

# Uncovering the Interactivity of the Elm City Game



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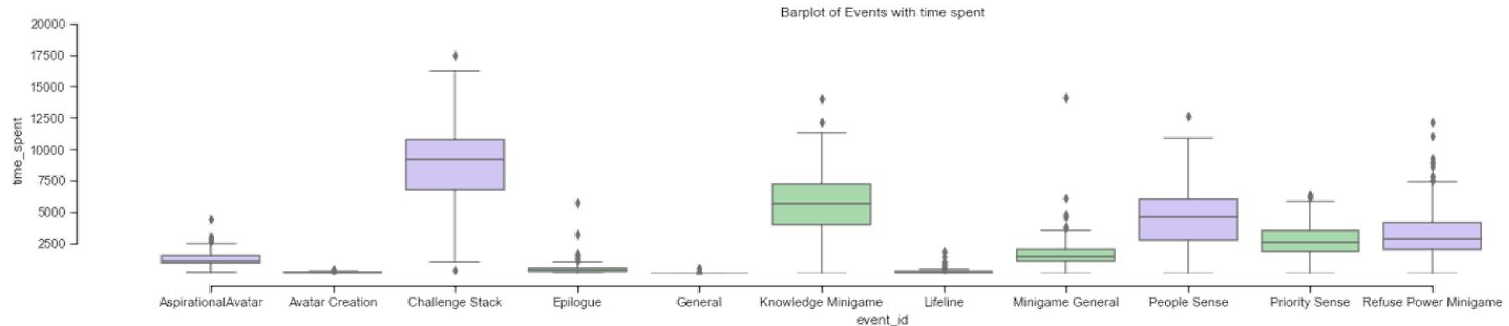
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# Exploratory Data Analysis

- Finding the clicks for each event
- What it says about time a player spends
- Possible to analyze this relationship to determine game interactivity

Median Clicks

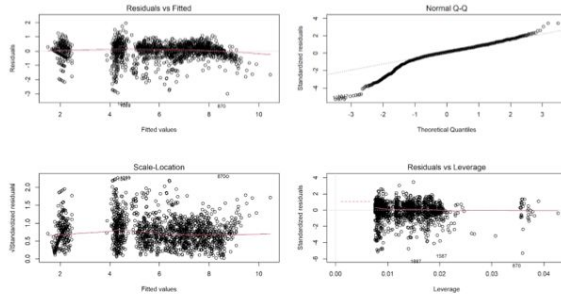
Avatar Creation	6
Aspirational Avatar	247
Challenge Stack	4131
Epilogue	89
General	11
Lifeline	86
Knowledge Minigame	2806
Minigame General	394
People Sense	2802
Priority Sense	1339
Refusal Power Minigame	807



log(Number of clicks) = School +  
Event Category + Avatar Age +  
Time Spent on Event Category

# Linear Model

Residual standard error: 0.5759826 on 2050 degrees  
of freedom  
Multiple R-squared: 0.9328351  
Adjusted R-squared: 0.932016  
F-statistic: 1138.876 on 25 and 2050 DF  
p-value: < 2.2204e-16



Performed BIC stepwise to determine optimal 4 variables

Event	Exponentiated Coefficients	P-Value	Significant
(Intercept)	139.969819	0.00E+00	TRUE
(school)1531	1.22355161	3.83E-03	TRUE
(school)1827	1.07254349	2.77E-01	FALSE
(school)2238	1.14213545	2.10E-02	TRUE
(school)2570	0.67757058	2.03E-04	TRUE
(school)3205	0.88798658	1.02E-01	FALSE
(school)3561	0.93572356	6.38E-02	FALSE
(school)4829	1.0599978	4.05E-01	FALSE
(school)5340	1.05582289	3.17E-01	FALSE
(school)6266	1.2054838	9.02E-03	TRUE
(school)7167	0.86318339	9.10E-03	TRUE
(school)9691	0.91270387	1.22E-01	FALSE
Avatar Creation	0.04458169	0.00E+00	TRUE
Challenge Stack	3.24495053	7.21E-45	TRUE
Epilogue	0.46216793	1.02E-35	TRUE
General	0.05592784	0.00E+00	TRUE
Knowledge Minigame	4.2625225	8.63E-91	TRUE
Lifeline	0.47799655	3.50E-34	TRUE
Minigame General	1.54802128	3.45E-13	TRUE
People Sense	5.10329763	9.59E-123	TRUE
Priority Sense	3.98947856	2.13E-105	TRUE
Refuse Power Minigame	2.24731561	3.54E-37	TRUE
(avatar_age)12	1.24180063	4.62E-08	TRUE
(avatar_age)13	1.12834107	2.50E-03	TRUE
(avatar_age)14	1.05397707	2.09E-01	FALSE
time_spent	1.0002294	2.70E-163	TRUE