3D Modular Lucky Wheel (Physics Based)

Overview

Create customizable, physics driven 3D lucky wheels with this fully modular Lucky Wheel Unity Asset. This asset Supports up to 52 rewards, interactive UI, and extensive customization. Fun and easy to configure!

Key Features:

Fully Modular & Configurable Wheel:

Mix and match detailed 3D models for wheel variants, reward sections, pins, and stands. Seamlessly create wheels tailored to your vision.

Customizable Reward Sections:
Choose from 4 to 52 reward sections (in steps of 2).
Personalize sections with up to 4 unique colors for vibrant designs.

Smooth 3D Physics Based Animation:
Experience realistic physics driven spinning mechanics with adjustable spin force, angular drag and more.

Interactive UI Integration:
Wheel Configurator UI: Effortlessly design and configure your wheel's look and behavior.
Customizable Rewards: Assign reward types, amounts, and icons to each section for a tailored experience.

Centralized Wheel Configurator:
Finetune parameters like spin force, angular drag, max spin time and spin cooldown to achieve the perfect feel.

Extensive Online Documentation & Intuitive Integration:
Integrate this asset into your Unity project with user friendly scripts and detailed documentation and make the most of this powerful tool. No need to be a coding expert - this asset is designed for easy implementation.

Asset setup

Built-in & URP

This asset was developed in the built-in render pipeline so it should work out of the box if you are using the same pipeline.

For URP you just need to convert the built-in materials to URP materials using the render pipeline specific converter.

HDRP

Since the Skybox handling in HDRP works a little differently than in the other pipelines, there is a small HDRP unity package included in this asset.
Simply import the whole asset into HDRP, convert the materials to HDRP materials and then double click on the included unitypackage:

This will update your demo scene and the Scene Switcher script to handle the skybox switching properly.
And that's it, you are ready to go!

Configuring the Wheel

Demo Scene

There is one Wheel Creator scene included in this asset which lets you configure the wheel design, themes and components, simply by pressing some buttons to change the specific variants. Just press the Left/Right buttons on the top right of the screen to change the wheel config

When you start the demo scene you can freely play around with the configurations and also spin the wheel. You can also move your camera to explore the wheel from every possible direction

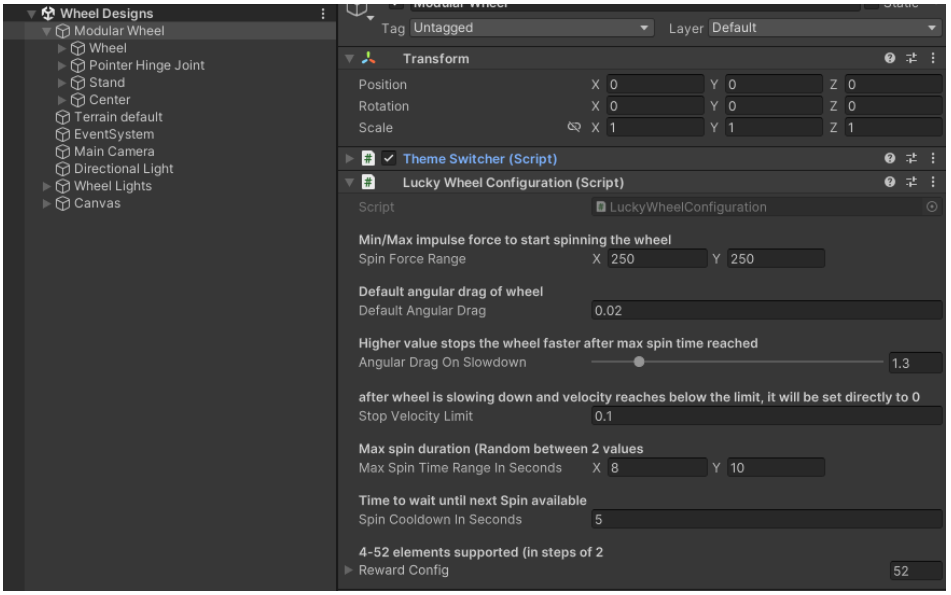
Simply move around by following controls:

- W: move forward
- A: move left
- S: move back
- D: move right
- Q: move down
- E: move up
- Right click mouse and hold: rotate camera

Centralized Configurator

Lucky Wheel Configuration

You can find the centralized wheel configurator attached to the Modular Wheel GameObject. In fact everything you need to configure is attached to this GameObject.

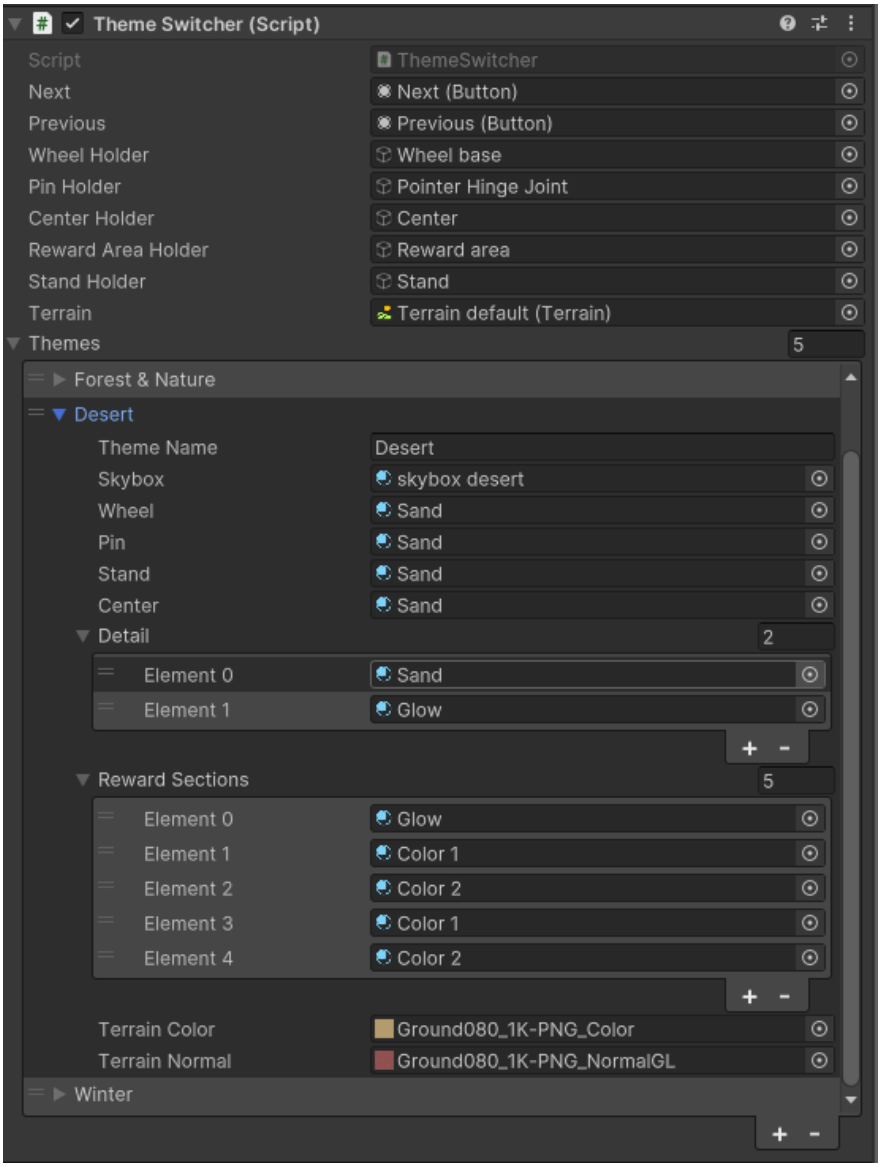


With the Lucky Wheel Configuration script you can define the following wheel behavior:

Spin Force	Define a range for the spin force. Spin force is applied to the Rigidbody of the wheel and defines how strongly you rotate the wheel.
Default Angular Drag	This value describes the standard angular drag of the wheel. This can be also considered as wheel friction. The higher the value, the more “friction” the wheel has and therefore will faster come to a stop
Angular Drag On Slowdown	After the configured max spin time (if the wheel hasn't stopped yet due to the default angular drag and spin force) the angular drag will increase so the wheel will come to a halt soon.
Stop Velocity Limit	Define the min velocity of the wheel that is considered as “still spinning”. If after you spin the wheel, the velocity gets below the defined limit, the velocity will be set to zero immediately and the reward claim will be triggered.
Max Spin Time	After the time is reached, the angular drag on slowdown will overwrite the default angular drag, so the wheel will come to a stop faster.
Spin Cooldown	Defines a cooldown that the user needs to wait after spinning the wheel until he can spin it again.
Reward Config	This asset supports from 4 up to 42 reward sections (in steps of 2). You can define the rewardType and the rewardAmount per entry. The demo scene has 42 rewards configured. If you create your own wheel with your own rewards, please make sure that there are as many rewards configured as there are rewardSections on the wheel, otherwise you will get an error on wheel initialization.

Theme Switcher

With the Theme Switcher you can add new themes to your wheel. You can change the skybox, the terrain and all the wheel materials.



The first part of the theme switcher is just assigning the proper wheel object holders so that changing the materials works as expected. The only thing you need to worry about is the “Themes” section. Here you can define the different materials for each component, change the terrain color and normal map and even change the skybox.

The “Detail” Models support up to 2 Materials. The first one is the base material and the second one is for the glow.
For the reward section the first material is always for the reward separators. Those are the small blue glowing lines between each reward section, as it can be seen in the following example:

The next 4 materials are for the color of the reward sections. Even though not all rewardAreas support 4 different colors, I would suggest that you always add 4 colors if you are switching between the number of rewards, since the rewards with 4 colors wont work properly if you only assign 2 color materials.

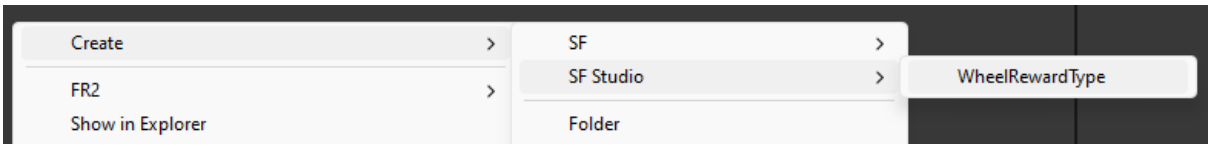
Here are the specifications for the amount of different color support:

Color amount	Reward areas
4 Colors	All areas where the reward amount divided by 4 adds up without a reminder: The areas are: 4,8,12,16,20,24,28,32,36,40,44,48,52
2 Colors	All other areas: 6,10,14,18,22,26,30,34,38,42,46,50

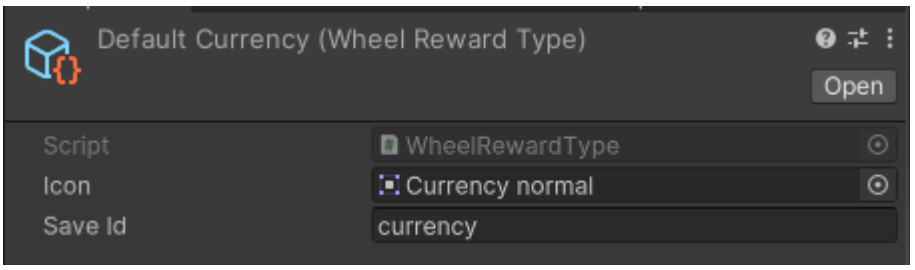
Adding new RewardTypes

This asset comes with a default and premium currency reward type with the option to add an arbitrary amount of new reward types to the wheel.

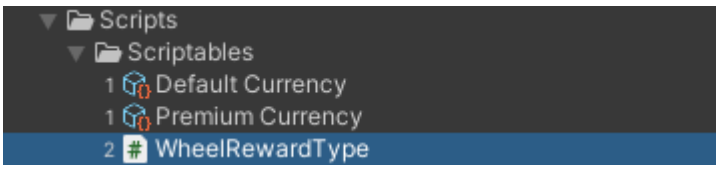
The reward types are built with scriptable objects. So If you want to create your own reward type, you can do it pretty easy by right clicking somewhere in your project folder and selecting Create → SF Studio → WheelRewardType



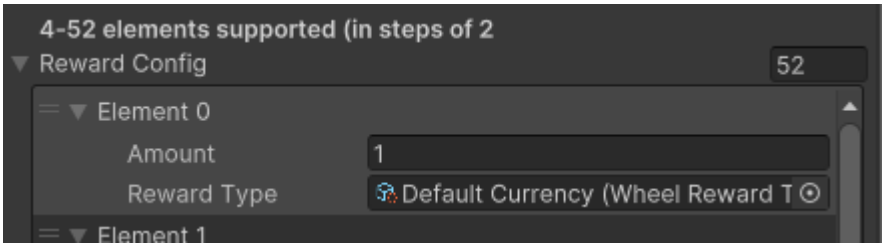
Rename the created scriptable to fit your rewardType name and assign an icon and a saveId to your type:



The saveId is used as an identifier to save the given reward amount to the correct reward, via *PlayerPrefs*. If you want to *change how and where the rewards are saved*, please adapt the *AddReward method in the WheelRewardType* scriptable.
This is located under Scripts → Scriptables:



Then simply go to your Modular Wheel in the demo scene and add(or change) a reward type in the Reward Config list.



3D Model Variants

Model	Variants	Notes
Stand	4	
Wheel	3	
Pin	7	
Details	3	
Center	3	
#Rewards	25	Sections: 4 up to 52 in steps of 2 Supports up to 4 different color materials for the sections
Background	1	One hexagon style background
Themes	5	• Default (Scifi based) • Rocky Landscape • Forest & Nature • Desert • Winder

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I hope you enjoyed this asset and had a smooth integration into your project!

If you liked this asset I would really appreciate it if you could take a few minutes of your time and help me out by leaving a review on the Unity asset store for this package!

Also if you have any questions/complaints/suggestions please contact me under:
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