WORK SAMPLES

JOANNA MIJARES

Fall 2022: Original Game Code - C#

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

// Joanna Mijares

// Midterm Assignment
// DIG3878

public class Meow : MonoBehaviour
{

    public GameObject meow;
    GameObject plyr;

    // Start is called before the first frame update
    void Start()
    {
        plyr = GameObject.FindGameObjectWithTag("Player");
    }

    // Update is called once per frame
    void Update()
    {
        float dist = Vector3.Distance(gameObject.transform.position, plyr.transform.position);

        if (dist <= 5.0f)
        {
            meow.SetActive(true);
        }

        if (dist > 5.0f)
        {
            meow.SetActive(false);
        }
    }
}
```

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

// Joanna Mijares

// Midterm Assignment
// DIG3878

public class DetectCat : MonoBehaviour
{
    public GameObject happyCat;

    void OnCollisionEnter(Collision col)
    {
        if (col.gameObject.tag == "HungryCat")
        {
            Instantiate(happyCat, col.gameObject.transform.position, col.gameObject.transform.rotation);
            Destroy(col.gameObject);

        }
    }

}
```

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

// Joanna Mijares

// Midterm Assignment
// DIG3878

public class FishCount : MonoBehaviour
{
    public Text fishCount;
    public static int gscore = 0;
    public int fishNum = 20;
    private GameObject[] fishList;

    public string levelToLoad;

    void Update()
    {
        if (Input.GetButtonDown("Fire1"))
        {
            fishNum = fishNum - 1;
        }

            fishCount.text = "Fish Left: " + fishNum + "/20";

        fishList = GameObject.FindGameObjectsWithTag("Fish");

        if (fishNum == 0)
        {
            Application.LoadLevel(levelToLoad);
        }

    }
}
```

Fall 2022: Original Game Code - C#

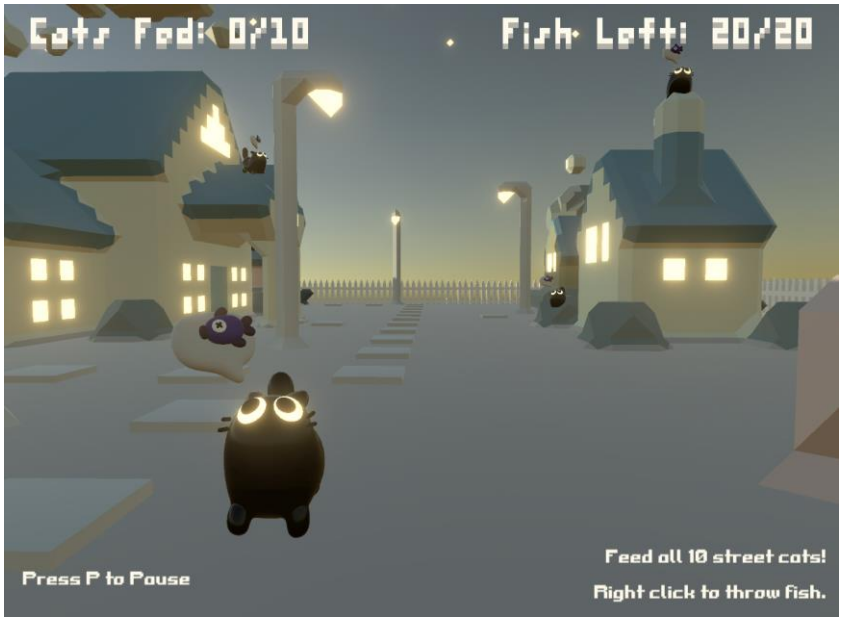
```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;

// Joanna Mijares

// Midterm Assignment
// DIG3878

public class ScoreManagerMidterm : MonoBehaviour
{
    public static int gscore = 0;
    public Text scoreText;

    public string levelToLoad;

    void Update()
    {
        scoreText.text = "Cats Fed: " + gscore + "/10";

        if (gscore >= 10)
        {
            Application.LoadLevel(levelToLoad);
        }
    }
}
```

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

// Joanna Mijares

// Midterm Assignment
// DIG3878

public class CounterMidterm: MonoBehaviour
{

    public AudioClip ding;

    void OnCollisionEnter(Collision col)
    {
        if (col.gameObject.tag == "Fish")
        {
            Destroy(col.gameObject);
            AudioSource.PlayClipAtPoint(ding, transform.position);
            Debug.Log("CAT FED");
            ScoreManagerMidterm.gscore += 1;
        }

    }
}
```

The code from the previous slide and continued to the left is from a class Midterm project during Fall of 2022 in which we created a minigame. All the code for the game was original. I have included the primary scripts used.

In this game, the player threw fish at cats to feed them. If the player fed all 10 cats with the 20 fish they were given, they would win. If the player did not feed all cats but ran out of fish, the player would lose. When the player throws a fish and feeds a cat, the cat's sprite changes, and a meowing noise is played.

Below is a screenshot of the minigame, which used downloaded assets.



Spring 2023: Group Game Original Code - C#

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

public class DetectNote : MonoBehaviour
{
    bool key1 = false, key2 = false, key3 = false, key4 = false, key5 = false, key6 = false, key7 = false;

    public AudioClip firstthirdNote;
    public AudioClip secondNote;
    public AudioClip fourthNote;
    public AudioClip fifthNote;
    public AudioClip sixthNote;
    public AudioClip lastNote;

    public AudioClip wrongNote;
    public AudioClip winningTune;

    public GameObject green1;
    public GameObject green2;
    public GameObject green3;
    public GameObject green4;
    public GameObject green5;
    public GameObject green6;
    public GameObject green7;

    public GameObject musicsheetSOLID;
    public GameObject musicsheetANIM;


    void OnCollisionEnter2D(UnityEngine.Collision2D collision)
    {
        if (collision.gameObject.tag == "Note1/3")
        {
            key1 = true;
            green1.SetActive(true);
            StartCoroutine(DelayColor());
            AudioSource.PlayClipAtPoint(firstthirdNote, transform.position);
        }

        if (collision.gameObject.tag == "Note1/3" && key2)
        {
            green3.SetActive(true);
            StartCoroutine(DelayColor());
            key3 = true;
            AudioSource.PlayClipAtPoint(firstthirdNote, transform.position);
        }
        if (collision.gameObject.tag == "Note2")
        {
            key2 = true;
            green2.SetActive(true);
            StartCoroutine(DelayColor());
            AudioSource.PlayClipAtPoint(secondNote, transform.position);
        }
        if (collision.gameObject.tag == "Note2" && key1)
        {
            key2 = true;
        }
```

cont.

```
if (collision.gameObject.tag == "Note5")
{
    green5.SetActive(true);
    StartCoroutine(DelayColor());
    AudioSource.PlayClipAtPoint(fifthNote, transform.position);
}
if (collision.gameObject.tag == "Note5" && key4)
{
    key5 = true;
}

if (collision.gameObject.tag == "Note4")
{
    green4.SetActive(true);
    StartCoroutine(DelayColor());
    AudioSource.PlayClipAtPoint(fourthNote, transform.position);
}
if (collision.gameObject.tag == "Note4" && key3)
{
    key4 = true;
}

if (collision.gameObject.tag == "Note6")
{
    green6.SetActive(true);
    StartCoroutine(DelayColor());
    AudioSource.PlayClipAtPoint(sixthNote, transform.position);
}
if (collision.gameObject.tag == "Note6" && key5)
{
    key6 = true;
}

if (collision.gameObject.tag == "Note7")
{
    green7.SetActive(true);
    StartCoroutine(DelayColor());
    AudioSource.PlayClipAtPoint(lastNote, transform.position);
}
if (collision.gameObject.tag == "Note7" && key6)
{
    key7 = true;
}

if (collision.gameObject.tag == "wrong")
{
    key1 = false;
    key2 = false;
    key3 = false;
    key4 = false;
    key5 = false;
    key6 = false;
    key7 = false;

    AudioSource.PlayClipAtPoint(wrongNote, transform.position);
}
```

Spring 2023: Group Game Original Code - C# Cont.

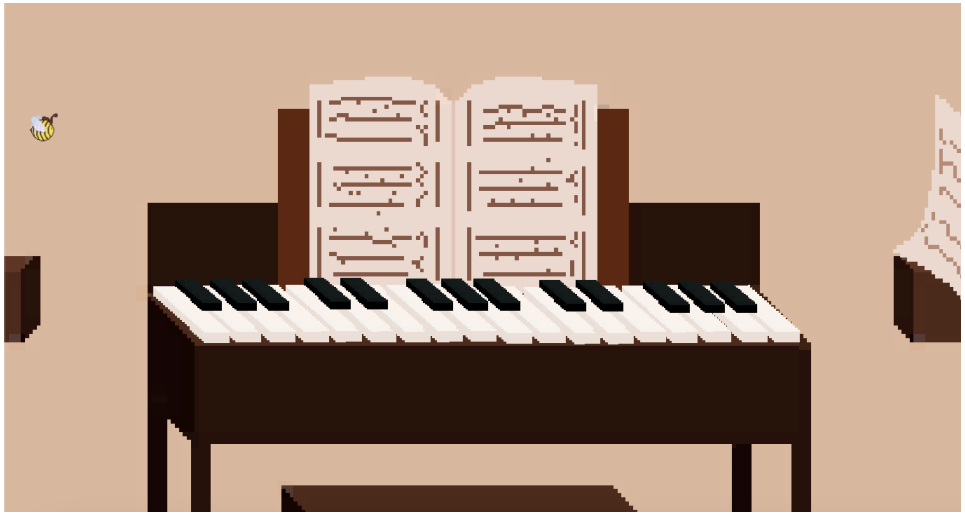
cont.

```
        if (key7)
        {
            AudioSource.PlayClipAtPoint(winningTune, transform.position);
            green1.SetActive(true);
            green2.SetActive(true);
            green3.SetActive(true);
            green4.SetActive(true);
            green5.SetActive(true);
            green6.SetActive(true);
            green7.SetActive(true);

            musicsheetANIM.SetActive(true);
            musicsheetSOLID.SetActive(false);

        }

    }

    IEnumerator DelayColor()
    {
        yield return new WaitForSeconds(1);
        green1.SetActive(false);
        green2.SetActive(false);
        green3.SetActive(false);
        green4.SetActive(false);
        green5.SetActive(false);
        green6.SetActive(false);
        green7.SetActive(false);

    }
}
```

The code from the previous slide and continued to the left is from a class project during Spring of 2023 in which we created an entire game in a group over the course of the semester. All the code for the game was original, and this specific script was completely by me.

This was for a minigame level, in which the player needed to jump on keys on a piano in a specific order to unlock the door to continue to the next level. The notes played Beethoven's Fur Elise. Notes 1 and 3 repeat, which is why they are coded as the same key. The notes turn green if they are the correct note. If the player jumps on the wrong note, all progress is lost, and the player must start over.

Below is a screenshot of the minigame (without post-processing lighting), which I drew and designed.

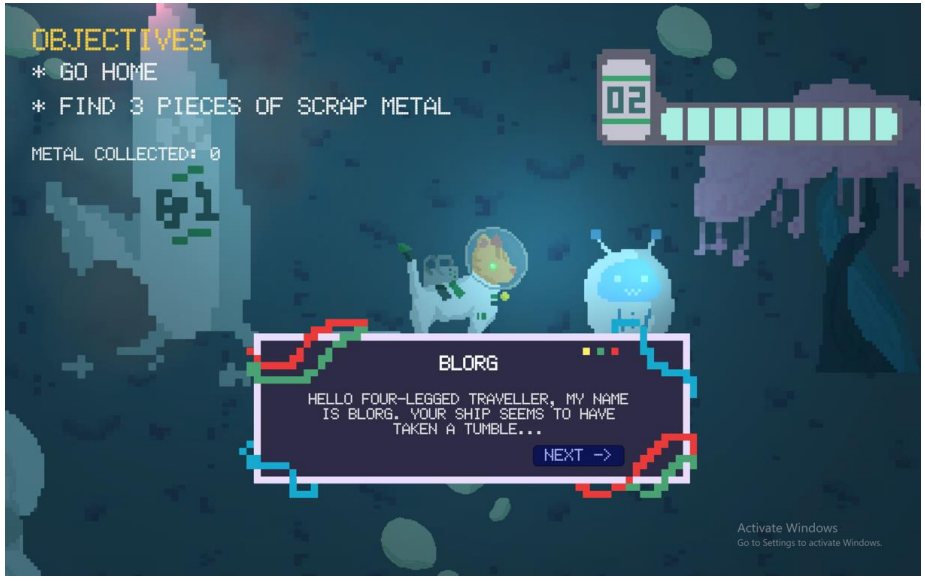


Summer 2023: Original Game Code - C# cont.

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

// Joanna Mijares

public class Objective_Text : MonoBehaviour
{
    public Text objectiveText;
    public Text objectiveDetails;
    public Text goHome;
    public Text coinNumber;


    // Update is called once per frame
    void Update()
    {
        objectiveText.text = "Objectives:";
        goHome.text = "* Go Home";

        if (Player_Health_Segmented.objectiveDisplay == false)
        {
            objectiveDetails.text = " ";
            coinNumber.text = " ";
        }



        if (Player_Health_Segmented.objectiveDisplay == true)
        {

            if (Player_Health_Segmented.coinAmount < 3)
            {
                objectiveDetails.text = "* Find 3 Pieces of Scrap Metal";
                coinNumber.text = "Metal Collected: " + Player_Health_Segmented.coinAmount;
            }
            else if (Player_Health_Segmented.coinAmount == 3)
            {
                objectiveDetails.text = "* Talk to Blorg";
                coinNumber.text = "Metal Collected: 3";

            }

            if (Player_Health_Segmented.motorAmount == 1)
            {
                objectiveDetails.text = "* Find a Motor";
                coinNumber.text = " ";

            }
            else if (Player_Health_Segmented.motorAmount == 2)
            {
                objectiveDetails.text = "* Talk to Blorg";
                coinNumber.text = " ";

            }

            if (Player_Health_Segmented.escapeTime == true)
            {
                objectiveDetails.text = "";
                coinNumber.text = " ";
            }


        }

    }
}
```

Summer 2023: Original Game Code - C# Cont.

```
if (motorAmount == 2 && collision.CompareTag("Blorg"))
{
    Blorg2.SetActive(false);
    Blorg3.SetActive(true);
    escapeTime = true;
}

if (escapeTime == true)
{
    BrokenShip.SetActive(false);
    FixedShip.SetActive(true);
    smoke.SetActive(false);

}
```



The code on the previous slide is from a class project during Summer of 2023 in which we created an entire game ourselves over the course of the semester. Most of the code was provided to us, but I needed unique code for displaying the game's objectives.

The objectives were displayed in the top corner of the game's screen and change based on how many different items the player collects.

To provide context for the **escapeTime** variable, to the left is an original section of a larger piece of code that was provided to me. When a certain number of items is collected, **escapeTime** is set to true and the game sets up the end of the level.

All art and level design for this game was created by me. You can view and download Into The Mewniverse at the link below.

Link to download my game:
https://star-soup-studios.itch.io/into-the-mewniverse