Unity Game Engine

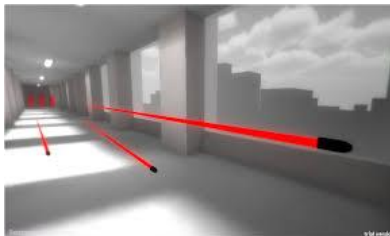Introduction to Unity – Trail Renderer

https://docs.unity3d.com/Manual/class-TrailRenderer.html
https://www.youtube.com/watch?v=UDb6KtT7I_E

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Trail Renderer

- The **Trail Renderer** is used to make trails behind GameObjects in the Scene as they move.

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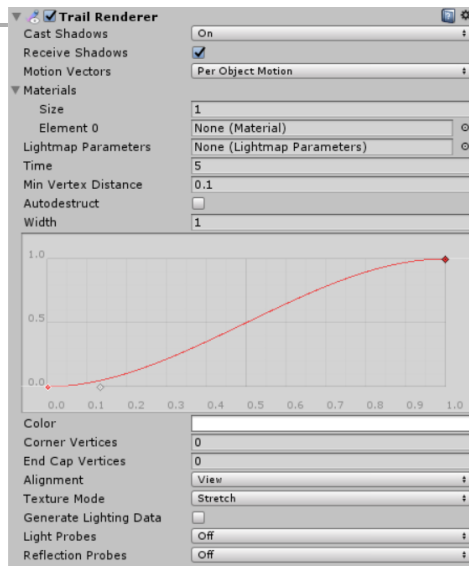
Trail Rendering Example

- Halo 2 (AI Battle - Elites vs Enforcer).
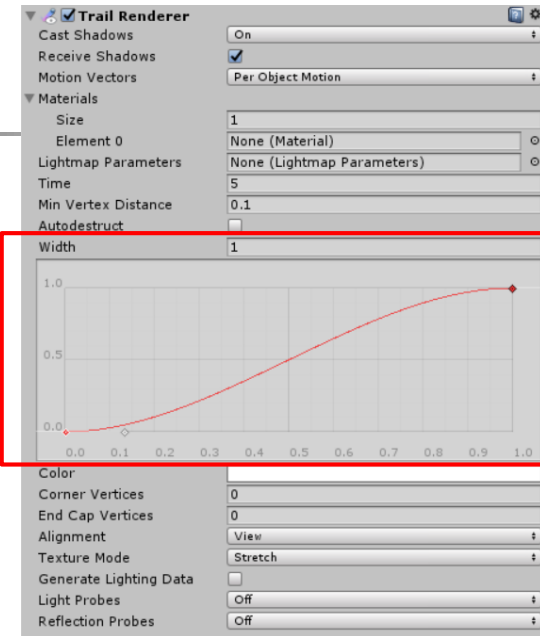- See a video clip at https://www.youtube.com/watch?v=m-nzh7WYYxI.

Trail Renderer

- Select an object (e.g. bullet prefab)
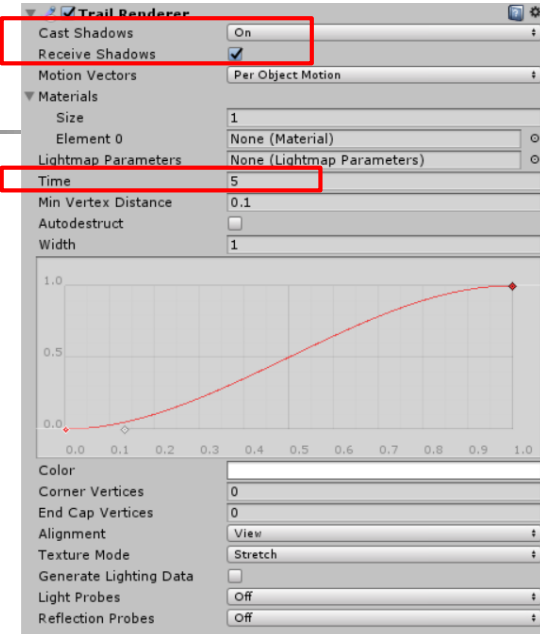- Add "Trail Renderer" component via **Add Component** > **Effects** > **Trail Renderer**

- **Width** : match with your bullet size
- Width Graph:
  - Click right button and add key to manipulate the curve for width of the trail head and tail.
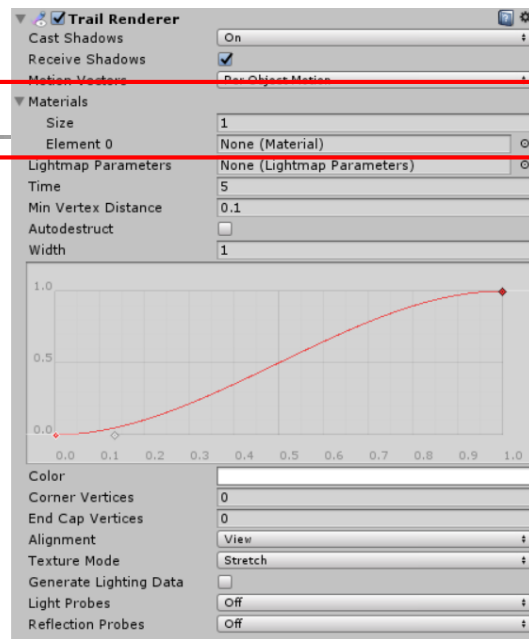
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- **Cast Shadows**: OFF

- **Receive Shadows** : Uncheck

- **Time** (in seconds): about 0.1~0.5 seconds for a bullet
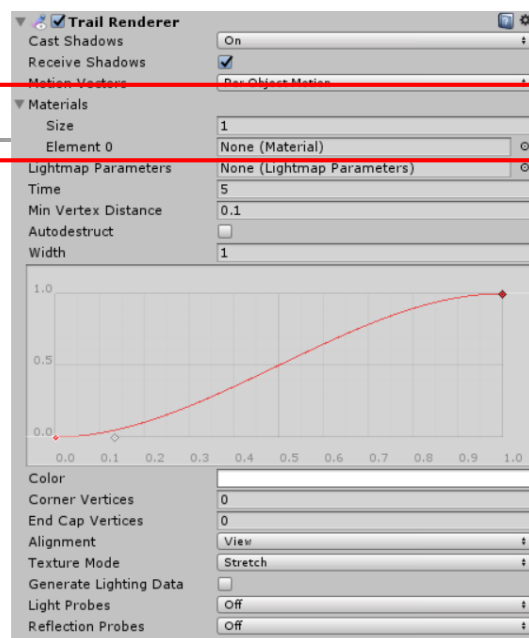
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- A Trail Renderer component should use a **Material** that has a **Particle Shader.**
- Create a new material with a Particle Shader (e.g Particles/Additive) and assign it to Element 0 of the Trail Renderer Materials.

- The Texture used for the Material should be of square dimensions (for example 256x256, or 512x512). The trail is rendered once for each Material present in the array.
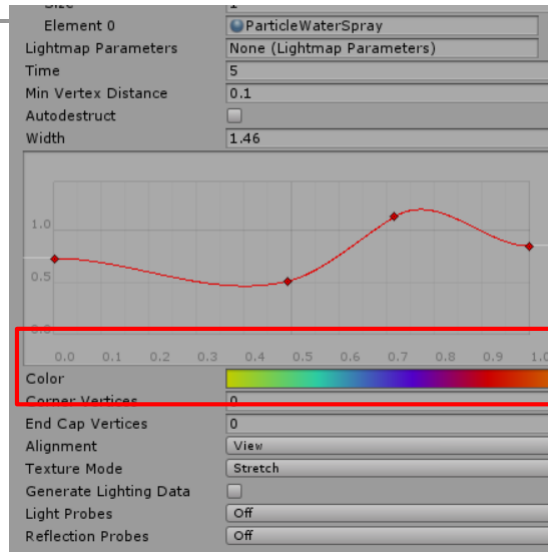
Trail Renderer Setup Example

- This Trail Renderer component has a set up to create a multicoloured trail that gets thinner and then much wider.

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Trail Renderer Setup Example

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Additional Resource

- https://www.youtube.com/watch?v=UDb6KtT7I_E
- Download the Starter Project Package and modify the bullet prefab to have a trail renderer component.

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