

Raffler Program Readme

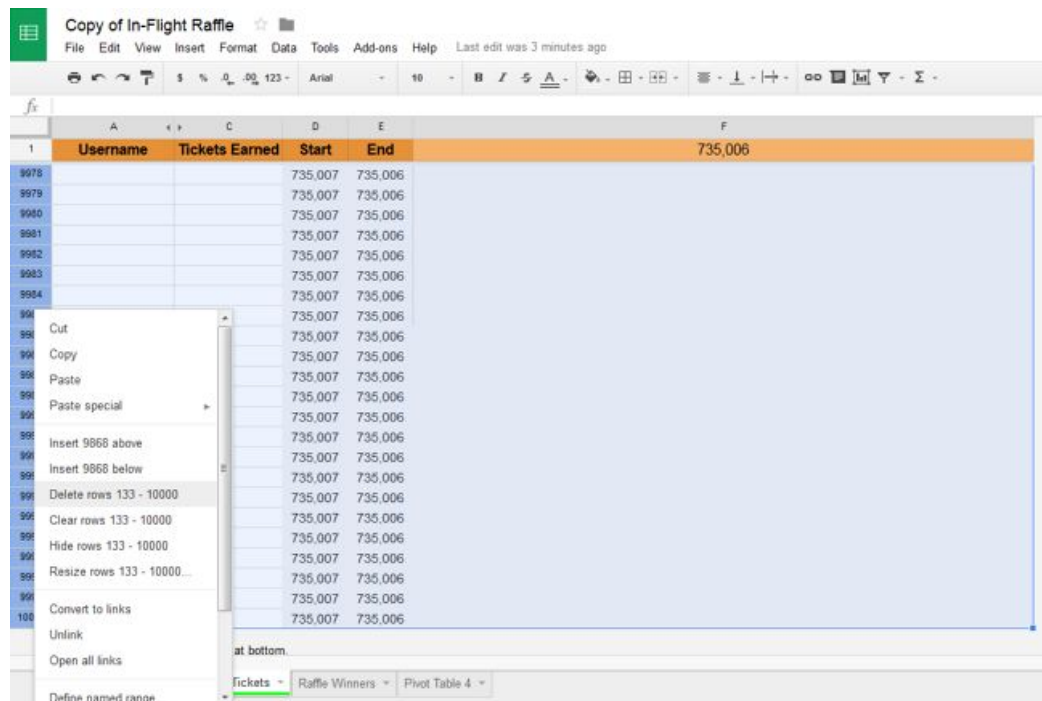
This raffle program has been put together primarily for handling raffle drawings on Flight Rising, originally for the creative raffle (and perhaps others) in Fire flight, but I don't mind the program being passed around to other people who find it useful. I'm happy to fix bugs and add settings people might find useful.

-Gracie88

Visual Guide

A. Clean up the file

1. I recommend creating a private copy of your file before doing any of this, but you could also dedicate 1 sheet to just being the pure data for ticket pulling.
2. All empty rows below the last row of real data should be deleted. All header rows of labels that aren't real data should be deleted. Basically, every single row should be data.



Copy of In-Flight Raffle

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

Username

	A	C	D	E
		Is Earned	Start	End
Cut		845	1	845
Copy		120	846	965
Paste		6	966	971
Paste special		7,740	972	8,711
		23,180	8,712	31,891
Insert 1 above		35,800	31,892	67,691
Insert 1 below		4,250	67,692	81,941
		8,535	81,942	100,476
Delete row		9,060	100,477	119,536
Clear row		16,110	119,537	145,646
Hide row		5,960	145,647	152,606
		2,230	152,607	154,836
Resize row...		140	154,837	154,976
		4,020	154,977	158,996
Define named range...		1,380	158,997	170,376
Protect range...		1,180	170,377	171,556
		0,230	171,557	181,786
Conditional formatting...		5,000	181,787	186,786
Data validation...		1,700	186,787	188,486
		1,995	188,487	190,481

3. There should be no commas in any of the data columns. Telling the number columns to use Automatic formatting should accomplish this as far as numbers go. If there are unimportant columns with commas in them, just delete the column.

Copy of In-Flight Raffle

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

Automatic

Plain text

Number 1,000.12

Percent 10.12%

Scientific 1.01E+03

Financial (1,000.12)

Currency \$1,000.12

Date 9/26/2008

Time 3:59:00 PM

Date time 9/26/2008 15:59:00

Duration 24:01:00

More Formats

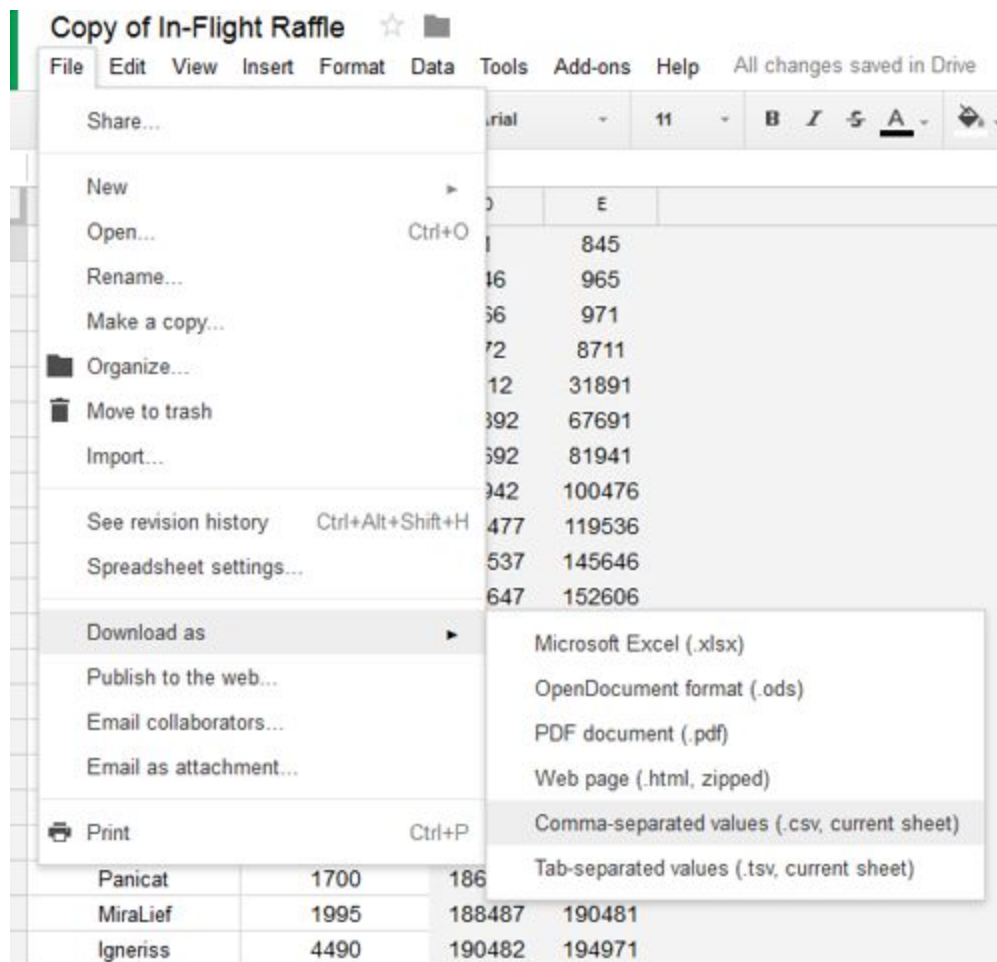
	A	C		
1	Voodooocat	845		
2	PurplePyron	120		
3	Parkakid	6		
4	AetherSeer	7740		
5	StealthBaguette	23180		
6	Psychostorm	35800		
7	Llassie	14250		
8	insufferablecrab	18535		
9	sasga	19060		
10	Thunderbird	26110		
11	Jurpassic	6960		
12	Cyans	2230		
13	Arrowfeathers	140		
14	Banjo	4020		
15	Xionahri	11380		
16	BladesFire	1180		
17	protowilson	10230	171557	181786
18	Zeushatches	5000	181787	186786
19	Panicat	1700	186787	188486
20	MiraLief	1995	188487	190481
21	Ignerriss	4490	190482	194971
22	Hinumi	2710	194972	197681
23	Espoir	4575	197682	202256
24	Loulybob	840	202257	203096
25	pedroinboxfort	1610	203097	204706
26	Mixed	6700	204707	211406

Tic. by User Tickets Raffle Winners Pivot Table 4

4. If something isn't going right or you want to be more careful, you can delete any extraneous columns.

B. Downloading the Data

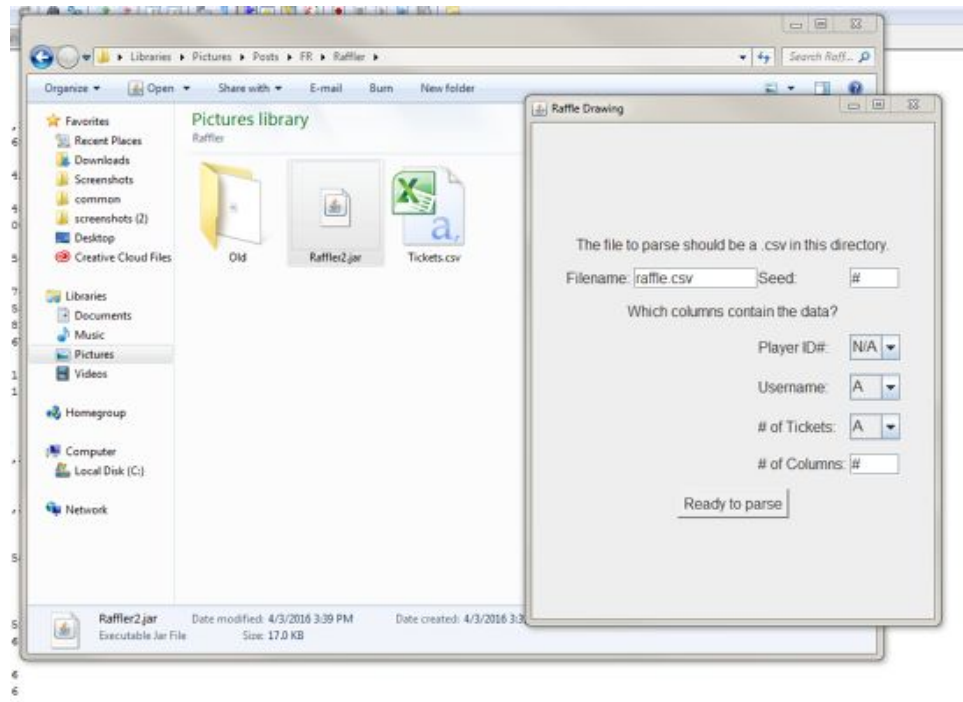
1. You can download a comma separated values file directly from Google Sheets, like so.



2. The data file should be put into the same folder that you put the raffler.jar file into.

Running the Program

1. If all goes well, you should be able to have the Raffler2.jar file and your .csv data file in the same folder, and just double click the .jar file to run it. If it pops up a message about an Exception occurring, it's possible your version of Java is older than Java 7. You could download the Java 8 Runtime Environment or you could pass the drawing duty on to someone else.



2. After you click through the welcome screen, there's a first screen for data about the file.

Filename: I recommend eliminating spaces from the filename.

Seed: See discussion below about seeding, but basically, pick a number between 0 and 999999999 from random.org. *Save this number* for yourself.

Columns: These drop down lists ask which columns hold the specified information. In the pictures below, you can see how A and C were given as the columns for these data based on the Google Sheets column names. If your file has more than G columns, just delete some unneeded ones. The number of columns is probably unimportant but could help the program with the shape of the file.

Copy of In-Flight Raffle

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

845

	A	B	C	D	E
1	Voodoocat	845	1	845	
2	PurplePyrn	120	846	965	
3	Parkakid	6	966	971	
4	AetherSeer	7740	972	8711	
5	StealthBaguette	23180	8712	31891	
6	Psychostorm	35800	31892	67691	
7	Llassie	14250	67692	81941	
8	insufferablecrab	18535	81942	100476	
9	sasga	19060	100477	119536	
10	Thunderbird	26110	119537	145646	
11	Jurassic	6960	145647	152606	
12	Cyans	2230	152607	154636	
13	Arrowfeathers	140	154637	154976	
14	Bango	4020	154977	156996	
15	Xonahni	11380	156997	170376	
16	BladesFire	1180	170377	171556	
17	protowilson	10230	171557	181786	
18	Zeushatches	5000	181787	186786	
19	Panicat	1700	186787	188486	
20	Miralief	1995	188487	190481	
21	Ignoriss	4490	190482	194971	
22	Hinumi	2710	194972	197681	
23	Espoir	4575	197682	202256	
24	Loulybob	840	202257	203096	
25	pedromboxdorf	1610	203097	204706	
26	Blisswood	67700	204707	211406	

Raffle Drawing

The file to parse should be a .csv in this directory.

Filename: Tickets.csv Seed: 62664

Which columns contain the data?

Player ID#: N/A

Username: A

of Tickets: C

of Columns: 6

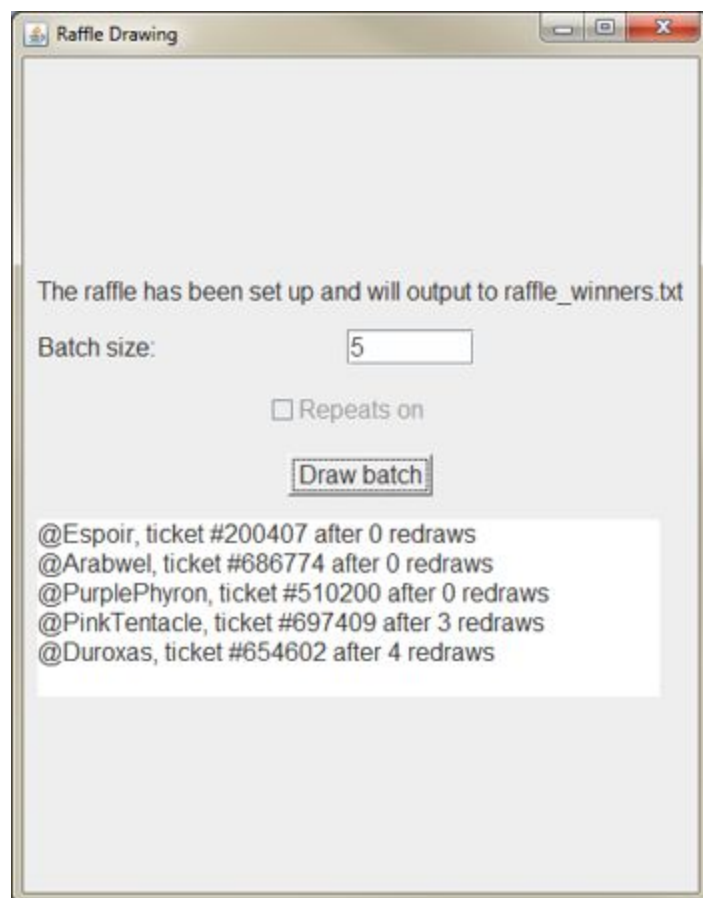
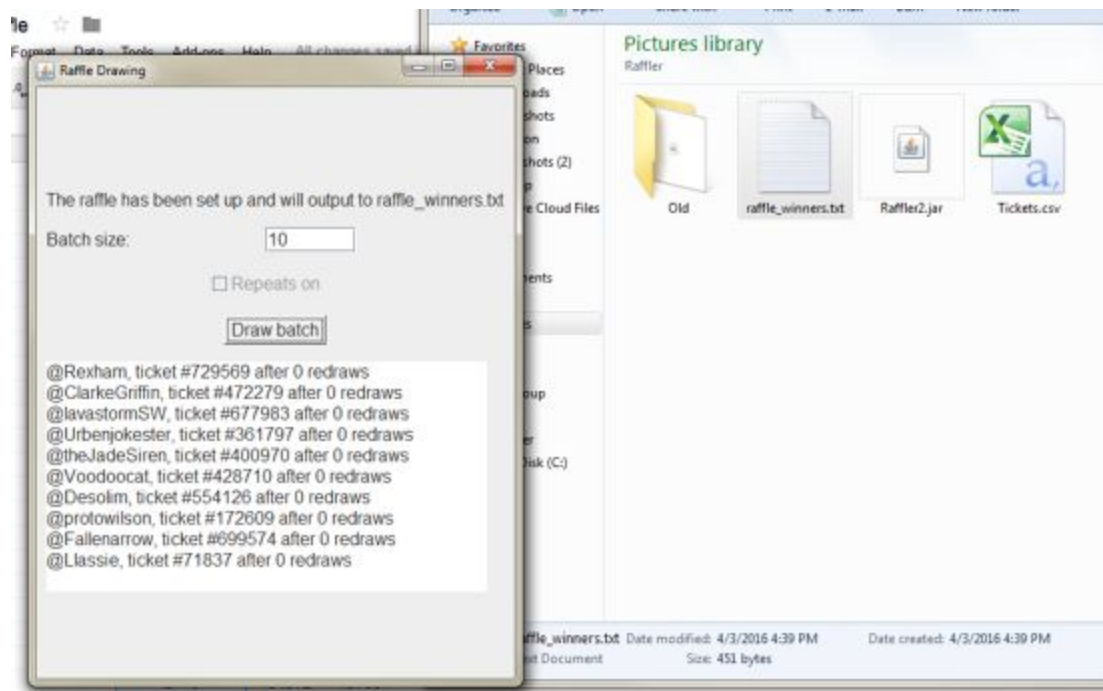
Ready to parse

Tic. by User Tickets Raffle Winners Pivot Table 4

3. When the data is all in, try hitting Ready to Parse. If something goes wrong, see below for troubleshooting or ask Gracie.

Drawing the Winners

1. When the next screen comes up, it means the data has been completely sorted out without problems. Batches of winners can be drawn until there are no more winners left in the entire list.
2. If you want to allow repeat winners, before hitting Draw Batch even once, you must check the Repeats On box. Either the entire raffle allows repeats or none of it does. Trying to define a gray area in between is too complicated.
3. The Batch size option can be changed in between drawings if desired. Drawing an initial batch of 20 should give you the same results as pulling two batches of 10 in a row.



4. The output text will be shown to you if you'd like to copy and paste it somewhere, but it also writes to the file `raffle_winners.txt` in case you click through too fast. The program will create `raffle_winners.txt` if it does not already exist, and if it does already exist, it will always add the new information to the end of the already existing information. That is to say, it will never delete old results, so if you want to keep raffle winners separate, rename the file after you're done drawing. Otherwise, everything will be in the same file with no context.

5. It's up to you whether to show the raffle winners their ticket number (based completely on the order in which the program encountered the names and their bundle numbers) or the redraw information (mostly included for interest).

Troubleshooting Errors

If an error occurs during the program's execution, it will show you a (probably cryptic) error message and crash.

In order, here are some errors you might encounter that could be fixed.

Can't open the program: this might happen if your Java runtime environment on your computer is older than Java 8 (it should be Java 7 compliant, but I don't have a machine to test that on).

NumberFormatException: one of the entry boxes that expected a number couldn't process a number. Be sure there are no spaces or commas inside of your number. It should be able to handle the `#` sign and extra spaces, but try it without those if it's causing trouble. Seed and `#` of Columns on the first screen are important, and then Batch size on the second screen.

The exception might actually tell you what word caused the error, which would look like "For string input: "aaaa"". If it looks like a word that might be in your data file, then the error probably occurred while actually parsing the data file. It could be an error with the `#` of tickets column having non-numbers in it.

FileNotFoundException: this means it couldn't find the file you typed in. Be sure that your data file is in the same directory (folder) as the program's `.jar` file, check the spelling of the filename you entered, and be sure to leave `.csv` at the end of it (and that your file is a `.csv` file).

Draw Batch produces empty box: this will happen after all possible unique winners have been drawn. If it seems to be happening way too quickly, it's possible there were silent errors with reading in the file. It's never happened to me so let me know if it does to you.

Extra Info

Seeding Best Practices

- Do *NOT* just pick a number. I cannot stress that enough. Use random.org or similar to generate a random seed.
- The seed can range from 0 to 9,223,372,036,854,775,807. So just use the max possible number in random.org.
- Save the seed number on your computer somewhere in case the raffle results need to be validated.
- I would caution against making the seed public without good cause.

About Seeding

I want to explain this concept briefly just to be really clear. Most random number generators, including the one used here, are actually pseudorandom. A computer can't actually generate true randomness. However, the pseudorandom numbers are unpredictable and evenly spread enough that for all normal applications, it's plenty random to work. No one will be able to predict the drawing, and every ticket will have an equal chance. random.org will allegedly generate truly random numbers. It's not that I doubt them, but their formula and process are a mystery to us.

"Seeding" a pseudorandom generator can be thought of as telling it what state to begin its generator in. If I seed it with "1", a specific pseudorandom sequence of numbers will come out; if I seed it with "2", a completely different sequence of numbers will come out. By using random.org to generate a truly random seed number (between 0 and the highest possible number random.org will give us so we have the biggest possible range of seeds), we get a truly random sequence of pseudorandom numbers.

If I run the program again with exactly the same raffle file, input options, and seed number, I will get the exact same sequence of winners as before - so if the raffle winners are lost or someone is questioning the validity of the sequence, it's repeatable as long as you've saved the seed somewhere. That also means a third party should be able to validate the results by using exactly the same inputs as well.

In the language this program is in (Java), if a seed is not given for its random number generator, the default behavior is to just pick a random seed based on the system clock. Seeding is going to happen anyway, so might as well take advantage of that by picking it ourselves.

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