

OFFLINE LEADERBOARDS

BY JEFF W. MURRAY (PSYCHICPARROT)

WELCOME

Thank you for purchasing! I hope this is useful to you and your games.

The Offline Leaderboard pack includes everything you need to add local (as in, offline) high scores to your games. Also included is an example project to help get you started. Feel free to copy and paste anything you want out of it and use it in your own games.

INCLUDED IN THE ZIP FILE:

1. This document, in .pdf and .rtf formats.
2. An example unity project file, containing the high score scripts.
3. Good karma.

THE EXAMPLE

OK, so I wanted to give you something that would make it as easy as possible to understand how this leaderboard code might be used. There was no need for a full game example, but I wanted to (at the very least) have an overall structure in place. That is; a menu with a link to the leaderboard screen, a show leaderboard screen and a really simple example of how a game might 'talk' to the leaderboard. I hope I managed to make something that supports this document in outlining how it works.

HOW TO USE THE HIGH SCORE SCRIPTS

Everything you need, to add high scores into your own game, is inside the *Leaderboard.cs* script. This contains all of the functions you need to create, update, save and load high scores. It also contains a few functions to help you get to the information you need, like the 'GetHighscoreRank' and 'DidGetHighScore' functions.

Leaderboard.cs doesn't do anything without you asking it to. It's just a collection of functions you'll need. In the example, it's the *StandardHighScores.cs* script that deals with managing everything around the Leaderboard script.

The easiest way to use this script is to add it as a Component to an empty GameObject in your scene. Create a reference to the Leaderboard Component in your own script and access it via the reference. That's exactly how I did it in *StandardHighScores.cs* when I made a variable like this:

```
// reference to our high score controller gameObject  
  
public Leaderboard _scoreManager;
```

I would suggest taking a look at the example project to see how these work in action before attacking a project.

LEADERBOARD.CS CLASS FUNCTIONS

Here is a list of the functions available within that *Leaderboard.cs* script:

SETUPSCORES()

Before we do anything to the leaderboard, we need to make sure that everything is set up. By set up, I mean that we need to either create a new leaderboard or load leaderboard data in from disk. The `SetUpScores()` function takes care of this, checking to see if the leaderboard exists before we start. Call this function before you do anything else.

If you wanted to have more than one leaderboard, we got it covered. Simply supply the `SetUpScores` function with an index number, for each score board. There is no hard limit to how many score boards the lib supports, since it's just grabbing the data from different `PlayerPrefs` values.

Whenever you call `SetUpScores` with an index number, you are switching leaderboards to whichever one you index. Every function you call after that will act against *that* leaderboard and not any other. Remember that whenever you want to 'switch' between leaderboards, you will need to call '`SetUpScores (<which leaderboard index num>)`'

RESETALLSCORES()

Resets all scores to default (rebuilds the leaderboard as if it were a new one).

GETNAMEAT(RANK)

This function returns the player name at the rank you pass in, as a string.

GETSCOREAT(RANK)

This function returns the score at the rank you pass in, as a string.

DIDGETHIGHSCORE(SCORE)

This function will return `TRUE` if the player achieved a high score suitable of making it on to the leaderboard, or `FALSE` when the score was not high enough. Use this as a 'quick check' and pass in the final score as an integer.

GETHIGHSCORERANK

This function returns an integer containing the rank that the player has achieved on the leaderboard. Pass in the final score as an integer to this function to find out where the player ranks.

SUBMITLOCALSCORE(NAME, SCORE)

Use this function to commit a score to the leaderboard. If the player does not place (if the score is too low to rank on the board) this function will work just fine, but do nothing with the score entry. Pass in the player name as a string and the score as an integer. The `SubmitLocalScore` function will take care of the rest!

USING THE EXAMPLE LEADERBOARD SCENE IN YOUR OWN GAME

Possibly the easiest way to use this leaderboard pack is to use the included scene and customize it to how you would like it. Integration is a case of writing the final score to a PlayerPrefs and loading the leaderboard scene. Here are some step by step instructions to help make it happen:

1. Add everything into your project.
2. When your game ends, save out the final score to the finalScore PlayerPrefs like this:

```
PlayerPrefs.SetInt("finalScore", finalScore);
```

(where finalScore is replaced with whatever variable your game is using for score)

3. Add code to your game to jump to the ShowLeaderboard scene whenever you want to display the leaderboard (such as from your main menu or after the game over screen). You can load the scene with the scene manager like this:

```
SceneManager.LoadScene("ShowLeaderboard");
```

Note that if you get errors about the SceneManager you may need to add a using statement to the first line of your script, to tell Unity to access the SceneManager library:

```
using UnityEngine.SceneManagement;
```

(You can see this scene loading in action in the example project script named MainMenuController.cs)

4. Open the script StandardHighScores.cs and look at the top of the script for the two scene loading functions, GotoMainMenu() and PlayAgain(). You'll need to change the scene names to your own for the buttons to go to different scenes than those in the examples.

For example, say your main game scene was called SpaceFace. When the user clicks the Play Again button on the leaderboard screen, you want the game to jump to the SpaceFace scene. To do that, first you would find PlayAgain() and find this line:

```
SceneManager.LoadScene("Game");
```

Then change it to

```
SceneManager.LoadScene("SpaceFace");
```

IMPORTANT NOTE ABOUT SCENES:

Go to the menu **File > Build Settings** and check that the scenes are all inside the **Scenes In Build** section.

You need to make sure that all of the scenes are added to Build Settings, otherwise the game won't be able to find them.

5. Sit back and enjoy the awesome, *you're done!*

FINAL NOTE

I really hope that this pack helps you out in your project and that you have fun with it. I've tried to keep it simple so that it's easy to integrate. That said, if there's any trouble using it you can drop me an email talk@psychicparrot.com and I'll try to help out.

Have fun making games!

Jeff.

EMAIL: TALK@PSYCHICPARROT.COM

TWITTER: [@PSYCHICPARROT](https://twitter.com/PSYCHICPARROT)
HTTP://WWW.PSYCHICPARROT.COM