



Coin System - User Guide (2D SpaceTilemap)



Overview

The **Coin System** included in the **2D SpaceTilemap** package is a fully functional, customizable system designed for 2D collectible gameplay. It allows you to:

- Place floating, animated coins in your scenes
- Collect coins with your player
- Play sound and visual effects upon collection
- Save and load the coin count using PlayerPrefs
- Display the coin count on screen in real-time

Everything is modular and easy to personalize.



What's Included

Prefabs:

- **CoinManager:** Contains all logic to manage coins and display them.
 - Has the Coin and CoinDisplay scripts already attached.
 - Includes child objects:
 - Bar Coin: Optional UI bar
 - Coin Text: A TextMeshProUGUI element for showing the coin count
 - **Coin:** A collectible coin with visual float animation and a trigger collider.
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How to Set It Up in Your Scene

1. Drag the **CoinManager** prefab into your scene.
 2. Place **Coin** prefabs wherever you want in the level.
 3. Make sure the **player GameObject is tagged as "Player"** (important!).
 4. Press Play and collect coins!
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Customization Options

You can fully personalize how coins behave and look:



In the **CollectedCoin** script (on the **Coin** prefab):

- **coinsToGive**: Number of coins this collectible gives when picked up.
- **coinSound**: AudioClip to play when the coin is collected.
- **CoinParticule**: ParticleSystem that plays on collection.
- **moveSpeed**: Speed of the floating movement (sine wave).
- **Distance**: Height range of the floating effect.

In the Coin script (on the CoinManager):

- **playerCoins**: Stores the current number of coins.
- **Data Persistence**: Coin count is automatically saved using PlayerPrefs and reloaded when the game starts.
- **Events**: OnCoinsChanged can be used to trigger other logic (e.g., unlocks, animations, etc.).

In the CoinDisplay script (on the CoinManager):

- Updates the TextMeshPro UI element (Coin Texte) automatically based on the current coin count.
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Coin Collection Behavior

When the player touches a coin:

- The sprite and collider are immediately **disabled**, making it invisible and untriggerable.
 - A **particle effect** plays at the coin's position.
 - A **sound** is played through the coin's AudioSource.
 - The coin is **destroyed after a 1-second delay**, allowing effects to finish.
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Developer Tips

- Want different coins to give different values? Just duplicate the prefab and change coinsToGive.
- If your coin count isn't updating, make sure:
 - Your **player GameObject is tagged as "Player"**
 - The **TextMeshPro UI reference** in CoinDisplay is properly assigned