

Pract- Create swipe controls for a 2D runner game

Step 1: Make a simple player scene

1. In Godot → **New Scene**.
2. Add a **Node2D** → name it Player.
3. Add child → **Sprite2D** → give it an image (e.g., a box or your runner character).
4. Add child → **CollisionShape2D** → pick a Rectangle shape.
5. Save the scene as Player.tscn.

☞ For now, this is just a square that will respond to swipes. Later you can add animations.

Step 2: Attach a script to Player

Right-click Player → **Attach Script** → call it player.gd.

Paste this script (Godot **4.x** version first):

```
extends Node2D
```

```
@export var jump_strength: float = 300.0
```

```
@export var slide_time: float = 0.5
```

```
@export var dash_distance: float = 100.0
```

```
var swipe_start: Vector2
```

```
var swipe_end: Vector2
```

```
var min_swipe_dist: float = 50.0 # how far finger must move to count as swipe
```

```
var sliding: bool = false
```

```
func _input(event):
```

```
    # When finger touches screen (or mouse button pressed)
```

```
    if event is InputEventScreenTouch and event.pressed:
```

```
        swipe_start = event.position
```

```
    # When finger lifts off
```

```
    if event is InputEventScreenTouch and not event.pressed:
```

```
        swipe_end = event.position
```

```
        _check_swipe()
```

```
    # (For testing in editor with mouse)
```

```
    if event is InputEventMouseButton and event.pressed:
```

```
        swipe_start = event.position
```

```
    if event is InputEventMouseButton and not event.pressed:
```

```
        swipe_end = event.position
```

```
        _check_swipe()
```

```
func _check_swipe():
```

```
    var delta = swipe_end - swipe_start
```

```

if delta.length() < min_swipe_dist:
    return # too short, not a swipe

if abs(delta.x) > abs(delta.y):
    if delta.x > 0:
        _on_swipe_right()
    else:
        _on_swipe_left()
else:
    if delta.y < 0:
        _on_swipe_up()
    else:
        _on_swipe_down()

# --- Actions for swipes ---
func _on_swipe_up():
    print("Jump!")
    position.y -= jump_strength # (replace with physics later)

func _on_swipe_down():
    print("Slide!")
    if not sliding:
        sliding = true
        scale.y = 0.5 # shrink player for slide
        await get_tree().create_timer(slide_time).timeout
        scale.y = 1.0
        sliding = false

func _on_swipe_left():
    print("Dash Left!")
    position.x -= dash_distance

func _on_swipe_right():
    print("Dash Right!")
    position.x += dash_distance

```

Step 3: Test it

1. Add Player.tscn to your main game scene. Project Setting -> Run -> Select player as a Main Scene.
2. Run the game.
3. Use your **mouse** to drag (swipe) in the editor:
 - Swipe up → player jumps.
 - Swipe down → slides.
 - Swipe left/right → dashes.
4. Export to Android/iOS → test with finger swipes.