#5-03ソースコード

MainCtrl.cs

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class MainCtrl : MonoBehaviour {

  enum GAMEMODE {
    TITLE,
    PLAY,
    END
  };

  GAMEMODE nowmode;

  public Transform titleInfoGroup;
  public Player player;

  // Use this for initialization
  void Start() {
    nowmode = GAMEMODE.TITLE;
  }

  // Update is called once per frame
  void Update() {
    switch (nowmode) {
      case GAMEMODE.TITLE:
        if (Input.GetButtonDown("Jump")) {
          titleInfoGroup.gameObject.SetActive(false);
          player.IsStop = false;

        }
        break;

      case GAMEMODE.PLAY:
        break;

      case GAMEMODE.END:
        break;
    }
  }
}
```

Player.cs

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class Player : MonoBehaviour {
  int score;        //スコア

  public UnityEngine.UI.Text scoreValue;
```

```csharp
    float downSpeed;      //落下速度
    Rigidbody2D rb;         //物理演算コンポーネント
    Animator animCtrl;   //アニメーションコントロール
    AudioSource audioSource;      //オーディオコンポーネント

    public AudioClip[] sounds;

    public bool IsStop;

    // Use this for initialization
    void Start() {   //初期化処理
      rb = GetComponent<Rigidbody2D>();
      animCtrl = GetComponent<Animator>();
      downSpeed = 0;
      score = 0;
      scoreValue.text = score.ToString(); //スコアの表示
      audioSource = GetComponent<AudioSource>();
      IsStop = true;
      animCtrl.SetBool("IsIdle", true);

    }

    // Update is called once per frame
    void Update() {
      if (IsStop) return;
      RaycastHit2D hit;
      //下方向チェック
      hit = Physics2D.Raycast(transform.position + new Vector3(-0.32f, -0.32f), Vector2.right,
0.64f);
      if (hit.transform != null) {
        downSpeed = 0;           //すぐ下がってめり込んでしまうのに対処
        animCtrl.SetBool("IsGround", true);
        if (Input.GetButtonDown("Jump")) {   //ジャンプのボタン判定
          downSpeed = 6.5f;
          transform.Translate(Vector3.up * 0.01f);      //ジャンプしてもRaycastに引っかかってしまう対策
          audioSource.PlayOneShot(sounds[0]);
        }
      } else {
        animCtrl.SetBool("IsGround", false);
        downSpeed += -0.3f;        //落下速度をどんどん早くする
      }

      hit = Physics2D.Raycast(transform.position + new Vector3(0.34f, 0.26f), Vector2.down,
0.52f);
      if (hit.transform != null) {
        //障害物に当たった
        animCtrl.SetBool("IsIdle", true);
      } else {
        //障害物に当たっていない
        animCtrl.SetBool("IsIdle", false);
      }

      Vector2 nowpos = rb.position;
      nowpos += new Vector2(1, downSpeed) * Time.deltaTime;
      rb.MovePosition(nowpos);

      animCtrl.SetFloat("DownSpeed", downSpeed);
    }

    private void OnTriggerEnter2D(Collider2D collision) {
      collision.gameObject.SetActive(false);
      score += 1;        //スコア1点加算
```

```
        scoreValue.text = score.ToString(); //スコアの表示
        audioSource.PlayOneShot(sounds[1]);

    }
}
```