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1 private void ShootFinger(Finger finger, Vector3 targetPoint)
2 {
3     // cast a ray from the fingerSlot to the 'targetPoint' (or just get direction)
4     Vector3 directionToShoot = (targetPoint - finger.Slot.position).normalized;
5
6     // shoot the actual rigidbody of the finger
7     GameManager.Instance.PhysicsController.ColliderBool(finger.ColliderFinger, true);
8     GameManager.Instance.PhysicsController.RigidbodyBoolKinematic(finger.RigidbodyFinger, false);
9     GameManager.Instance.PhysicsController.RigidbodySetVelocity(finger.RigidbodyFinger, directionToShoot *
GameManager.Instance.PhysicsController.ShootingVelocity);
10
11     // update lists
12     ShotFingers.Add(finger);
13     StationedFingers.Remove(finger);
14     GameManager.Instance.FingerPathManager.AddToShotList(finger);
15
16     // play muzzle particle & activate trail
17     GameManager.Instance.ParticleManager.PlaySimpleParticle(finger.ParticleMuzzle);
18     GameManager.Instance.ParticleManager.SetTrailStatus(finger.TrailsShot, true);
19
20     // play audio shot
21     GameManager.Instance.AudioController.PlayRandomAudio(_soundsFingerShot, false, 0);
22 }
23 public void OnFingerHitSomething(Finger fingerThatHitSomething, Collision collision)
24 {
25     GameObject hitObject = collision.gameObject;
26     Vector3 impactVelocity = fingerThatHitSomething.RigidbodyFinger.velocity;
27
28     // freeze the finger in place (maybe even parent it, only if it's shakeable ?)
29     GameManager.Instance.PhysicsController.RigidbodySetVelocityZero(fingerThatHitSomething.RigidbodyFinger);
30     GameManager.Instance.PhysicsController.RigidbodyBoolKinematic(fingerThatHitSomething.RigidbodyFinger, true);
31     GameManager.Instance.PhysicsController.ColliderBool(fingerThatHitSomething.ColliderFinger, false);
32
33     // impact and charging logic
34     GameManager.Instance.MagnetismController.FingerHitTryCharge(fingerThatHitSomething, collision, hitObject, impactVelocity);
35     // particle hit
36     GameManager.Instance.ParticleManager.PlaySimpleParticle(fingerThatHitSomething.ParticleImpact);
37     // sound
38     GameManager.Instance.AudioController.PlayAudio(_soundFingerHit, false, 0, fingerThatHitSomething.transform);
39 }
40 public void ClapHands()
41 {
42     if (GameManager.Instance.IsPaused == true)
43     {
44         return;
45     }
46     // possibly change the logic for when I can clap and magnetize...
47     if (_currentFingerCountLeft < 5 || _currentFingerCountRight < 5)
48     {
49         _canClap = true;
50     }
51     else
52     {
53         _canClap = false;
54     }
55
56     if (_canClap == true && _isClapping == false)
57     {
58         _isClapping = true;
59
60         // reset the look rotation of the hands and animate them
61         StartCoroutine(ResetHandRotationRoutine(_handLeft));
62         StartCoroutine(ResetHandRotationRoutine(_handRight));
63         _handLeft.Palm.AnimatePalmCall(_handLeft.Palm.AnimClap);
64         _handRight.Palm.AnimatePalmCall(_handRight.Palm.AnimClap);
65
66         // stretch any fingers that are still present on the hand
67         for (int i = 0; i < StationedFingers.Count; i++)
68         {
69             StationedFingers[i].AnimateFingerCall(StationedFingers[i].AnimStretched);
70         }
71
72         // activate actual magnetism
73         StartCoroutine(GameManager.Instance.MagnetismController.MagnetismRoutine());
74         StartCoroutine(ReturnFingersAndResetHandsRoutine());
75
76         // play audio clap
77         GameManager.Instance.AudioController.PlayRandomAudio(_soundsClap, false, (TimeToReachClap - 0.09f));
78     }
79 }

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80
81
82
83 public IEnumerator RetractFingerRoutine(Finger fingerToRetract)
84 {
85     // unparent + reset scale
86     GameManager.Instance.TransformController.SetFingerTransformValuesForReturn(fingerToRetract);
87
88     // stop any velocity/physics related to this finger
89     GameManager.Instance.PhysicsController.RigidbodySetVelocityZero(fingerToRetract.RigidbodyFinger);
90     GameManager.Instance.PhysicsController.RigidbodyBoolKinematic(fingerToRetract.RigidbodyFinger, true);
91     GameManager.Instance.PhysicsController.ColliderBool(fingerToRetract.ColliderFinger, false);
92
93     // disable shot trail & enable return trail
94     GameManager.Instance.ParticleManager.SetTrailStatus(fingerToRetract.TrailsShot, false);
95     GameManager.Instance.ParticleManager.SetTrailStatus(fingerToRetract.TrailsReturn, true);
96
97     // create initial path & keep updating the path on this finger (in manager)
98     GameManager.Instance.FingerPathManager.CreateFirstFramePath(fingerToRetract);
99     GameManager.Instance.FingerPathManager.EnablePathUpdating(true);
100
101     // set the speed on the pathFollower
102     GameManager.Instance.FingerPathManager.SetSpeedFingerPath(fingerToRetract);
103
104     // play sound reconnection (with delay)
105     GameManager.Instance.AudioController.PlayAudio(_soundFingerReconnect, false, _fingerReturnTime - 0.1f);
106
107     // once the finger has arrived...
108     yield return new WaitForSeconds(FingerReturnTime);
109
110     GameManager.Instance.FingerPathManager.ResetAndDisablePath(fingerToRetract);
111
112     ReconnectFingerVisually(fingerToRetract);
113
114     // update lists and values
115     GameManager.Instance.FingerPathManager.RemoveRetractFingerPath(fingerToRetract);
116
117     ReplenishFinger(fingerToRetract);
118 }
119
120
121 private void ResetHandsAndFingersToIdle()
122 {
123     _handRight.Palm.AnimatePalmTrigger(_handRight.Palm.TriggerIdle);
124     _handLeft.Palm.AnimatePalmTrigger(_handLeft.Palm.TriggerIdle);
125     for (int i = 0; i < StationedFingers.Count; i++)
126     {
127         var fingerOfInterest = StationedFingers[i];
128         fingerOfInterest.AnimateFingerCall(fingerOfInterest.AnimIdle);
129     }
130 }
131
132 private void ReconnectFingerVisually(Finger fingerThatReturned)
133 {
134     fingerThatReturned.Reconnect();
135     fingerThatReturned.AnimateFingerCall(fingerThatReturned.AnimRecover);
136     GameManager.Instance.ParticleManager.SetTrailStatus(fingerThatReturned.TrailsReturn, false);
137 }
138
139 private void ReplenishFinger(Finger fingerToReplenish)
140 {
141     ShotFingers.Remove(fingerToReplenish);
142     StationedFingers.Add(fingerToReplenish);
143
144     if (fingerToReplenish.Hand.TypeHand == HandType.Left)
145     {
146         _currentFingerCountLeft += 1;
147     }
148     else
149     {
150         _currentFingerCountRight += 1;
151     }
152 }
153
154
155

```