

“The Slot Machine”

- A Unity 2D Project developed using Unity 2020.1.0f1

Data Sources

System Setup

- One main Controller script called “GameControl”. It handles all computations when the spin button is pressed so this script is attached to the spin button. It provides the other components necessary details to display in the View (UI) such as the winnings display and the player money.
- Model of reels to represent each column of reel
- Two additional handler scripts for increasing and decreasing number of bets
- Multiple game objects for UI such as:
 1. Minus button for decrementing number of bets
 2. Plus button for incrementing number of bets
 3. Bets Text to display current number of bets
 4. Spin button to handle starting and stopping the spin of the reels.
 5. The Player money at the top to display current balance.
 6. The winnable Text at the bottom of the screen to display current winnings amount.
 7. The reels container and the reels themselves, the containers are the mask for the reels so that they can be hidden behind the slot machine UI when the spinning animation is simulated.

Scalability

1. More reels can be added or reduced in the editor. To modify, simply access the script component of Spin button in editor and edit the size for the total number of reels and add each individual reel to the slots in the array.
2. More symbols can be added to each reel, simply edit and add the new symbol at the end of the list in the image collection of symbols. As the symbols are scaled, new payout amounts are automatically computed based on current size of the reel.
3. Similarly, the entire set of symbols can be replaced and the game will still be able to handle it. All the symbols simply need to be arranged in a single image from top to bottom with 2.2 spacing in between each symbol.

Future Improvements

1. Being able to select how many payout lines and which payout line to bet for would be nice.
2. UI improvements such as improvement in the scrolling animation and making interactive button presses (eg. Button sinking when pressed).
3. Settings for configuring player balance and changing background stuff like music.