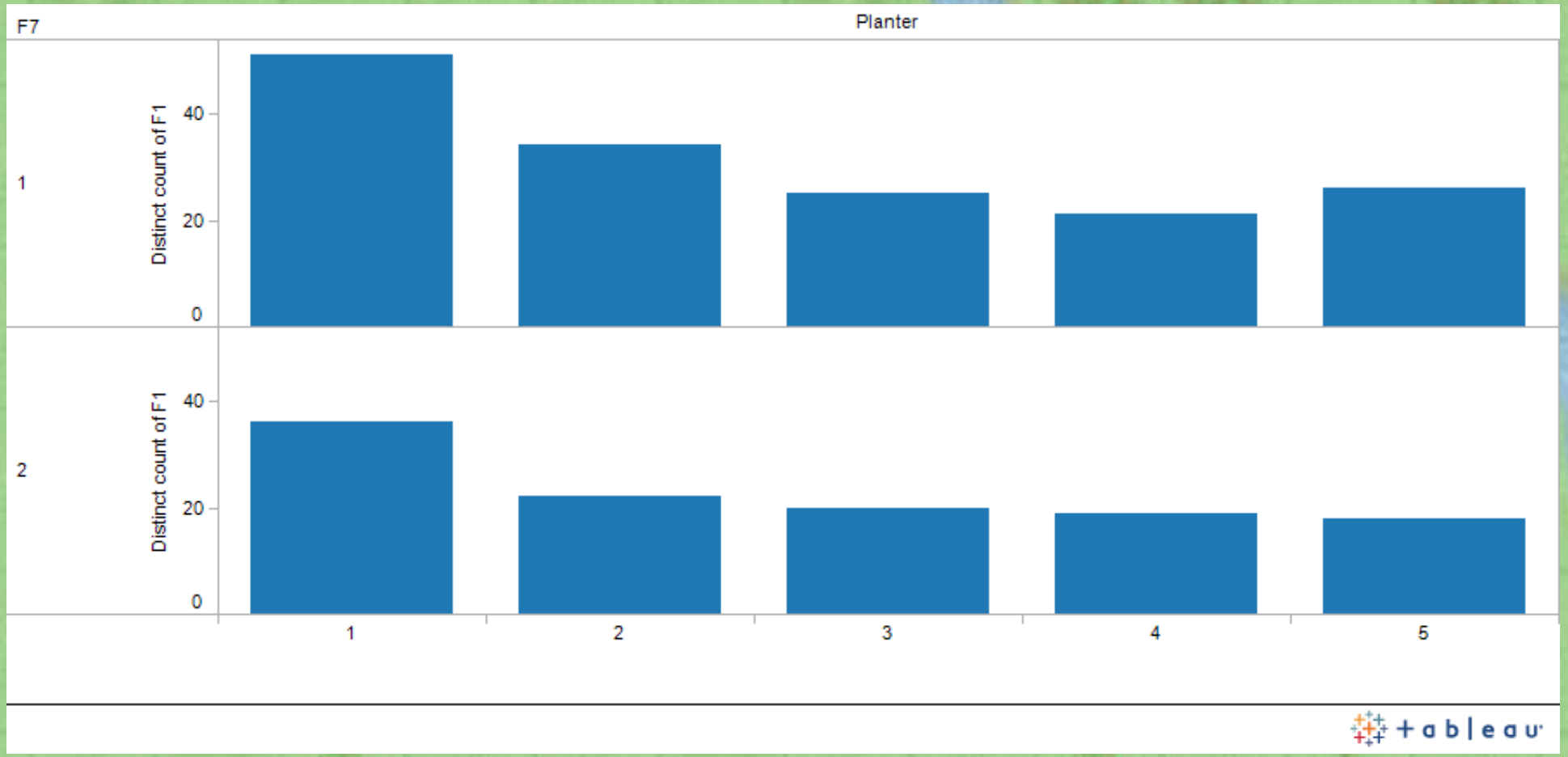

Analytics &
Logging
numbers & graphs galore

Analytics on earlier version (Kongregate)



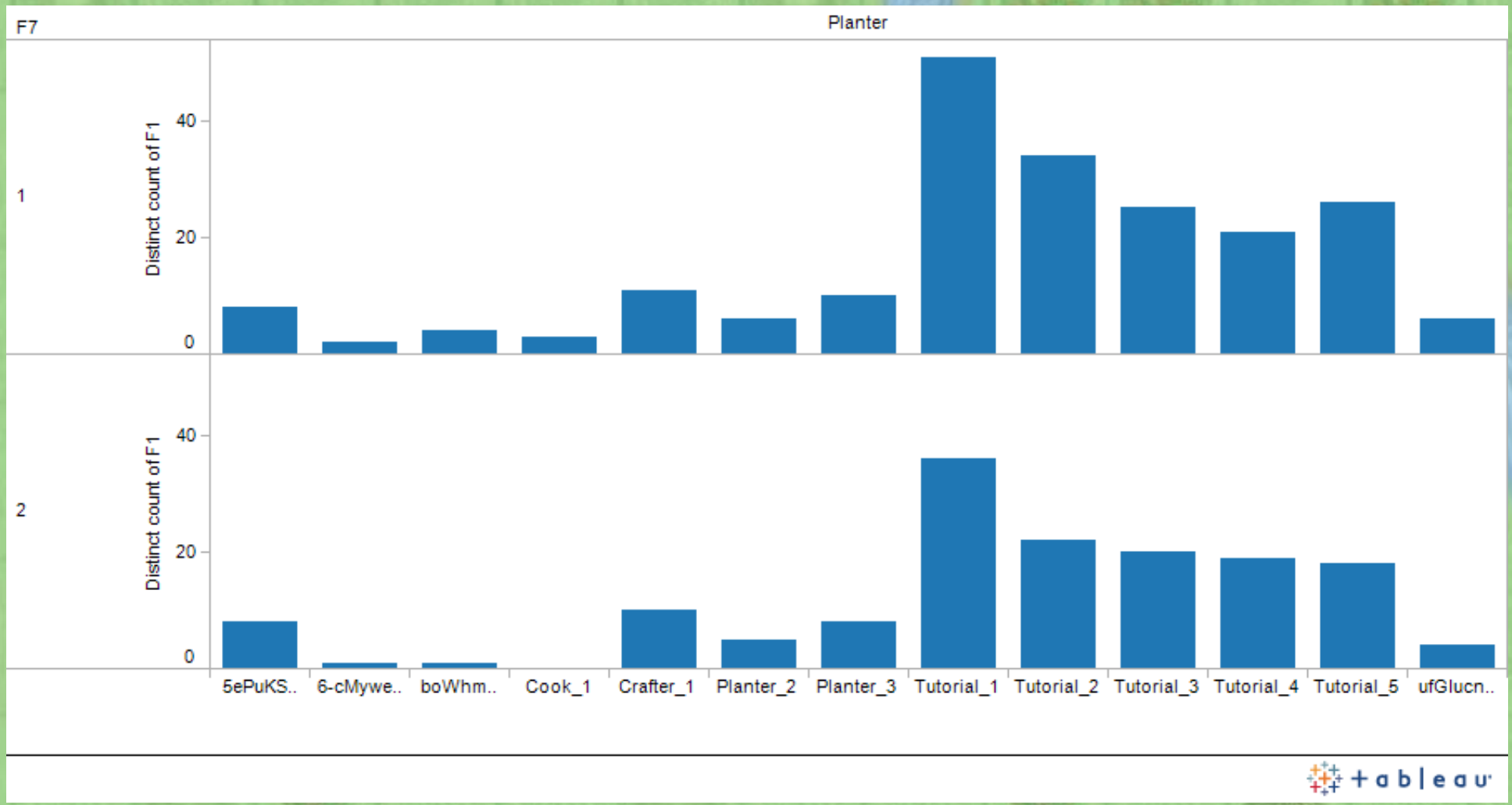
In the earlier version of the game, people stopped playing the game after the second tutorial level because of a long delay

Analytics on current version (Facebook)

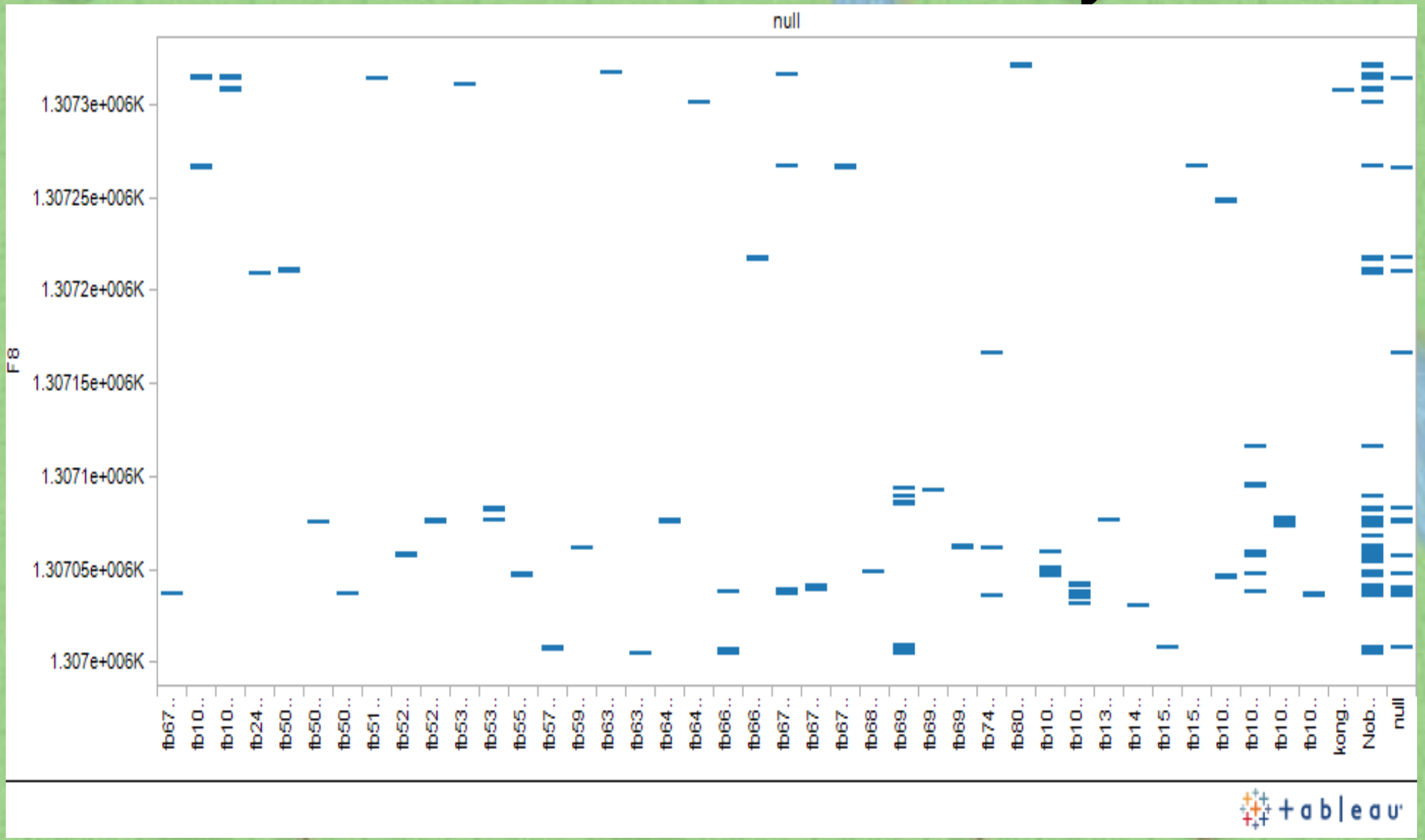


In the current version of the game, the number of levels played decreased at a much smaller rate after tutorial level 1

Number of Games Played and Finished



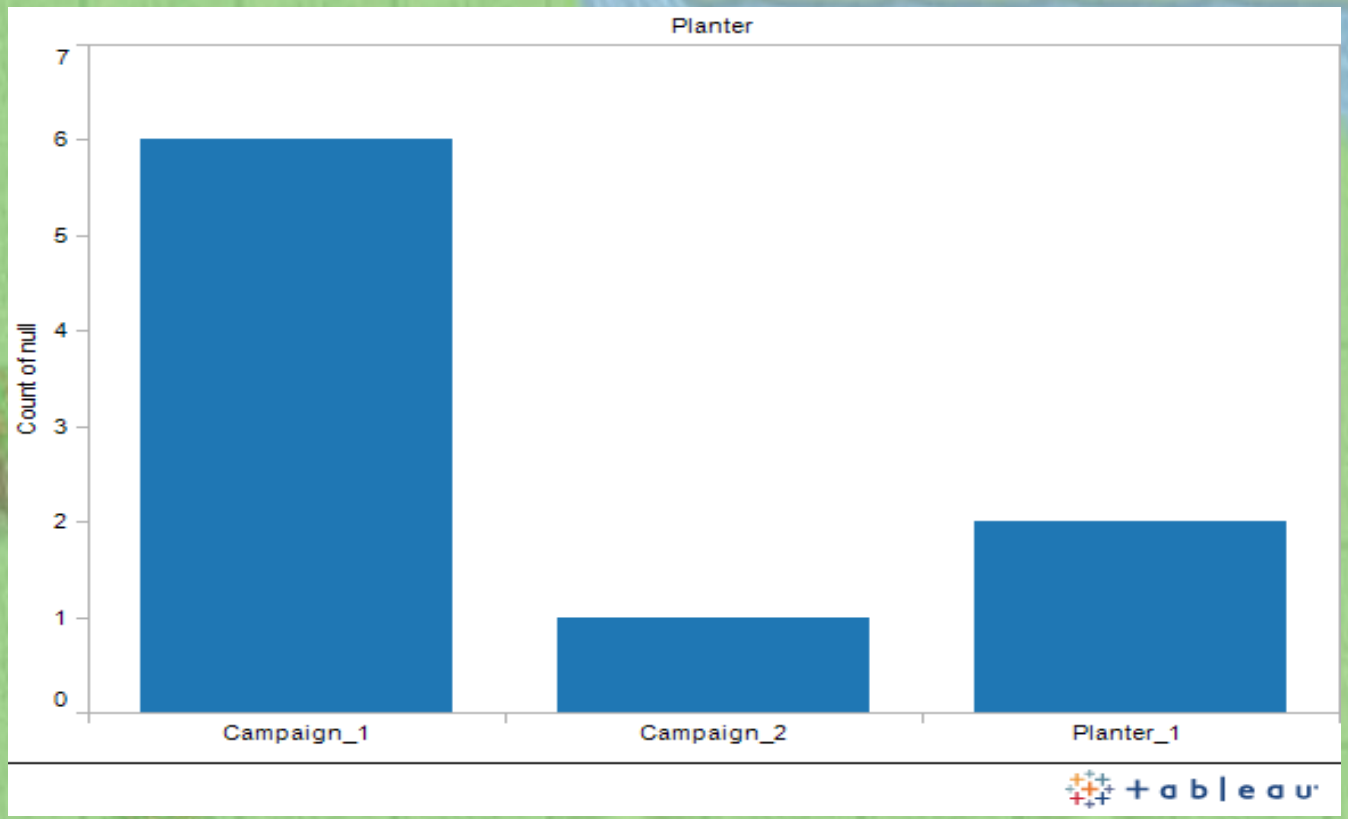
Return Rate & Duration of Play



Social elements and other analytics

Choosing class:

- 3 Cooker, 8 Planters, 8 Crafter
- 4 User-generated maps
- 17 Games where there were 2+ players on the map

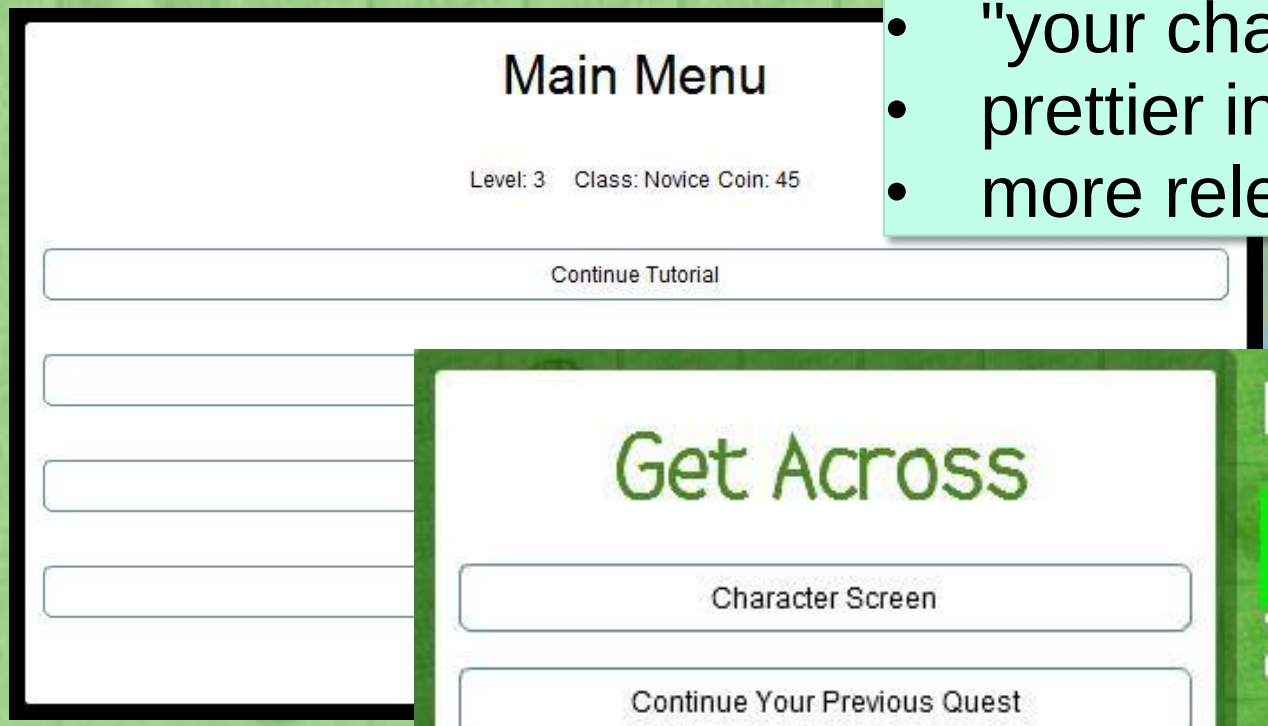


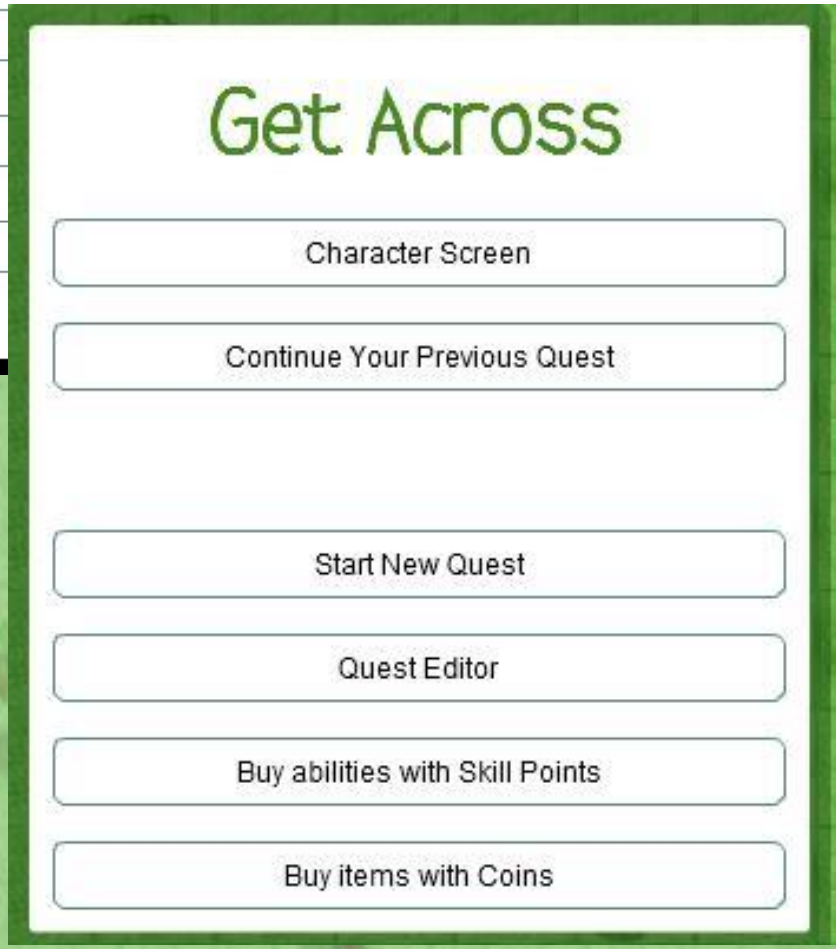
Refinements

design, iterate, iterate, iterate, iterate...

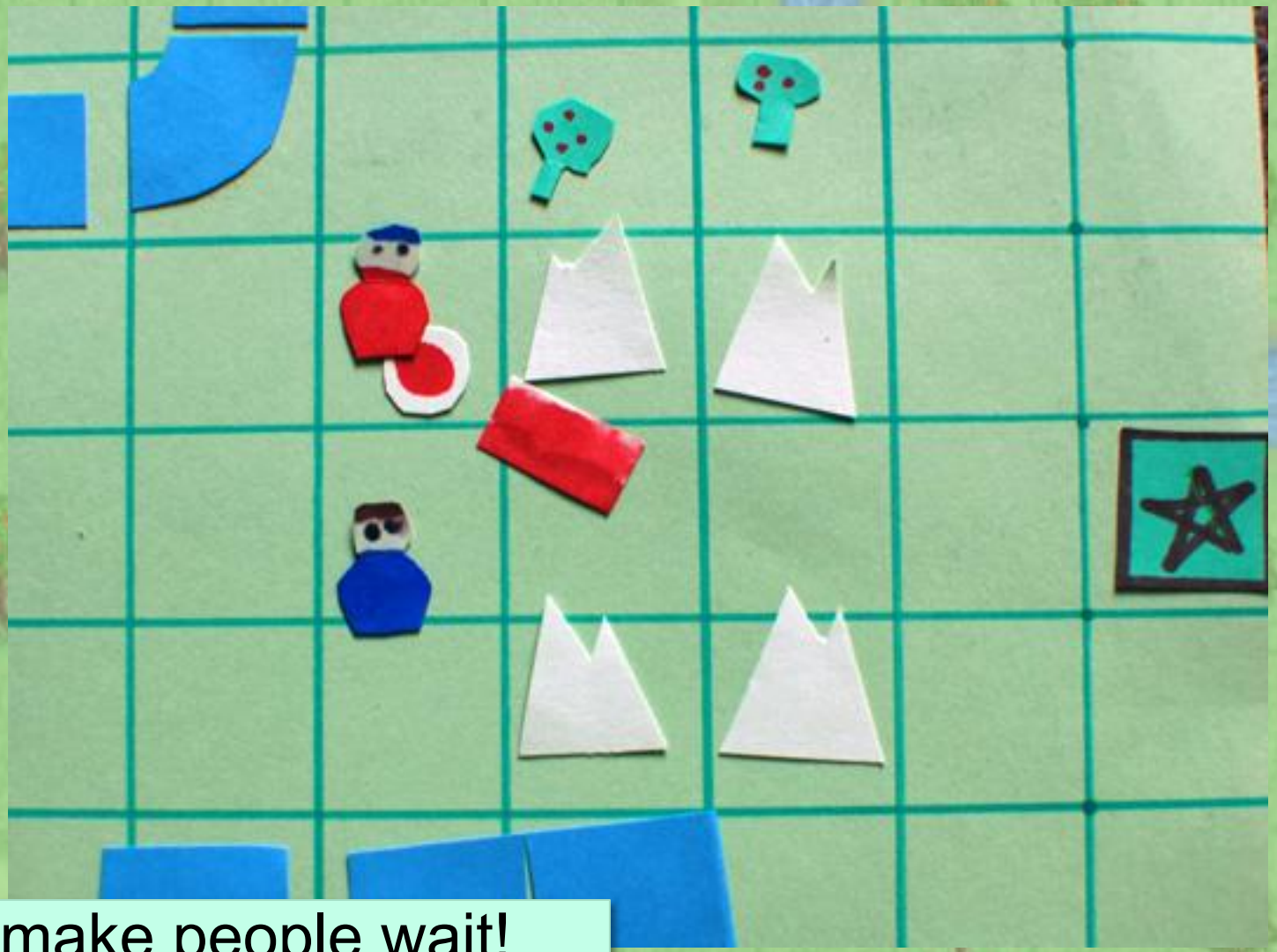
Game Refinement – Main Menu

- "your character" more prominent
- prettier in general
- more relevant information



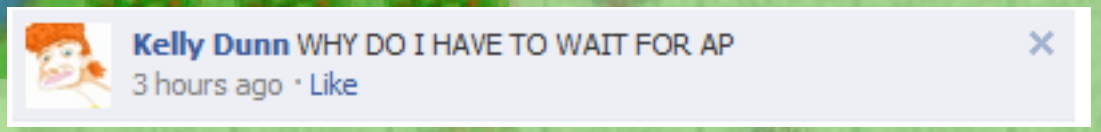


Game Refinement – Cooperative Play



- Don’t make people wait!
- New tile types encourage cooperative play

Game Refinement -- Cooperative Play



focus AP usage less on movement, more on abilities

Game Refinement – Classes

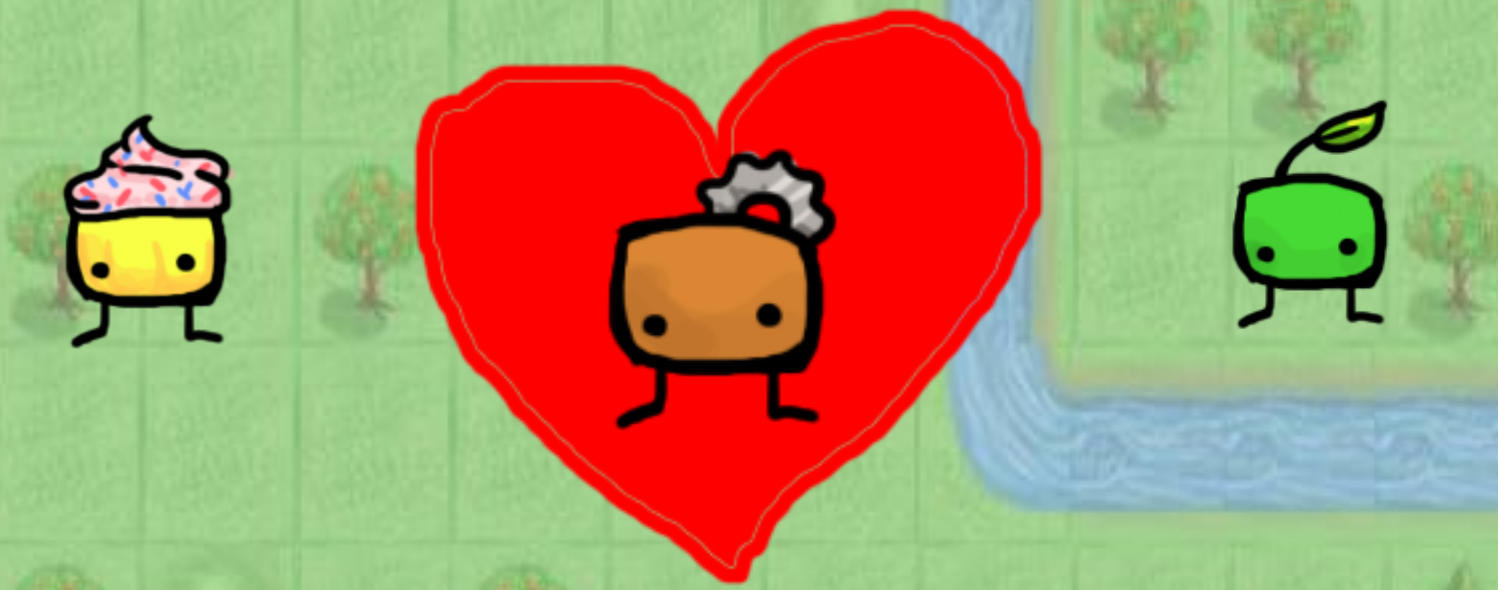
Problem: "Runner" doesn't sound cooperative

If the name of the game is "Get Across," it sounds like Runner would just...run off

Solution: New Classes!

Ones that don't have much of a "bias" with players

Game Refinement – Classes



Problem: Everyone loves Crafter

Crafter seems like the only one "conducive to getting across," and what do Cook and Planter do? Who knows!

Solution

Flavor text to illustrate a class's general play-style

Game Refinement – Classes



New Problems: Class Balancing

Some abilities were over-powered or too expensive for anyone to want to use

Solution

Just keep iterating

Game Refinement – Map Editor

- More informative Map Editor
- Error catching, tile information

Game Refinement – Server Load

Player.IO Development Server (v2.2.0.0)

PLAYER.IO

GetAcross.dll

getAcross | logout

Status | osmUobXl20OXwfJomncTWg

Bandwidth: 0.00KiB/s Up: 0.00KiB/s Down: 0.00KiB/s | Play

Band...	Id	Player...	PayVa...	Partn...	Name	level	AP	positi...	positi...	chara...	tutori...
0.00KiB/s	simplen41 (1)	{sp: 0...	not lo...	Player...	[null]	0	20	0	9	Novice	1

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   at System.Net.Connection.ReadCallback(IAsyncResult asyncResult)
   at System.Net.Connection.ReadC
   at System.Net.LazyAsyncResult.
   at System.Net.ContextAwareResu
   at System.Net.LazyAsyncResult.
   at System.Net.LazyAsyncResult.
   at System.Net.Sockets.BaseOver                                    erlapped)
   at System.Threading._IOComplet

>Error: Thread was being aborted.
   at System.Threading.Thread.AbortInternal()
   at System.Threading.Thread.Abort(Object stateInfo)
   at ea.a(Boolean A_0)
   at ea.b(ft A_0)
   at PlayerIO.ServerCore.PlayerIOClient.PlayerIOChannel.ProtobufHttp.Call[A,O,E](Int32 method, A args, Callback`1 success, Callback`1 error)
   at ml.Call[A,O,E](Int32 methodId, A args, Callback`1 successCallback, Callback`1 errorCallback)
   at PlayerIO.ServerCore.PlayerIOClient.PlayerIOChannel.CreateObjectsCaller`1.CallAsync(Callback`1 onSuccess, Callback`1 onError)
   at PlayerIO.ServerCore.PlayerIOClient.BigDBImpl.CreateObject(String table, String key, DatabaseObject obj, Callback`1 successCallback, Callback`1
   at PlayerIO.GameLibrary.BigDB.CreateObject(String table, String key, DatabaseObject obj, Callback`1 successCallback)
   at GetAcross.GameCode.<>c__DisplayClass8.<>c__DisplayClasse.<UserJoined>b__3(DatabaseObject staticMap) in C:\Users\nadine\Desktop\Get-Across\Serve
   at PlayerIO.ServerCore.PlayerIOClient.BigDBImpl.<>c__DisplayClass4.<Load>b__3(DatabaseObject[] objs)
   at PlayerIO.ServerCore.PlayerIOClient.PlayerIOChannel.LoadObjectsCaller`1.success(LoadObjectsOutput output)
   at ml.a.a.c()
   at me.a(e A_0, BasePlayer A_1, Message A_2, Action A_3)
```

UW Mail - Sent ... | TileTest2 | Serverside Code... | TileTest2 - Flash... | Player.IO Develo... | Adobe Flash Pla...

people won't play if game won't even load!

"After getting finishing the first tutorial lvl it freezes..."
- Kongregate User

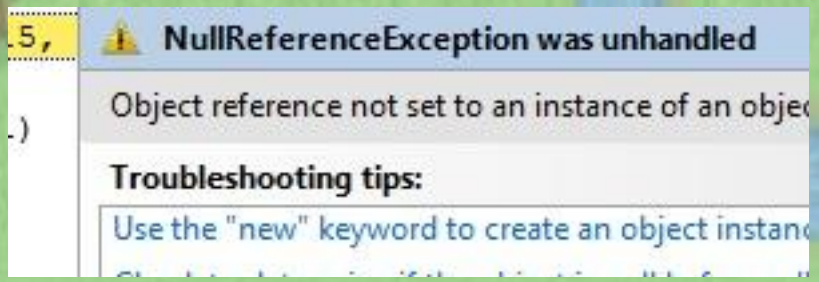
Game Refinement

- Retooled Tutorials multiple times to draw more people in and help them understand the game

  "Just the first tutorial level, if you realize you can collect stuff and want to reach that pack of trees, in the bottom left, you end up having to wait at least 2 minutes to finish the level." - Kongregate User

Lessons Learned

- Asynchronous function calls suck
  - you never know if you have the data you want at the right time

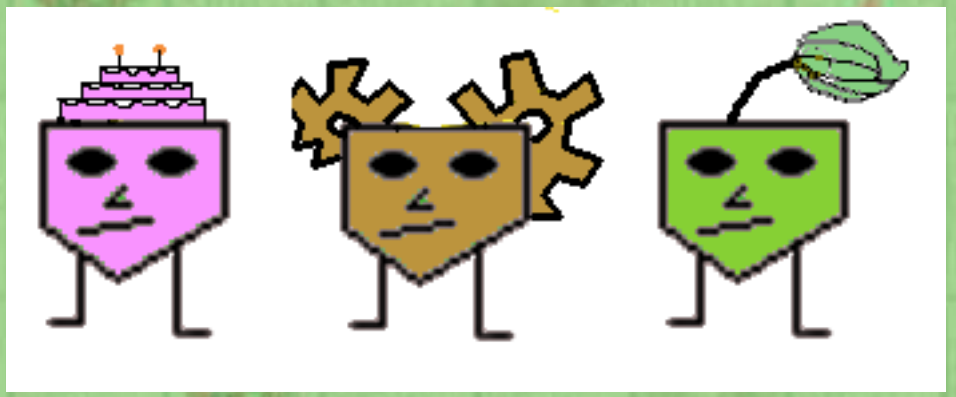


- Git is amazing but merging is always dangerous

Lessons Learned

- Learning languages and APIs takes time
  - a lot of time

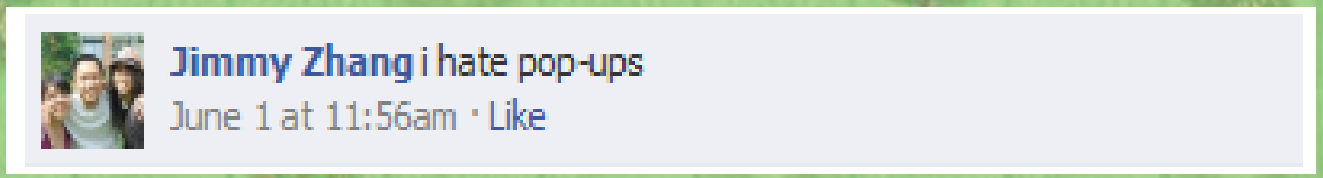
- Art! Makes your game look really polished



Lessons Learned

- 10 weeks is shorter then it sounds (our eyes bigger were then our stomachs)
  - couldn't implement cards, ability choosing

- Nothing is obvious to users, they never read (and hate pop-ups)



Lessons Learned

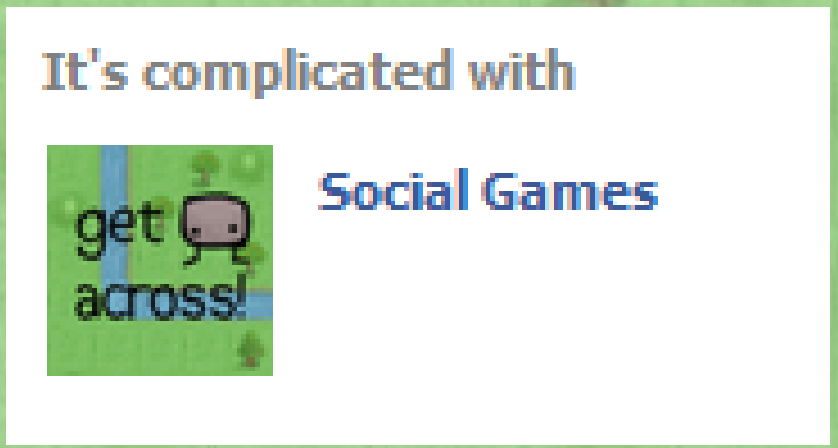
- Early design and following set guidelines is essential to effective team programming
  - we worked on specific features that we wanted to do, rather than a strict schedule

29		add "you can't cross water" alert to tutorials if player hasn't clicked on water before and does so, an any tutorial	abandoned
30		remove text about resources in tutorial 1	done
31		tutorial 2: remove text about cherry resources	done
32		make goal more apparent in the right side of the hud	done
33		change "selected tile" overlay on map editor to initialize in the right position	done
34		show how many moves you have left with red flower	done
35		make swf larger for facebook friends	
36		remove the "goals" panel in the hud, place context-specific buttons there instead (i.e. battling, gathering resources)	
37		make the red star ending tile more shiny	
38	high	reset button for tutorial levels	
39		sparkle on star	done

GoogleDocs To-Do List

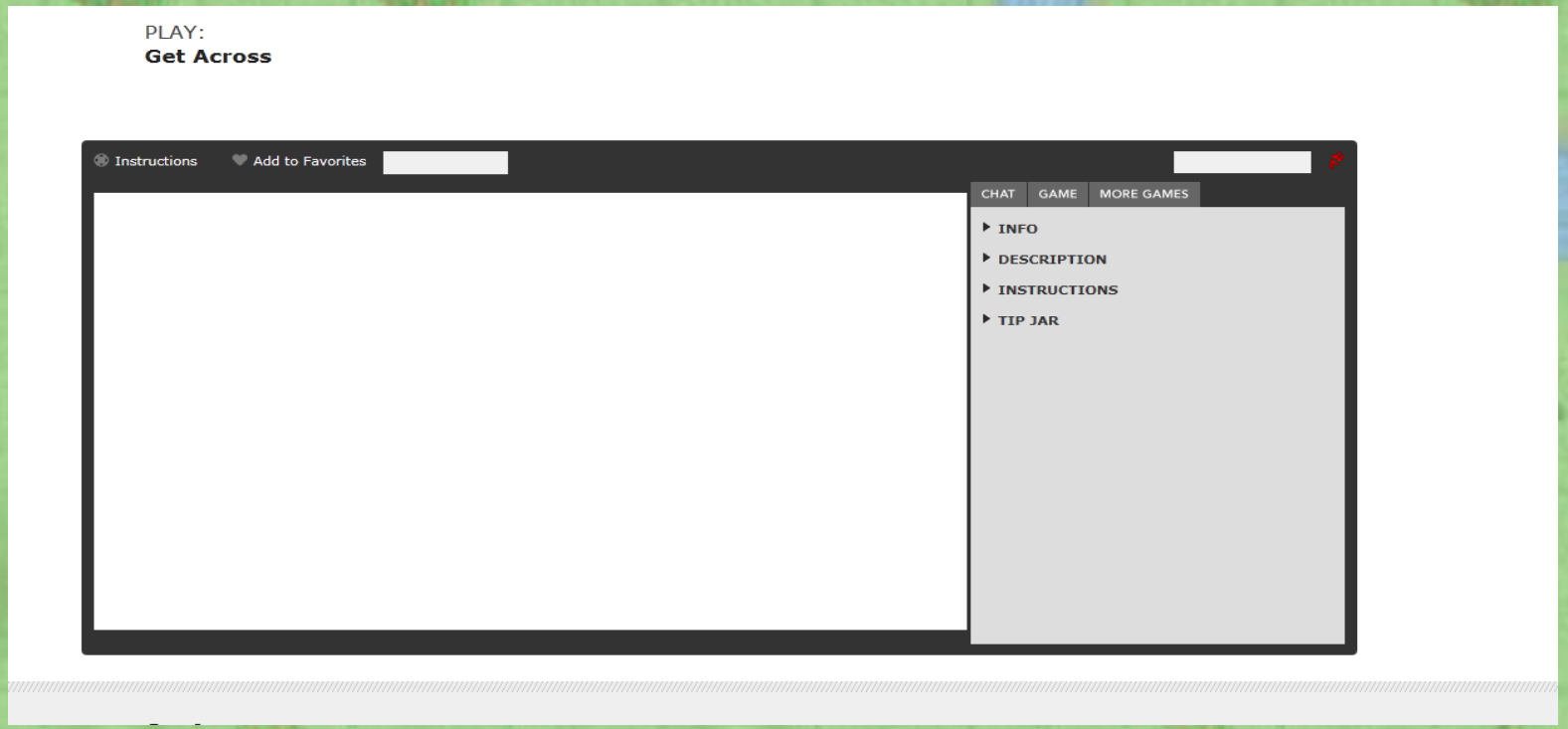
Lessons Learned

- Social games are complicated
  - hard to iterate and find brand new players, or to get people to come back
  - we spent a lot of time with back-end and infrastructure, versus social design



Lessons Learned

- Don't release a game before it is ready
  - Kongregate release flopped



fail):

Questions?