Find Differences Complete Game Template

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# Overview

Find Differences Complete Game Template is a game template that allows you to create "find the differences" game.

The template includes 2 scenes - a main menu scene, and a game scene. The main menu displays the list of available images, with images unlocked as the player solve previous images. The game scene contains the main gameplay.

## Features:

* Fully commented C# code.
* Perfect for creating games for children.
* Contains a fully working example, with multiple random elements!
* Contains randomization engine, that ensure a unique level every game!
* Easily customizable with to support new types of differences.
* Works on all platforms, PC, Mac, iOS, Android, etc.

# How to use the asset

## Controlling the collection of images

The main canvas of the Game scene contains the list of images available to the user. Each image has the following properties:

* A name
* A prefab that represents the image itself (as described below)
* A prefab for the “discovered” state
* The number of changes to apply randomly when displaying the image
* The list of images that will be unlocked when this image is solved.

### How to add a new image

Each image consists of a prefab that is composed of a main component that serves as a container for the various image parts. Each part has the Changeable script, which defines the list of changes that can be applies to the part.

For example, looking at the “Bunny” template, you can see that the image was separated to multiple parts that can be modified – Left and Right Eyes, Left and Right Ears, Nose and Tail. The Eyes parts have the “Hide” change type enabled. On the other hand, the Ears parts have the “Hide” and “Colorize” change types enabled.

### How to implement a “discovered” halo

There are 2 ways to implement a “discovered” halo for show to the player that he discovered a change in the images:

1. Using the image prefab (as can be seen in the “Cow” prefab) – placing a disabled object with the “Halo” script under the image part. When the change is discovered by the player, the halo object will be activated.
2. Using the image information – place a prefab in the image information, that will be automatically added to all changeable parts.

### Playing a scene

When an image is selected, the Game scene is loaded. The Randomizer script will apply a number of changes to the selected image (based on the image's supported number of changes), based on the following algorithm:

1. Select a random part
2. Apply a random change (based on part's supported changes)
3. Apply changes to sub-parts (as needed)
4. Repeat until enough changes are applied

Currently, the following changes are supported:

* Hide: Completely hides the part
* Flip Vertical: Flips the part vertically
* Flip Horizontal: Flips the part horizontally
* Colorize: Changes the color of the part to one of the predefined colors
* Move: Changes the position of the part to one of the predefined positions