

*Shoy Schot!* *nui* POSTMORTEM

# *Shoy Schot!*

STAND-ALONE EDITION

*nui*

VERSION 3.x.x.x

Shoy Schot! nui (SSN) is an electronic card game and sequel game to Shoy Schot! and Shoy Schot! Stand-Alone Edition (SS! SAE). This project was first conceptualized in the beginning of 2013, with light production beginning in March and full production starting May 22<sup>nd</sup>, 2013. The game started out as being the next and final version of the SS! SAE series as well as my goodbye to the text-based graphical style I'd been using. After many delays and many more features added, SSN became much more than a simple update to SS! SAE and evolved into the third and best iteration of Shoy Schot!

With both many problems and many successes, SSN became a celebration of everything that I and Virtual Gaia have done before. I truly believe SSN is something I'm going to look back on in 10 years and still be proud of and what more could I ask for? To all the fans of the Shoy Schot! series, I hope you enjoyed it as much as I did.

[**Warning:** This document contains some spoilers of Hidden Features within Shoy Schot! nui]

## ❖ Things That Went Right

### 1. Doing It Myself

While SSN isn't the first project I've done alone, it may be the biggest and I think more than any of my other projects it shows my voice as a creator. There's not some generic feel to it. Other than that, I did a lot of things for this project and learnt quite a bit. It taught me what parts of design I like and dislike and which parts I can do quicky and what parts I can't. The next big project that I work on, I want to work on with a team of people, but I'm very glad I did this one alone.

### 2. NSS-AI System

The Non-Stupid, Simple Artificial Intelligence (or NSS-AI) System is really the one part of Shoy Schot!, not just SSN, that I'm most proud of. The NSS-AI System was something I knew the game would need if it was going to be any fun. I figured, correctly, that most people would play it by themselves rather than with another person. So, I made this AI System, which started out very humbly and rigid (because it was my first attempt at game AI). I remember not really accepting it as a real AI System, so I gave it that cheeky name because it did its job but it was so simple. Over time, with every new update, the system would slowly evolve, becoming more and more a real AI System. It became something I started to marvel at and enjoyed improving.

While the past updates brought additions and fixes to the NSS-AI, SSN is the first time that I actually overhauled a huge section of it. I can look at it now with all its nuances and really be proud of the thought, time, and effort I put into. I really believe it paid off.

### 3. Overall Design

I honestly love the design of SSN. Not because I made it but I really do think it looks and feels really good; from its box menus and start capitalization to its subtle use of color—it looks good. I doubt anyone could make a text-based card game look as cool and inviting as SSN. Not only that, but I'm really proud of the how the game's Accomplishments leads the Players to playing the different game modes. Plus, there's a good number of Accoms that the Player earns easily, through a bit of effort, and through a lot of effort. The break between completeive and arcade modes is a lot more clear than in previous releases, though I feel like the game lean a bit heavily on the arcady side. Lastly, I love SSN's logo. That was actually the last straw that got to go, "Okay, let's do this!" I couldn't waste such a beautiful logo.

### 4. Ways To Play

With all the options and game modes, there's literally thousands of ways to play SSN, but looking just at the major game modes it's still pretty impressive that I could come up with so many different ways to play a simple card game. The fact the Score Attack plays different than Arcade Battle Campaign and that plays different than Arcade Challenges and the different challenges in that mode plays different from each other. It's impressive, especially to me.

Before SSN was conceptualized I thought I was completely out of ideas as to where to go next with Shoy Schot! Each update of SS! SAE v2 there were less and less features packed in and even what was there was noticeable similar to each other. But after a little break I came up with a lot of new ideas and even a whole new card game. This one of the reasons I still marvel at Shoy Schot! nui!

### 5. Treating It Like A Triple-A Game

Even though SSN is just a simply card game I never treated it as such and I think in some ways that made the game grow bigger. I polished the hell out of it, making sure the game was as perfect as it could be. I marketed and advertized it to various degrees of success, I got it a spot on IndieDB and made a demo for it. Even this postmortem is me treating this game with the respect of a bigger release. In the end, I believe this shows my honest feeling about SSN: it's a small game but it's not a small game, it's a text-based game but it's still a real game, it's card game but it's a damn fine game. SSN is awesome and I am proud I was part of it—that I made it.

## ❖ **Thing That Went Wrong**

### **1. Time To Complete**

There's no real way around it—the game simply took too long to finish. While originally planned to only take about 2 or 3 months, it took 9. On top of that it, at first glance, the game looks smaller than it is. Now, obviously the game grew since my original plan and I stand firmly by the notion that the finished version of SSN (with all its features and done by an army of one) could not have been completed any sooner, 9 months was still a very long time. On a positive note I have a lot of new experience and knowledge in a ton of new areas, including the dangers of feature creep.

### **2. Work Environment**

I could talk about how I had to restart my computer 6-8 times a day, all the power outages that happened, but I rather discuss how this affected the production and how important a good work environment is—partly because I think this postmortem should be about me reflecting and solving past mistakes so my future endeavors won't befall to the same problems and partly because I tried writing it the other way and I just sounded whiny and bitchy.

Having a good work environment is very important because while people can work in a hole in a ground fighting off giant rats, they are so much more productive when the only problems are coming from the project itself. It wasn't all too bad as I learnt some ways to comeback a bad work environment when changing circumstance isn't possible: Working outside, changing pace, different (longer) work hours, switching area between project parts, etc. Though, in the end, better computers and work space trumps all.

### **3. Communication**

Something that I think hurt the project a lot was my lack of communicating was SSN was and why it was taking so long. Part of the problem was the fact that project grew and what it was was changing daily. Second, was the fact that that after it grew and was taking so long it really was difficult to explain the why what appeared like a finished project was still being worked on. I just didn't do a very good job at explaining then work-in-progress features and problems. And third, after so much time I got embarrassed about the length, so I would occasionally stop talking about until a big piece was finished. That, as I would find out, was more detrimental to the game than anything else, because it seemed like I wasn't excited about it. And if I wasn't excited about it, nobody was. Going forward I will need to work on this area a lot.

### **4. Extreme Excess**

While nowhere as big as Skyrim or GTA V, SSN has a lot of content in it. There were two main problems here: 1) SSN is actual 4 projects in 1. The first being Shoy Schot! nui itself, the second being Clementine, third being the port of Still Here After Wednesday Night, and fourth being the Secret Menu

Story. Now, while the Clementine was always in the plan and the port of Still Here didn't take a lot of time, the hidden Menu Story, while cool, was completely unnecessary and added two months to the production time.

2) Everything in SSN got bigger.

Ex. 1: Arcade Challenges was only going to be about 10 to 15 challenges with no bosses, but the final version ended up with 40 plus extras. The other 5 new modes received the same treatment to various degrees.

Ex. 2: All 6 of the new game modes have 1 big hidden extra and various smaller ones; none of which were in the original plan.

Ex. 3: Speaking the 6 new game modes, there were originally only going to be 5—Arcade Battle Campaign was a very last minute addition with added about 2 week to the production time.

Now, none of this added any extra monetary cost to the game (had it not been a personal passion project it would have) it did cost me a lot in time. I'm glad did this project this way to learn the effects of feature creep and going overboard in a safe environment. The next project I work on will stay within budget. I also, found I can work pretty fast in a pinch to make deadlines. Missing 2013 was a no go!!

## **W**riting

In the final version of the game, there ended up being a ton of writing in it—about 20 to 25 thousand words (excluding the How To Play sections and Still Here's script), which is a lot for a small-ish, non-story-based game. Not to mention all that writing added 4 whole months to production time! Writing tends to be my slowest area, but I actually got through a lot of it rather quickly with the quality I wanted. The problem was twofold: First, a game like this could have cut some of its writing, like the Secret Menu Story. Two, if I was going to be crazy and build the game like I did, I needed a second writer. This is one mistake that won't be repeated.

## ❖ Things That I Learnt

### 1. The Many Hats Of Game Design (or any design)

As a designer, creator, businessman, not just of games, but of anything, you have a lot of roles. Whatever you think your job is, is not the only thing you may be doing, especially if you're alone on your venture. Making SSN I not only had to design and code the game, but I also had to be a writer for various things inside and outside the game, be a graphic designer for the logos, banners, and interface design, a beta-tester which while something I would and needed do anyway it's not something that works best alone, a marketer, website manager, file manager, and tons of other smaller task. At the end of the day, even a text-based card game needs a lot of work outside of simply making it.

### 2. Scheduling, Goal Setting, And Planning

These are things that are always very important to any project—big or small. Especially, ones like this—ones that kept growing and growing. The main thing—for scheduling and planning, I learnt to check it daily (multiple times) and make the needed changes and adjustment when they arise immediately. Do not just keep those things in your head. Also, put it somewhere you are forced to see it clearly—neon pink post-its are your friend and mine! As for goal setting, I became better at it, which is a weird thing to write, but it's true. And just like scheduling and planning—keep it in plain sight. Lastly, and this goes for both, tell people about. It makes it real and keeps you motivated.

### 3. Keeping A Daily Work Log

This was a great way to monitor how much I was actually working each day and also a great motivator. This is something that I will continue with future projects.

### 4. Graphics Mean Everything

Graphics mean a lot. Something I knew, but not to the extent. The tech demos did in Unity were immediately more exciting than SSN, even though, after playing it, SSN was clearly the better game—by leagues and bound. Graphics mean a lot; even crappy sprite or 3d based graphics go a long way. People tend to treat those games as being more *real* even if they aren't necessary better.

### 5. Beta-Testers Are A Must

For SSN (and in fact, for any of the previous releases) I didn't have any beta-testers other than me. While thoroughly play testing your game is a must, being so close to it for such a long time, you will miss things and the bigger the game is more you can expect to miss stuff. I learnt that both during the entire creation of Shoy Schot!, where I had no testers, and during the creation of Still Here After Wednesday Night, where I had two awesome testers. Having a fresh set of eyes and fingers is always good for finding typos and judging difficulty, etc. Also, having someone who doesn't think like you is a great help. I had to fake that last thing for SSN. Results varied.



## ❖ Cut Features

### 1. Tweet Accomplishments

During the production of SSN, I was playing Superbrothers: Sword & Sworcery EP and this game had a feature that I thought was genius and executed perfectly and not at all intrusively: the tweet feature! While not 100% new, I've never seen it integrated into a game so seamlessly. I wanted that for SSN! My version was going to be more simplified; only tweeting out accomplishments earned. It was going to be automatic and the feature could be turned on and off. I made two attempts at different points in production, but could never get it to work properly. I really, really, really wanted this feature. If I wasn't too stretched for time in December, I had planned on attempting it a third time.

### 2. Colorado Rule Set (Again)

Way back when I first conceived Shoy Schot! as a minigame for Still Here After Wednesday Night in 2012, this was one of the original Rule Sets I made. I cannot remember if I ever truly attempted to add it to the game then, but since then it always been in the back of my mind to add in. Now, for SSN I didn't try to add it in actually, but again I took it into consideration. The problem with Colorado Rules and getting it into the electronic version of the game is that it works markedly different than the way the other Rule Sets—and really the game—works. It's just too much work for what it is. It'd be like creating a completely new game mode than just added a new rule. So, it was cut pretty quickly, but if anyone wants to play it, just build a physical game deck and have at it (That's why I always leave its rules in the How To Play section).

### 3. Advanced (4th) CPU

After I redid the NSS-AI, I put some real thought into making a fourth CPU Player. This was something I started thinking about after I upgraded the AI system back in December of 2012. Her name would be Kaori—Kaori Nomura—and her counterpart would be her brother Neil Nomura. Kaori, like Elsa, would be able to intentional do single and multiple flips and have access to the advance moves. However, she'd differentiate herself from Elsa and the other CPU Players by being able to look for and read chains—meaning she'll be able to take advantage of the Monarch's Rules and know when it's better to use a single direction card vs. a multi-direction card. Also, I wanted her to have a basic perception of some of the Rules and Rule Sets, playing a bit differently if say a 0 card could be played—the way a real player would.

I cut this for two reasons:

1. I wasn't sure how much harder she would actually be over Elsa, especially after the SSN upgrade. Looking back, Elsa didn't really feel much different than Imogen until several upgrades and months later (seriously, play SS! SAE v2.0.0.0). Kaori wasn't going to have a months of upgrades.

2. It was going to be hard—part technically and part logistically. Hard really isn't a problem, but time always is, especially in the long run if no one can tell the difference between the Hard and

Advanced AI. In the end, I felt that Elsa was hard enough and that added in another AI just wouldn't be worth the time and effort.

#### 4. Hidden Endless Tower Leaderboards

This feature was cut because it was stupid. Instead of the Top 20 Hi-Floor record system that the final version of this mode would have, Endless Tower was original only going to keep a Player's single highest Floor reached. Yep, just the one, not Top 20. That's the first part. The second part was that when a Player saves their Rank Card it would also save a hidden file in the Rank Card containing their highest Floor reached in Endless Tower along with their name. When a Rank Card is uploaded into a game it would check that Hidden Endless Tower file vs. that Player's Endless Tower Hi-Floor and if the current Player's Hi-Floor is lower it would replace it with the friend's file.

In theory, it would build friendly competition between players a la the leaderboard system in Geometry Wars 2 (or any game). However, there were two main problems. 1. It wasn't an online based system. It was this complicated system that forced the Player to do unnecessary work for it to function. 2. It was a hidden system. CUT! The Top 20 system works so much better for an offline game.

#### 5. Vegas (Joke) Rule Set

The Vegas Rule Set was an idea my cousin and I thought of on our Vegas trip. It was going to be a joke Rule Set based on how some of the games in Vegas worked and the jokes we made. It was going to be a little mode with no known rules—the Player would have to figure them out through playing—and the rules would be weird, changing with each turn. It was just going to be a fun little mode. It was never high on my priority list.

#### 6. 21 Minigame

21 was another idea from the Vegas trip. It's a simple game to make, but I just could get the visual to look how I wanted them to in SSN's text-based graphics system (mostly how the Hand would be display) so I decided not to bother. What I wanted needed actual graphics.

#### 7. Some Kind Of Betting/Money System

By Money System I mean I wanted something akin to the Accumulation Point System of Still Here where each Accomplishment had a point value and once the Player had enough points they could buy something. The betting part was just a way to earn more point, by betting on either single player matches or CPU vs. CPU matches. The problem was what would the Player use the points to buy? I didn't want to lock modes and I wanted the hidden modes to be unknown and earned through surprise. Shoy Schot! isn't like an RPG, the Player can't buy a new sword so it was partially dropped.

Arcade Battle Campaign brings back the money system and a kind of betting system and even a kind of RPG system. Since Arcade Battle Campaign is only a single mode, I'm still deeming this as being a cut feature since my original idea was a system-wide feature.

### 8. Elements Rules

Elements Rule was going to randomly add Field Makers to the Field before the match started, similar to Score Attack, with each Field Marker represented by a color representing an element. I believe my original concept only included four elements (Water and Fire for sure). Each element was either going to be natural, effective, or ineffective against each element. For example, if an opponent's was on a water marker and the Player's card was on a water marker the normal card value rules apply, but if the opponent's card was on a fire marker than it would be 2 points weaker against the Player's water card. Not too complex, but it added this cool extra element to the game.

The problem with the Elements Rule was that it really needed proper graphics to work or a complete rebuild of how the game field works. SSN's text-based is also limited to the colors I could use anyway.

### 9. Flipside Rules

Flipside Rules were a cool concept. If I had more time I would have tried to add it in. This rule allowed any card to be flipped by any card—meaning the Player could flip one of their cards and add a point to their opponent's score if they weren't careful. It would have made using multi-directional cards very dangerous. It was cut because it would have needed the Flipping System (one of the Holy Core Systems) to be reworked—which I didn't want to do for a lot of reasons. In short, if something went wrong—there's the game. I know I could have made a back-up (that what I did for the NSS-AI nui upgrade), but it is the core-i-est of the Holy Core Systems—I'm not mess with that unless I'm completely remaking the game and as you could imagine it would have taken some time to do.

### 10. Custom Rule Set Only Rules

After finishing Custom Rule Set (CRS), I was a little disappointed because while it worked, you couldn't actually create a Rule Set that you couldn't make by just messing around with one of the Free Play mode (excluding hand sizes). As you can see from the two above Cut Features above, new game rules were cut. There were a couple attempts to add CRS only rules but none of them left the drawing board. The best contender was another type of Discard Rule that would allow for multiple discards during a match. Deck size issues stopped that one.

### 11. Individual Custom Rule Set Collections

The CRS Collection is one of the only things in SSN that is global to the game and not individual to the Profile. Initially, the decision to do this was made because of problems it caused within the mode and it was keep because it was felt that 500 was a good number. It allowed Players to create a lot of

Custom Rule Sets while not being able to make all the permutations—this means it increases the Player’s chance of trading with other Players. 500 was also bigger than the original individual limit of 100 or 200 Rule Sets. Plus the game can hold another 500 or so in temporary storage when uploading friend’s Custom Rule Sets. I still stand by this decision.

### **12. Draws Rules For Arcade Deck**

Honestly, after overhauling the Arcade Deck Builder to work more like the Standard Deck Builder (and especially after working on Arcade Battle Campaign and Clementine) this is entirely possible and wouldn’t take too much effort to work. The only reason it was left out was to keep it differentiated from the Standard Deck. Also, I would have had to rewrite some portions of both Tutorial Mode (including the Script, Study Sheets, and Questions—all done by this time) and the How To Play section.

### **13. Full Screen Mode**

The iconic rectangle design of Shoy Schot! is bit awkward. I wanted to make a somewhat proper Full Screen Mode, but as I would find out this would need a lot of major revisions to certain aspects of the game. It just wasn’t viable beyond superficially making the screen full (with everything still on the left hand side). It’s just something else that needed a different engine to work as I wanted it to work. Though, I did make a cheatcode for the failed attempt.

### **14. DLC For Arcade Challenges**

Before I attempted Arcade Challenges, my original plan was to design them in a way I could just upload parameters and the game would make the challenge based on those parameters. That way if I wanted to add another challenge in the future, instead of releasing a full update of SSN, I could simply create DLC files for Players to upload into the game with the new challenge or challenges on them. While working on the challenges I quickly found out that that wasn’t going to work as the challenges—even ones of the same type—needed individual care. The fact that I ended up with 40 challenges over my initial 10 to 15 also helped with the decision to cut this.

## ❖ Shoy Schot! nui Numbers & Facts

- **First Day of Pre-Production:** March 26<sup>th</sup> 2013
  - **First Day of Real Production:** May 22<sup>nd</sup> 2013
  - **Last Day of Production:** December 28<sup>th</sup> 2013
  - **Release Date:** December 29<sup>th</sup> 2013
- **Total Days Worked On:** 226 Days (~7.5 Months)
  - **Most Consecutive Days Worked On:** 56 Days (25% of Total Production Time)
  - **Total Time Worked On:** 9 months
- **Number of Cheatcodes:** 47
- **Number of Accomplishments:** 48
  - **Including Hidden Accomplishments:** 66
    - **Legacy Accomplishments:** 22
    - **nui Accomplishments:** 26
    - **Hidden Accomplishments:** 18
- **Total Number of Notes:** >200 Sheets of notebook page
- **Unique Name Combinations for Arcade Battle Campaign:** >2 Million Names
  - **Total Combinations:** >65 Million Names
- **Word Count In Game:** >35 Thousand Words (Excluding Still Here Port)
  - **Word Count Of This Postmortem:** 5,078 Words
- **Shoy Schot! nui Facts**
  - The name *Shoy Schot* came from me misspelling the word *shot* twice when I was adding the Skip Shot to the 2-Player mode of Virtual Gaia Games Matching!
  - This is the third version of Shoy Schot! after the original Shoy Schot! minigame and Shoy Schot! Stand-Alone Edition
  - It was originally going to be the third version of SS! SAE, but became too large to simply be another versions of SAE. Though, it still retains SAE's version numbering
  - The two major iterations of Shoy Schot! after its original minigame form, Stand-Alone Edition and nui respectively, were both unplanned. They were both suppose to be the next release of the previous iteration, but grew too large and felt too different to simply an update
  - The current version number of the NSS-AI System is 3.1
    - The male counterparts are on version 3.0 and play more robotic
    - The girls have quirks
      - For about 4 hours at night/early morning, Imogen and Elsa play slightly worst
      - During the same time Ollie plays better
      - After that period, for about 1 hour, Elsa plays slightly better before returning to normal
      - The reason for this is to give them personality—like you're playing against a real person

- Ollie's Main AI is actually the Error System, so when she is not making a mistake she is likely using Imogen's or Elsa's AI.
- I own over 1000 albums and during the production of SSN I listened to just about all of them! Multiples of multiples of times!!
- The game makes a ton of subtle and not so subtle references to my unreleased and unfinished audio drama Elevator Music Can Be Good Music Too. This includes character names, story tidbits, and other little things.
- SSN took a lot more risk in making than any previous release. The game nearly fatally broke twice during production!
- The initial Hi-Scores for Score Attack were made by having the Computer play against itself 21 times in each category then averaged. That score was then tweaked based on a few games I played against the CPU and intuition.
  - The Hi-Scores were made before the '\*' Field Maker was added to the game. Only the Accomplishments were readjusted.
- The first new game mode to be completed was Custom Rule Set. This mode was a sort of test. If I couldn't get it to work properly then I would have ended production right then
  - SSN was originally not intended to be released. It is the only Shoy Schot! release to have been made initially to not actually release
- Endless Tower was the first mode that was playable
- Both the prototype versions of Clementine and Score Attack mode sucked and had to be retooled. They were both almost cut from the game
- Arcade Battle Campaign originally didn't have the Deck Manager and the Type A Battle Spoils System
- Arcade Challenges was the mode that I spent the most time polishing.
- Custom Rule Set had the least amount of polish.
- Each of the 6 new game modes in SSN include at least one big hidden unlockable
  - Each of those modes also include various smaller secrets
    - The more Accomplishments the Player earns in SSN the more likely Special Events occur when playing Score Attack
    - Arcade Battle Campaign includes more than 17 Items
- Some failed features made it in the game through cheatcodes
- The Secret Menu Story never uses the word: around
- The Clementine Prototype was original going to be a hidden unlock but due to time I decided not to make it hidden

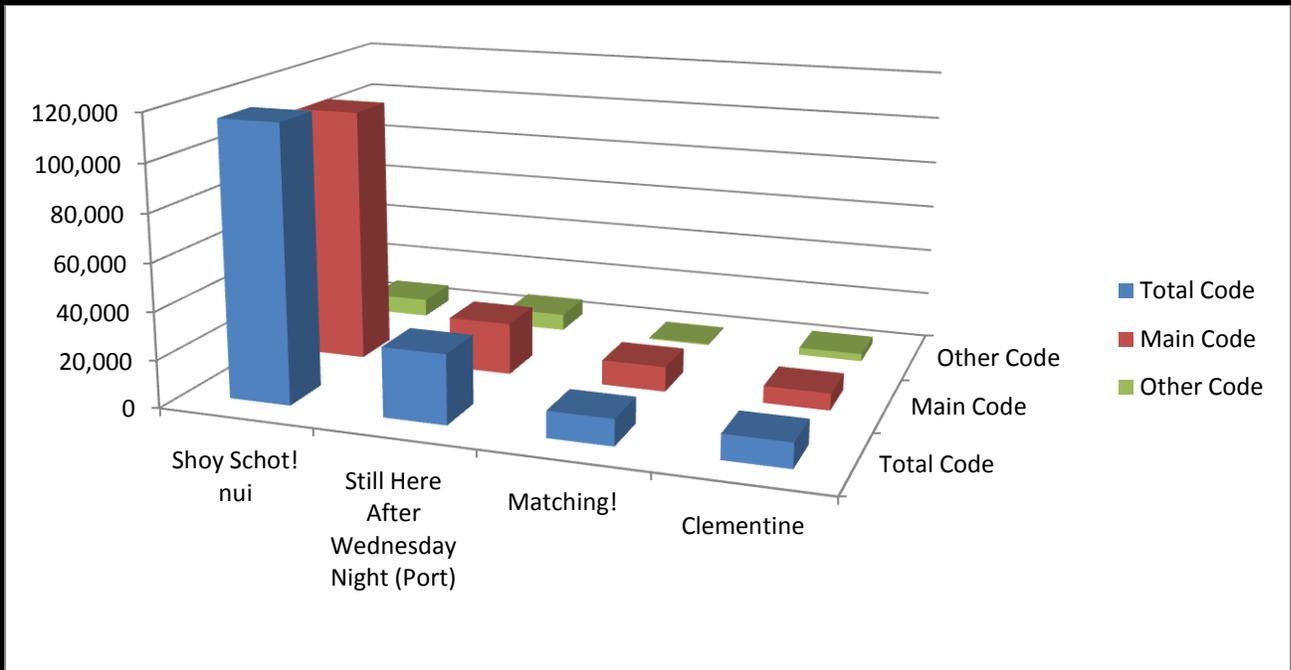


Figure 1: Lines of Code

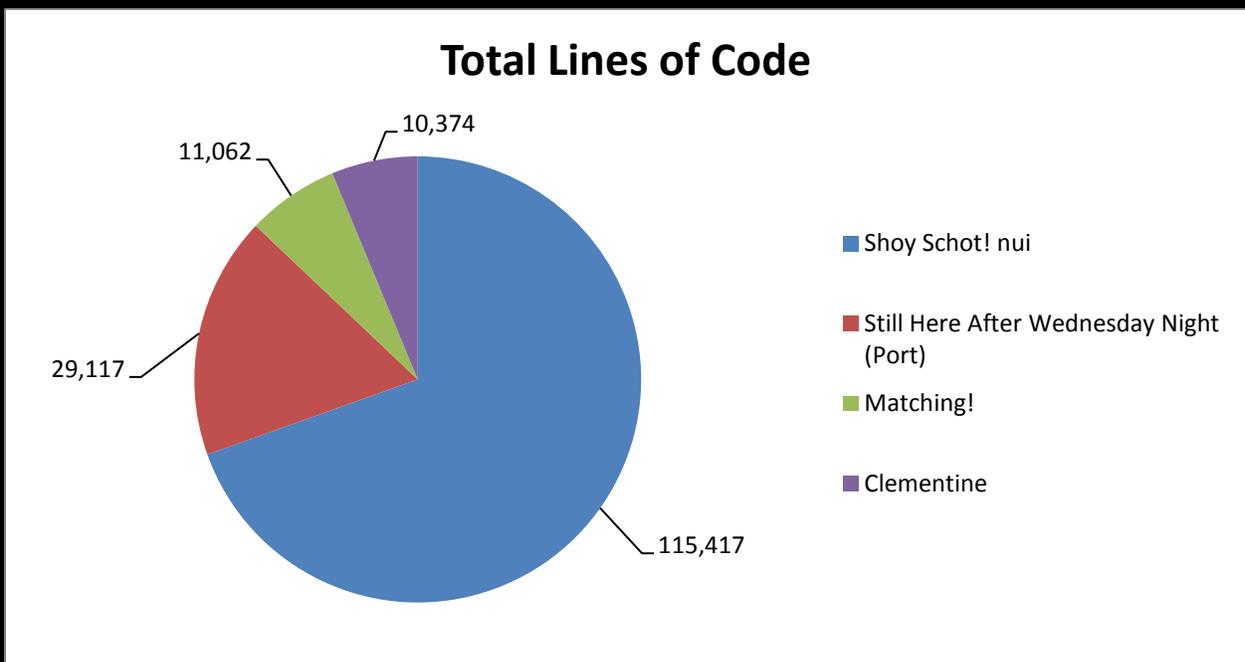


Figure 2: Total Lines of Code