



Creating a Slot Server

Background

At Snowborn Games, we create Slot Games for the iGaming (Casino) industry. This assignment will give you the possibility to show your skill level by creating a simplified version of what we actually do for every game; creating a slot server.

How to get started

In the package of this document you will find an Excel file. This Excel file holds the information you need to create the slot server. This document help you interpret the information from the Excel file.

Expectations

- We expect a slot server with 5 reels and 3 displayed rows of symbols that can be run.
- The input to the slot server will be a Bet (no currencies needed) and the possibility to Spin the reels.
- The result from the slot server needs to be presented somehow.
- The presentation and input to the server can either be in the form of an API request/response, a Java Script client or a Windows application.
 - On our client side, we are using browser based clients made in Java Script. However, this assignment is foremost focusing on the Server side, so don't go overboard on the client and keep it simple if you are out of time and energy.
- The presentation after a Spin should show the displayed, resulting reel symbols and the total win based on the requested Bet.

After a quick review, we will go through the resulting slot server together with you. What is the most interesting to us is your reasoning, such as the short-cuts you decided to take in order to get done, the assumptions you made if you got stuck on lacking or unclear information and how you looked at the problem from a logical perspective.

The Slot Server



What is a slot game?

A slot game is traditional casino game. The slot game is holding a number of symbols on a couple of reels. When you activate the slot game, the reels spin and eventually land on random positions. A few of the symbols of each reel are shown to the player after the reels have stop.

Displayed Reels

To simplify things in this document, the positions of symbols shown to the player from the reels are numbered. Each displayed reel is considered to be an array with the first displayed position identified as 0.

The Slot Server in this assignment has 3 reels and 3 displayed rows of symbols.

Actual Reels

There are of course more symbols on the reels than what happens to be displayed to the users. Thee reels themselves are also considered arrays of symbols, with the first position identified as 0.

Paylines / Winlines

The slot game has one or more Paylines. A Payline is a combination of positions on the displayed reels that constitutes a win. For example, on a 3 reels and 3 rows slot game, you could say that the Payline with positions [1, 1, 1] will mean that adjacent equal symbols along the middle of the displayed reels.

The Paylines are read from left to right. This means that, given symbols “banana” and “orange”, a Payline of [“banana”, “banana”, “orange”] would yield a win of 2 bananas. However, [“orange”, “banana”, “banana”], would not yield a win

Paytable

The Paytable describes how much the player will win given the number of symbols adjacent to each other on a Payline.

The Excel file

The Excel file hold the following sheets:

- Notes – Notes helping you on the way, describing the key features of this slot server.
- Symbols – The Symbol Id:s and names.
- Paytable – The Win x Bet given a certain number of symbols on a Payline.
- Paylines – The positions of the Paylines (there is only one in this example)
- Reels – The Reelset holding all possible combinations of symbols. Each position in the reelset described here contains a symbol Id.

So what do I do?

1. Read through this document, look at the Excel
2. Make a plan on how to hold the data in the Excel
3. Find a way to keep track of what is displayed after a reel has stopped spinning.
4. Find a way to identify the adjacent symbols on the Payline
5. Calculate the win
6. Now find a way to accept data for the Bet and the Spin event
7. Finally work out a way how to display your data.

Good luck!

