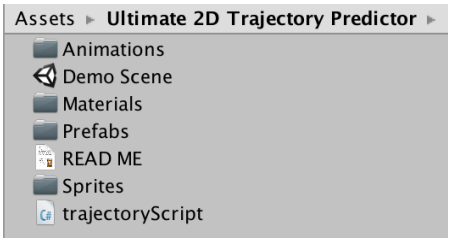
Documentation: Ultimate 2D Trajectory Predictor

[Tutorial](#) [Support Email](#)

What's included:



Animations:
Contains 18 animations for the trajectory line. Only for visually appealing purposes. Also contains 2 animations for the Help Gesture which are required for the Help Gesture to function properly.

Demo Scene:
It is recommended that everyone checks out the Demo Scene and follows the tutorial for a complete insight of what the *Ultimate 2D Trajectory Predictor* offers.

Materials:
Simply contains the Demo Scene's materials.

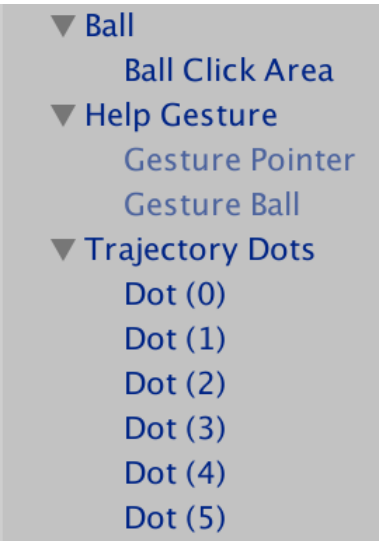
Prefabs:
Contains 3 prefabs: The ball from the Demo Scene with the script attached, Help Gesture, and Trajectory Dots.

READ ME:
Extra information.

Sprites:
Contains sprites for the Demo Scene and a folder named "Dots" containing over 50 sprites for you to customize your Trajectory Display.

trajectoryScript:
Must be attached to the Ball.

Hierarchy:

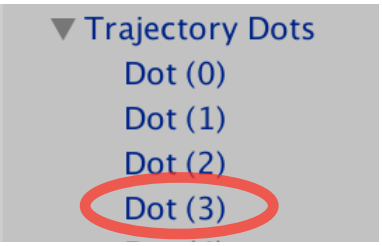


The hierarchy must contain the prefabs for all components of the *Ultimate 2D Trajectory Predictor* to function. None of the names of these gameobjects should be changed (including the rest of Trajectory Dots' children).

Ball Click Area:
This is the area the user has to start their drag gesture in in order to initiate a shot. The area can be customized by changing the circle collider attached to the gameobject's radius.

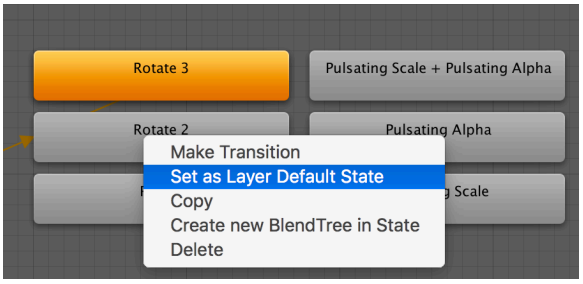
Customization:

How to change individual points:



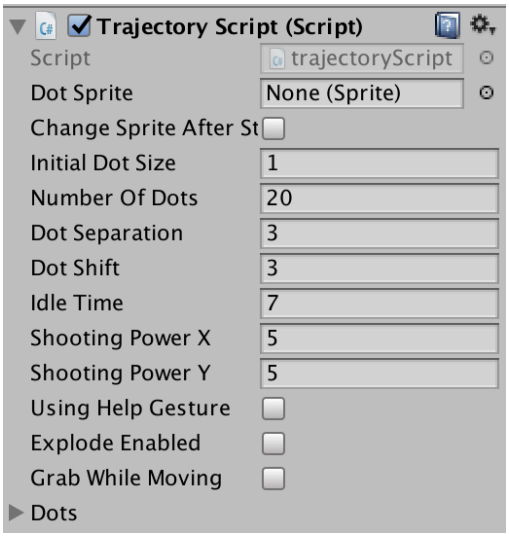
You can change individual point's components by selecting the gameobject from the hierarchy and changing the sprite, scale, rotation, color, etc.

How to change the trajectory's animation:



You can change the animation by going to the Trajectory animation controller which is attached to the Trajectory Dots gameobject. You can find the Trajectory animation controller in the Animation's folder under Trajectory. From here, you can right click on whichever animation you want and select the highlighted option.

Script:



From the Trajectory Script which is accessible through the Ball gameobject, you can further customize the trajectory.

Dot Sprite:
When empty, it does nothing. When a sprite is applied to it, it will change the sprite of all the Dot gameobjects to the sprite it has attached to it.

Change Sprite After Start:
If you want to change the sprite of the Dots after the scene starts, you will have to select this option. It is less efficient. Whenever you change the sprite attached to Dot Sprite, all the Dots will immediately change their sprite also.

Initial Dot Size:
This is the X and Y scale applied to the Trajectory Dots gameobject. If you want to change the scale of the Trajectory Dots gameobject during a scene, change the scale of the Trajectory Dots gameobject directly because changing the Initial Dot Size won't do anything since the scene already started.

Number of Dots:
You can use up to 40 dots.

Dot Separation:
The amount of space between each point on the trajectory.

Dot Shift:
The amount of distance the first point of the trajectory has with the Ball. Used to prevent the first point from overlapping the Ball.

Idle Time:
The amount of time (in seconds) that the user has to be inactive for before the Help Gesture begins to animate. Will only work if Using Help Gesture is checked and the Help Gesture is in the hierarchy as previously demonstrated.

Shooting Power X and Y:
The greater the value, the easier it is to shoot further. The smaller the value, the harder it is to shoot further.

Using Help Gesture:
Must be off if the Help Gesture is not in the hierarchy. Must be on and the Help Gesture must be in the hierarchy for it to work.

Explode Enabled:
Must be on if you want to make something happen when the ball reaches the last point of the trajectory. Code must be inserted where the comment which can be found in the explode coroutine at the bottom of the Trajectory Script.

```
public IEnumerator explode(){
    yield return new WaitForSeconds (Time.fixedDeltaTime * (dotS
    Debug.Log ("exploded");


//Insert what happens when the time it takes for the projectile

}
```

Grab While Moving:
When enabled, the user can catch and shoot moving balls. When disabled, the user can't shoot the ball until it comes to a complete stop.

Dots:
Must have a size of 40 for everything to work properly.

Thank you for purchasing the *Ultimate 2D Trajectory Predictor.*

For more information, please check the Tutorial.