Cashbury

Spin 2 Win :: Setup , Build, Simulate

Do not distribute.

0. Overview: Configure, Build, Simulate

The following are a high level description of the steps needed to simulate the game.

Configure the simulation

Define the number of prizes in each group (N, L, M).
Define the symbols needed to run the game.
Define the pay lines and assign a win probability to each one.
Sort the Pay lines by their probability starting with the lowest first

Build the simulation

Calculate the weightings for the virtual reel and output it.
Set the RNG range
Output the http://stackoverflow.com/questions/1194585/what-is-the-difference-between-methods-and-attributes-in-ruby reel
Generate the Pay tab for a spin credits with (M,L)
Generate Pay tab for a spin credits with (M,L, M)

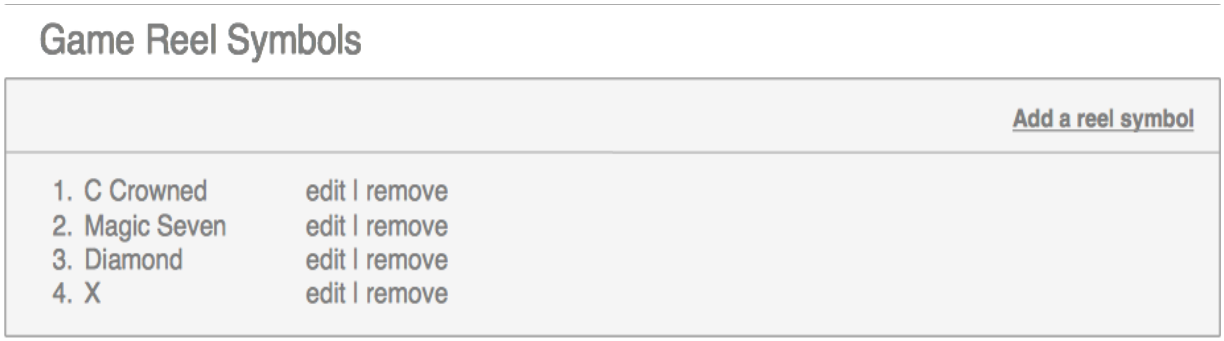
Simulate

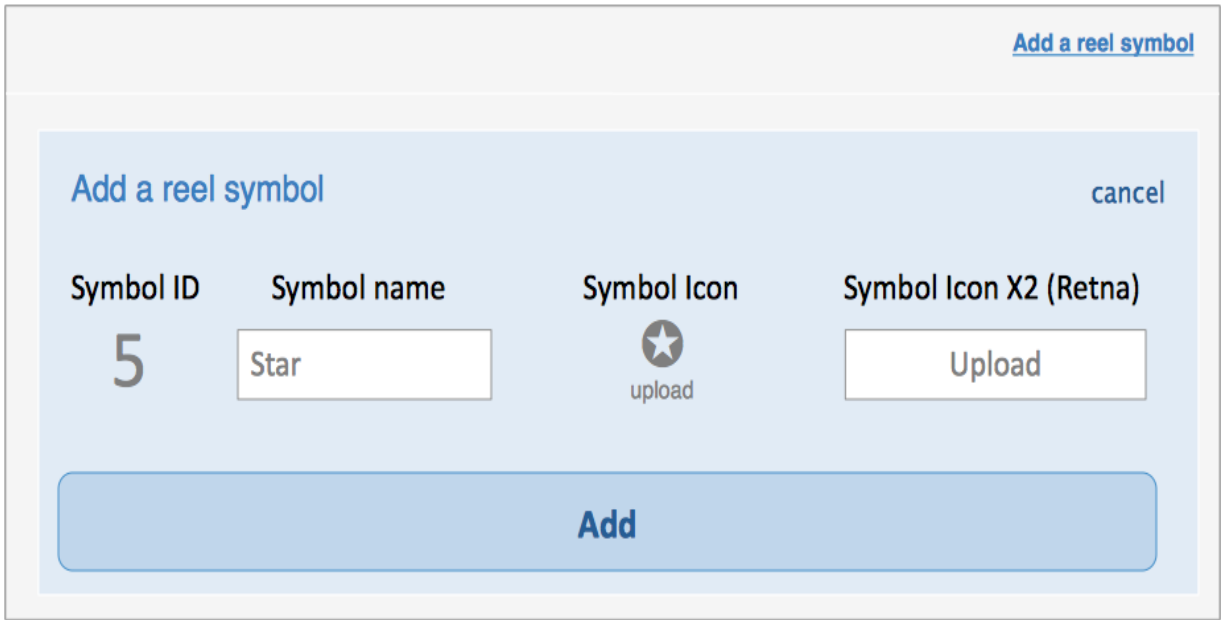
Set the number of spins or game cycles
Generate the spin credits
Output the simulation result feed and analysis (tbd)

1. Configure the game ::

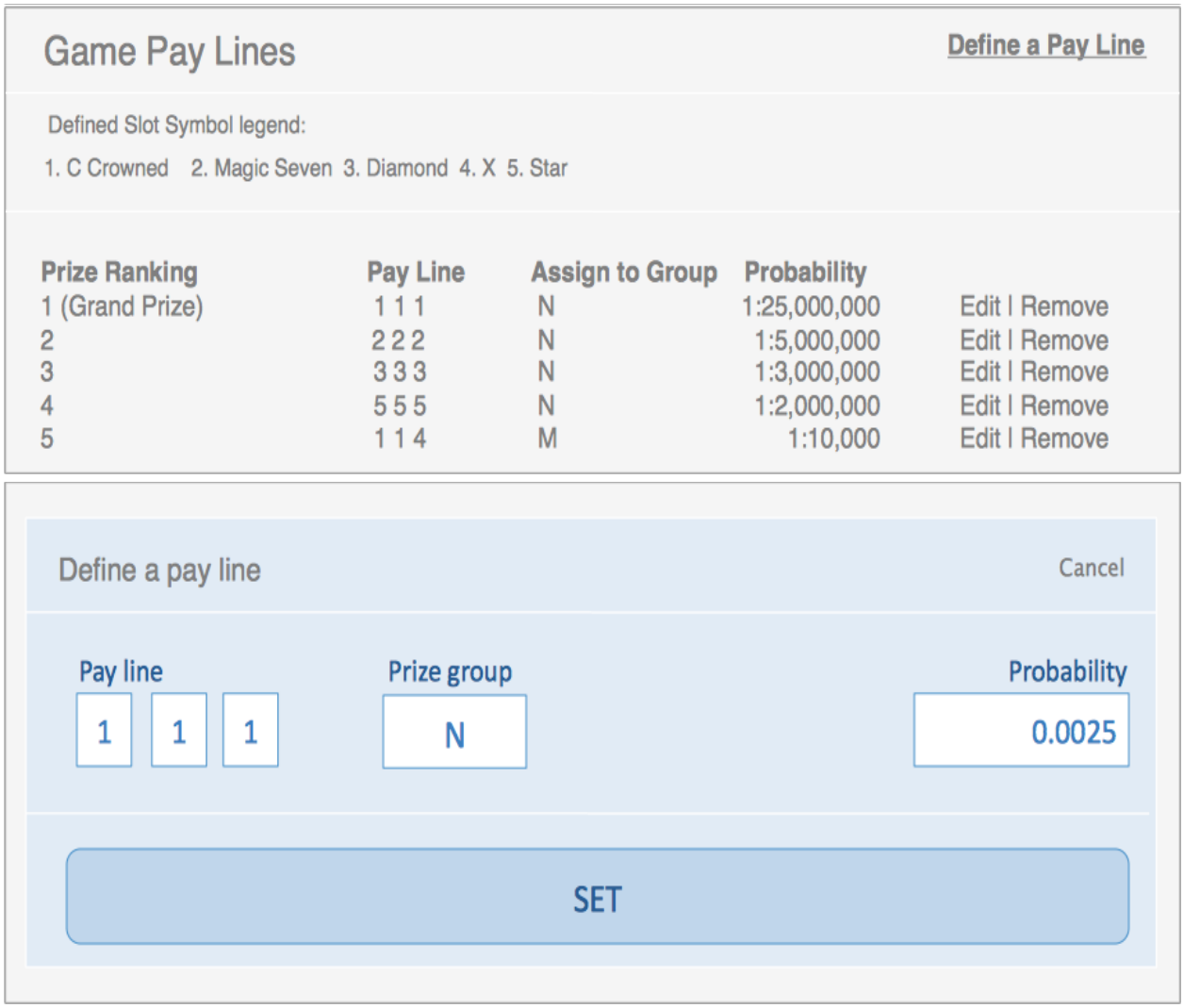
0) Define the max number of prizes for each prize category (N, L, M)

1) Set the symbols needed to run the game: Ex: 1) C crowned 2) magic 7 3) Bar 4) Diamond 5) space etc

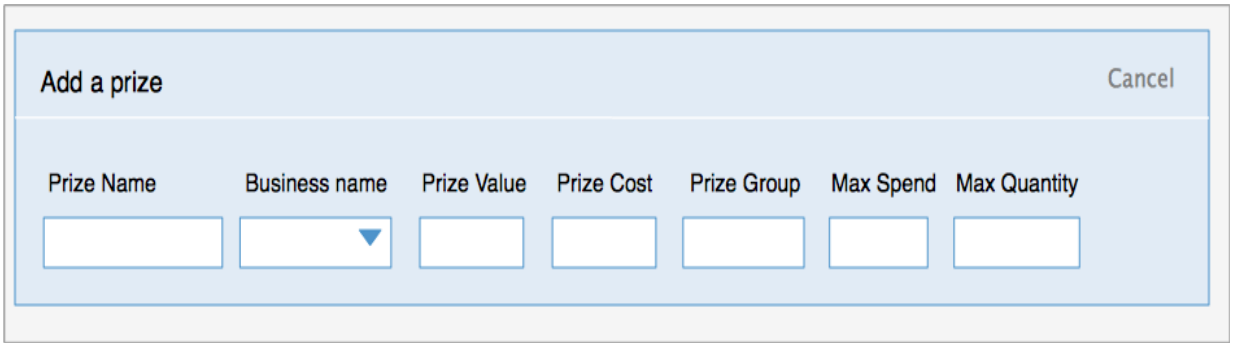




2) Define the pay lines a.k.a winning combinations and assign their ranking ex: Grand Prize, Second



3) Define the prizes



4) Assign or Auto-assign the prize to an available payline in the group

Build the game ::

Calculate the weightings for the virtual reel and output it.
Set the range to the RNG
Output the reel interface reel
Generate the Pay tab for a spin credits with (M,L)
Generate Pay tab for a spin credits with (M,L, M)

Simulate the game ::

Set the number of spins or game cycles
Generate the spin credit
Run the simulation, play the credits, output it, log it's outcome
Output the play feed including the play outcome, prize board, play outcome, prize won if any,
Conduct a variance analysis [95%, 99%] confidence level on the game, winnings and cost ranges

From each business:
Total Cost to business
Number of prizes granted

For each prize offered from the business:
prizes won by #Customers for a total cost of $
to be continued ….

Lexicon

Ssi: Symbol ex: S3: Diamond
si: symbol number ex: 1, 2,3,4,5
sn: number of symbols configured ex: 9

Zzi (Bbi, name, value, cost, p) :: A prize offered by Business (Bbi)

zi: prize number or identifier
zn: total number of prizes
Bbi: Business. ex: B3: Walt Disney
bi : Business identifier. ex: 3
name: Price Name : ex: Ipad
value: Prize Value: ex: $399.00
cost: Price Cost: ex. $349.00
p: probability of winning the prize

Ri: Reel number
N: the number of stops on the actual reel ex: 22
K: is the number of stops of the virtual reel ex: 64

Wn,k: a weight, a positive integer between 1 and K inclusive,

subject to the constraint that each column sums to K.

n: 1 - N
k: 1 - K

Derived variable and parameters when building and simulation the game:
L: A single row payline from the pay table
C(L): The number of combinations leading to the display of L
T: The total number of ways that a prize can be won = sigma [C(L)) summed over all L]
Pr(L): The probability of landing on payline L = C(L)/T
Odds(L): The odds of landing on payline L = Pr(L)/(1-Pr(L))