

Information for Sean's Game

* Means confirmed happening

- Means could happened

? Means likely not happening

Player Viewing

Patch notes:

1.0.0 (4/13/24): (Actually, two updates, without updating the number, so they merged)

Beta Release, Blue Squares shooting Pink Squares, Share Score Button, Practice

2.0.0 (4/19/24):

All new boss fight

Can Hire Sean

Shop based on currency called Bling

Sean's Game Out Of Commision Due to East Coast + Loss of Interest (4/22/24 - 5/9/24)

2.1.0 (5/14/24):

New golden enemy after 100 regular kills that is faster

Bryce has more health based on the upgrades you bought.

Self Destruct Button (K)

2.1.1 (5/16/24):

Bug Fix: Shop opening dozens of times upon death.

2.2.0 (5/22/24):

New Stage 2 with green enemy and Watch Ad feature which should give 250 bling each ad and decrease by 10 when each ad is watched

2.3.0 (5/23/24):

New Stage 3 with Greedy Abhinav who has 4,200 health and shoots every 50 frames. New Health Upgrades. (Bug Fix: Bryce Boss now gives 500 bling when he is killed)(Bug Fix: Ads now give $10(25-x)$ bling when $x < 24$ an x is the number of ads watched that day)(Bug Fix: Pink Enemies now have 50 health no matter what)(Bug Fix: Gold Enemies just have 2x speed. Green Enemies have 2x speed and 2x health)

Sean's Game Beta Version Unpacked Creation Date v0.1: 4/4/2024 (0 users)

Sean's Game Official Release 1.0.0: 4/13/2024 (1 user)

Seans Game Grows in Popularity: 4/16/2024 (9 users)

Sean's Game Grows in Popularity: 4/17/2024 (10 users)

Sean's Game Grows in Popularity: 4/18/2024 (11 users)

Sean's Game Gets Update V2.0.0 And Grows in Popularity: 4/19/2024 (15 users)

Update Goal 2.0.0 4/19/2024

Additions: Shop with currency

Upgrades for Sean, and yourself (Bullet Speed)
Static Leaderboard
Update Finished 4/19/2024

New Update Goal 4/24/2024

Add Bryce Boss

Update Static Leaderboard

Add Health Upgrades

Add Stage 2 Enemies Yellow Color that are two shot and give 2 bling they will only be accessible if you pay 2,000 Bling

Add Raechel as the merchant in the shop.

Seans Game Overview and Stages:

Stage 1: Pink enemies as default, Gold enemies spawn in after 100 kills

Stage 2 (1.5x bling multiplier): Pink enemies as default, Gold enemies spawn in after 100 kills, Green enemies spawn in after 200 kills

Stage 3 (2x bling multiplier): Pink enemies as default, Gold enemies spawn in after 100 kills, Green enemies spawn in after 200 kills, Evil Abhinav spawns in at 250 kills.

Enemies Overview:

Stage 1 Enemy: Pink Enemy has 1x speed, 1x health 1x damage

Stage 2 Enemy: Gold Enemy has 2x speed

Stage 3 Enemy: Green Enemy has 2x speed and 2x health

Bryce: Has $1200 \times v$ health where v is the amount of times you have upgraded your bullet speed. (ranges from 1-7)

Greedy Abhinav: Has 4,200 Health and shoots once every 50 frames

Bullet Speed Formula

Value from 1 - 4 to the third power + 1 to the $\frac{1}{3}$. Maxed out bullet Speed shoots every 22 frames

Developer Viewing Only

History of Sean's Game

Try to make weekly updates

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Sean's Game Grows in Popularity: 4/17/2024 (10 users)

Sean's Game Grows in Popularity: 4/18/2024 (11 users)

Sean's Game Gets Major Update V2.0.0 And Grows in Popularity: 4/19/2024 (15 users)

Sean's Game Gets Minor Update V2.1.0 And Grows in Popularity: 5/14/2024 (24 users)

Sean's Game Gets Bug Fix Update V2.1.1 And Grows in Popularity: 5/16/2024 (26 users)

Schedule for Updates in Sean's Game

Wednesday: Update Gets Released

Thursday: Developing Features

Friday: Programming

Monday: Programming

Tuesday: Testing Day + Little Programming

Update 2.1.0 Features:

New golden enemy after 100 regular kills that is faster

Bryce has more health based on the upgrades you bought.

Self Destruct Button (K)

Update 2.2.0 Features:

*New Green Enemy which does 2x damage + 2x speed - (complete)

*New Stage 2 - Cost 2,500 bling Permanent - (complete)

*Ads which give 250 bling on the first watch but decrease by 10 bling each ad. Maximum cash from ads per day: 3380. Maximum ads you can watch a day: 25. Estimated maximum cash developers can receive from one user each day: \$0.05. (needs bug fix)

*Perhaps an upgrade that makes walking speed faster (incomplete)

*2x bling multiplier on people you kill - (complete)

*Sean Stage 2 Upgrade cost 2,500 bling with green enemies - (complete)

Health Upgrades for your character which gives him one more hit each upgrade - (next update)

Update 2.3.0 Features

New Stage 3 with Greedy Abhinav who has 4,200 health and shoots every 50 frames. New Health Upgrades. (complete)

(Bug Fix: Bryce Boss now gives 500 bling when he is killed)

(Bug Fix: Ads now give $10(25-x)$ bling when $x < 24$ and x is the number of ads watched that day)

(Bug Fix: Pink Enemies now have 50 health no matter what)

(Bug Fix: Gold Enemies just have 2x speed. Green Enemies have 2x speed and 2x health)

Update 2.4.0 Features:

Certain hats that give special abilities (1,000 bling, 2,500 bling, 5,000 bling, 20,000 bling, 50,000 bling, 100,000 bling)

3 categories for hats abilities

-Health Regeneration Buffs (Green color)

-Speed Buffs (Red color)

-Extra Bullets Fired (Yellow color)

1,000 bling hat can have 25% faster health regeneration (White)

2,500 bling hat can have 50% faster speed (Green)

5,000 bling hat can have 100% more bullets fired at once (Blue)

20,000 bling can have 200% faster health regeneration (Beacon)

50,000 bling can have 150% faster health regeneration + 150% faster speed (Purple)

100,000 bling can have 150% faster health regeneration + 150% faster speed + 150% more bullets fired at once (Rainbow)

(Bug Fixes: Bryce Boss needs to have half his current bullet speed)(Stage 2 needs to have a 1.5x bling multiplier and Stage 3 needs to have a 2x bling multiplier)

***Note: Henry Mihelich may be able to help on hat designs**

3.0.0 90% (chance of happening):

Multiplayer

3.0.1?: Renderer overhaul, fully support all polygons, including collisions

Update 3.0.0:

Multiplayer.

Tests showing proof that all stages give the same bling:

1st Stage BPM (Bling Per Minute) = 514 1st Stage BPM (Bling Per 2 Minute) = 996

2nd Stage BPM (Bling Per Minute) = 487 2nd Stage BPM (Bling Per 2 Minutes) = 1285

3rd Stage BPM (Bling Per Minute) = 463 3rd Stage BPM (Bling Per 2 Minutes) = 1065

Update 3.0.1 Features

3.0.1: Bug Fix: Servers are down

3.0.1: Bug Fix: (Stage 2 should give 1.5x bling after pink enemies are killed)

3.0.1: Bug Fix: (Stage 3 should give 1.5x bling after pink enemies are killed and 2x bling after gold enemies are killed)

3.0.1: Bug Fix: You killed (Name) message should disappear after 5 seconds.

3.0.1: Bug Fix: In the top right corner of the multiplayer screen it should say Score:(Number)

3.0.1: Bug Fix: Multiplayer should give 1,000 bling to the winner multiplied by the amount of people in the game (Max 6) (Still Testing)

3.0.1: Multiplayer should only take 250 points to win.

Starting 78 Users: 10/3/24

Goal: 100 Users By 10/18/24

To - Do List

Status	Task	Comments
Complete	Bring Multiplayer Online	Good
Not Started	Statistics for Multiplayer	Track how long the average game lasts
Working	Polygons	Add Sean as a Triangle
Not Started	Rating Feature	How do we know if they left a review?
Complete	Find out what upgrades cost	See Cost Chart Below
Complete	Make Stage 2 and 3 have bling multipliers of 1.5 and 2	
Working	Monthly Events	Halloween Level, Multiplayer has $\frac{1}{2}$ chance of spawning Halloween Mode, where everyone has to work as a team to beat a halloween boss, everyone gets 5K bling for winning. Beating the halloween level (with a halloween boss, and sean) will give you the halloween hat.
Complete	'You Died' when beating the Boss	After beating the boss, instead of 'you win' going on the screen, 'you died' goes
Not Started	Patch Server Side Exploits	If someone sends corrupted JSON, or JSON at the wrong frequency, the server will

		trust them, this can lead to crashes, hacking in-game, and the server being hacked (JSON-injection?)
Waiting for next multiplayer deployment/Complete	Add a space between name and won in the multiplayer wait screen	
Complete	Fix bug where the upgrades screen doesn't start on any type of upgrade, and you have to click one	
Complete	Edit footage for trailer, add dramatic music	We recorded bunch, and I downloaded the music, now we wait on me editing it in between coding sessions
Not Started	Client performance improvement	For when the internet connection is really bad, the client should store a buffer of frames received and display them with an offset to average out network conditions
Complete	Setup root Aurorii.com	Before the google site for the Aurorii company was on www.aurorii.com ONLY, now you can access it from aurorii.com
Rejected by Google/Searching alternatives	Banner Ads	There should be two banner ads in multiplayer when you die
Complete	Bug where health does not regenerate fast enough for the Rainbow Hat	

Item	Cost	Description
Hire Sean	1,000	Sean's kills count towards User's earned bling
Player Health	Graph $2000x^2 + 2$	Player's health

Level 1	Free	
Level 2	2,500	
Level 3	10,000	
White Hat	1,000	Healtime is divided by 1.25
Green Hat	2,500	Speed is multiplied by 1.5
Blue Hat	5,000	Reload time is halved
Beacon Hat	20,000	Heal Time is thirded
Purple Hat	50,000	Heal Time divided by 2.5, speed 1.5ed
Rainbow Hat	100,000	Heal Time divided by 2.5, speed multiplied by 1.5, Reload time divided by 1.5
Sean Bullet	The maximum is 4, graph $(X^3 + 1)^{1/3}$, round up. Divide 60 by this	How often the player can shoot, AKA "Reload time"
Player Bullet	The maximum is 4, graph $(X^3 + 1)^{1/3}$, round up. Divide 60 by this	How often the player can shoot, AKA "Reload time"

Average Game Length Multiplayer Tracker:

Sample 25 random games and remove any outliers: shortest 5 games and longest 5 games will be removed.

6 Bullet Speed Upgrades

Polygons:

Base Goal:

Users should turn into circles with guns about 2 times the area they are right now.

Example:



Advanced Goals: Users can have one little black dash on their gun for each bullet speed upgrade they have

Upgrades:

7 Stages:

Health Upgrades: 50 bling + 150 bling + 225 bling + 300 bling + 375 bling + 450 bling + 525 bling = Total 2025 bling. (Total time = 30 minutes if player has no bullet speed upgrades or 5 minutes if they do).

Sean Bullet Speed Upgrades: 100 bling + 300 bling + 450 bling + 600 bling + 750 bling + 950 bling + 1050 bling = Total 4050 bling. (Total Time 16.6 Minutes If upgrading as you go and Sean is hired).

Bullet Speed Upgrades: 100 bling + 300 bling + 450 bling + 600 bling + 750 bling + 900 bling + 1050 bling = Total 4050 bling. (Total Time 16.6 Minutes If upgrading as you go).

Intense Math Explanation for Upgrade Cost

BPM = Bling Per Minute

Base Player (No Upgrades) = 60 BPM. 1 Bullet Speed Upgrade = 120 BPM. 2 Bullet Speed Upgrades = 180 BPM. 3 Bullet Speed Upgrades = 240 BPM. 4 Bullet Speed Upgrades = 300 BPM. 5 Bullet Speed Upgrades = 360 BPM. 6 Bullet Speed Upgrades = 420 BPM.

If a player upgrades their bullet speed first then they will be able to max out their upgrades in x time because.

- 60 BPM x 1.6 Minutes = 100 Bling
- 120 BPM x 2.5 Minutes = 300 Bling
- 180 BPM x 2.5 Minutes = 450 Bling
- 240 BPM x 2.5 Minutes = 600 Bling
- 300 BPM x 2.5 Minutes = 750 Bling
- 360 BPM x 2.5 Minutes = 900 Bling
- 420 BPM x 2.5 Minutes = 1050 Bling

Total = 16.6 Minutes. This works if the player is buying bullet speed upgrades for them or Sean depending on if they hired him.

Monthly Events: There will be a monthly event that runs for one week of the month and will be themed based on the holiday. (Halloween, Thanksgiving, Christmas).

Youtube Channel: Sean's Game. The Introduction To Sean's Game Video will be posted on 10/18/2024.

It will have 15 seconds or so of me explaining what it is.

7.5 seconds of me talking about Sean and the overall game and what to do and the updates.

15 seconds of me talking about the upgrades features, 5 seconds for hats, bullet speed upgrades, and health upgrades,

7.5 seconds talking about the boss and

15 seconds talking about the 3 stages.

3.0.2 Features

Bug Fix: Multiplayer pays bling, to make stage 2 multiply bling by 1.5x and stage 3 multiply bling by 2x.

Bug Fix: Enemy count works

Bug Fix: You get 3000 bling for each game you win in multiplayer

Testing: Testing game length and deaths per game to calculate how much ads will be viewed and how much bling we should give.

2p: 2:25.

2p: 2:08

4p: 2:45

4p: 2:43

4p: 2:03

Players	Average Time	Average Total Deaths
2	2:16	10
3	Not Tested	Not Tested
4	2:30	Not Tested

3.1.0 Features:

Bug Fix: Shop doesn't allow you to click upgrades button

Bug Fix: Multiplayer randomly lags out and causes everybody to be stuck and then ends the game after 10 seconds.

Bug Fix: When you kill the boss the screen just says (You Died Score: X), It should say: (You Defeated Bryce! Congratulations, you earned 500 bling!

Minor Update: Multiplayer will have 2 spawn points when you die on both sides of the map which will act as a jail with bars and you will just stay there for 10 seconds and then rejoin.

Minor Update: You will get 1,500 bling per person in the game. This is because with 4 people you don't have as much expected value and we need people to play multiplayer.

Minor Update: Banner Ads

3.1.0 Features: To - Do List

Status	Task	Comments
Complete	Shop Bug	Shop doesn't let you click upgrades button from home page
Complete	Multiplayer Bug	Multiplayer works well and doesn't lag anymore.
Complete	Boss Bug	When you kill the boss it says You Died! Instead of you won
Complete	Multiplayer Spawn Points	2 spawn points in multiplayer that you stay in for 10 seconds. They should look like a jail.
Complete	Multiplayer Bling	Will give 1,500 bling per person in the game.
Complete	Add 30 min max to Multiplayer	If a round takes longer than 30 mins, the server will restart (to prevent lag) (usually when no one is online)
Waiting for Approval	Banner Ads	2 ads on death screen in multiplayer

3.2.0 Features:

Minor Update: Polygons

Minor Update: Banner Ads

Bug Fix: Multiplayer follows the equation $y = 500x + 1000$ when rewarding bling to players who have max upgrades and follows the equation $100x + 200$.

Bug Fix: $Y = 6X^4 + 75$ is the new graph for the upgrades. This will make the upgrades: 75, 81, 169, 561, 1611.

Minor Update: Power - Ups (3)