My game is called banana smash, it is made in unity and c#, and this game is meant to be played on computers and desktops. It uses Firebase auth and firebase database to help take care of the authentication of the database, so people can register and log into the game, and the database to take care of data for changing names, changing Highscores.

The aim of the game is to click on as many bananas as you can within 30 seconds

You can register a new account, log in and play the game and try to get a new high score.

There are 3 scenes in use:

Welcome (scene 0) used for welcoming players, registering their accounts, logging them in, and if they forget their password they can send their emails in to change it

Start (scene 1) when successfully logging in, it will load this scene, this scene contains the main gameplay, where if u click on start the game starts. In this scene you can change your display name, delete your highscore, and you can log out(clicking this will lead to scene 0) or see leaderboard (clicking this will lead to scene 2)

LeaderBoard(scene 2) handles the UI of the leaderboard

Database

The database is structured like this

Leaderboards

-|uuid

--|score

--|displayName

PlayerStats

-|uuid

--|score

--|DisplayName

Players

-|uuid

--|HighScore

--|displayName

--|email

Codes in use:

AuthScript: this handles all the authentication

GameManager: this handles mainly the scores, the game starting

SimpleFireBase: handles sending and updating things to the database

PlayerStatManager: updates UI based on the playerStats data in the database

LeaderboardManager: updates the leaderboard UI based on the data in the database

RandomSpawn: this handles the random spawning

TargetScript: handles the code of the target when clicking on it

Timer: handles the code of the timer

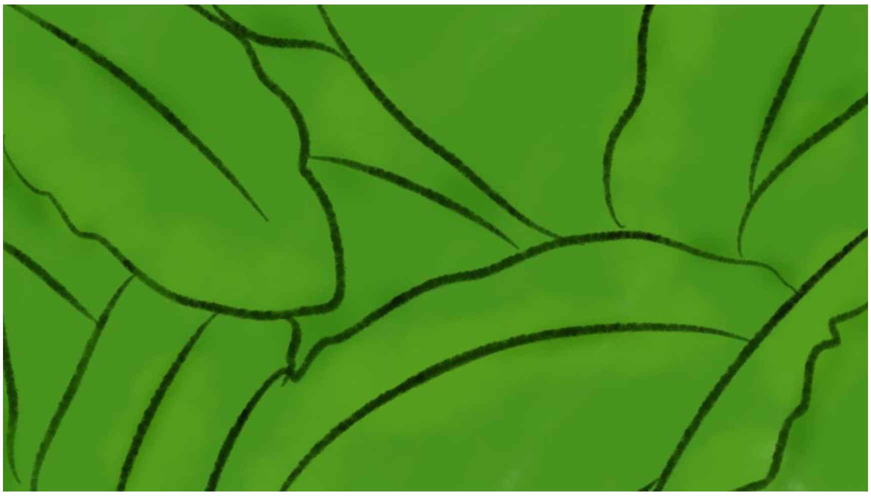
Classes:

Users: base information for the player including, email, HighScore, displayName

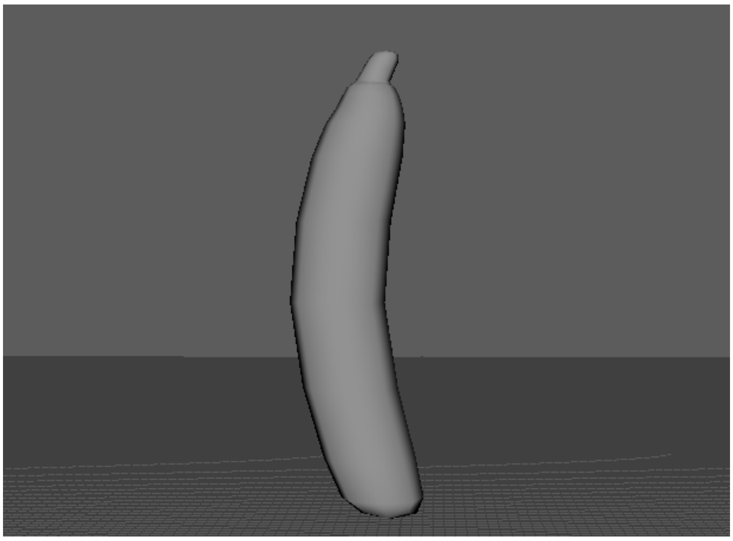
SimplePlayerStat: information on the playerStats such as score and DisplayName

SimpleLeaderboard: information on the playerStats for the leaderboard such as score and displayName

All the UI were made by me



And the banana model was made by me as well



Music credit: https://www.youtube.com/watch?v=_KycvSI-lkg&list=PL3qKGTUJcGDoHJGloGV4OdsqY-NNlxfvi&index=5

https://www.youtube.com/watch?v=b1xkXrzVQdU&list=PL3qKGTUJcGDoHJGloGV4OdsqY-NNlxfvi&index=2

https://www.youtube.com/watch?v=1XM8ReW9NvA&list=PL3qKGTUJcGDoHJGloGV4OdsqY-NNlxfvi&index=7

https://www.youtube.com/watch?v=M1KFN9Gypil&list=PL3qKGTUJcGDoHJGloGV4OdsqY-NNlxfvi&index=8

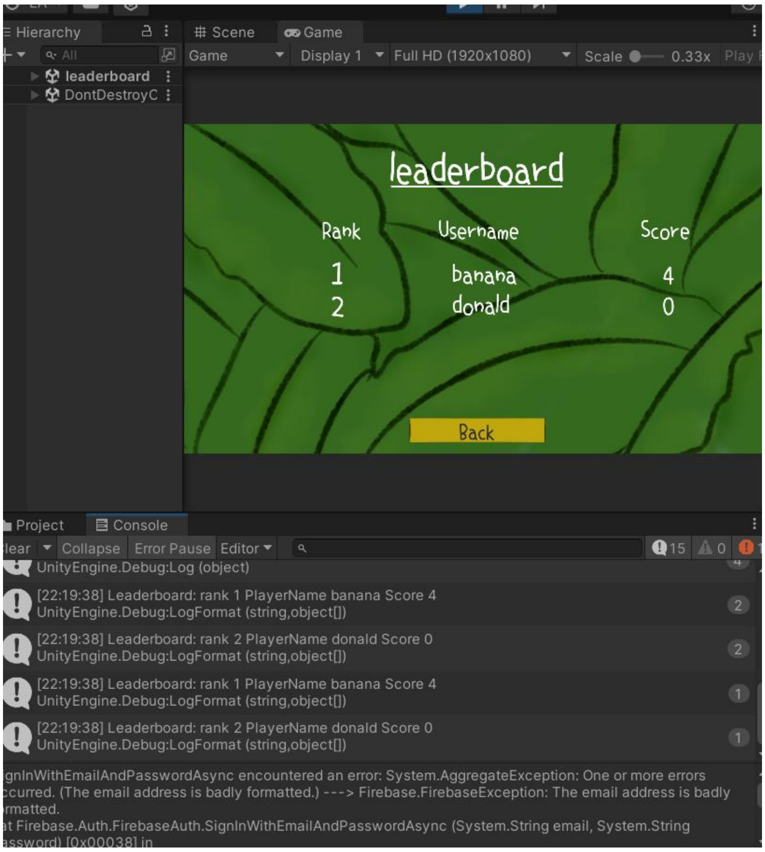
Font credit: https://eng.m.fontke.com/font/23392034/

Videos that helped me : https://www.youtube.com/watch?v=GjyQiq23fBk

https://www.youtube.com/watch?v=WtcESnxT8cQ

Bugs:

Sometimes the leaderboard shows very old data (in this instance banana is a delete user, theres no data of him left in the database)



Rank	Username	Score
1	banana	4
2	donald	0

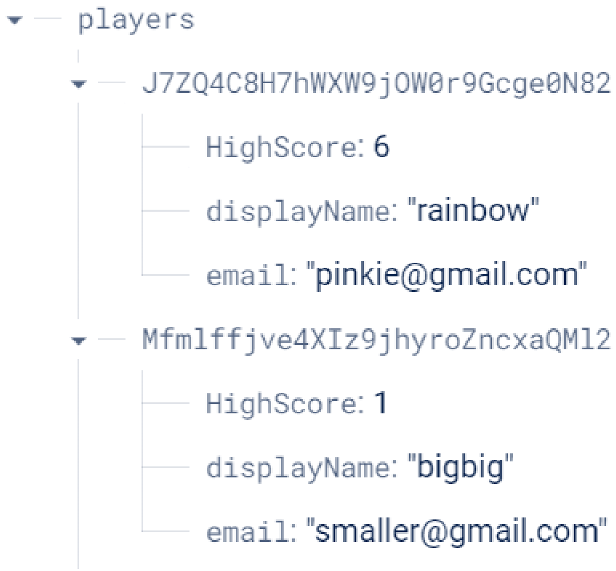
```
UnityEngine.Debug:Log (object)
[22:19:38] Leaderboard: rank 1 PlayerName banana Score 4                2
UnityEngine.Debug:LogFormat (string,object[])
[22:19:38] Leaderboard: rank 2 PlayerName donald Score 0                2
UnityEngine.Debug:LogFormat (string,object[])
[22:19:38] Leaderboard: rank 1 PlayerName banana Score 4                1
UnityEngine.Debug:LogFormat (string,object[])
[22:19:38] Leaderboard: rank 2 PlayerName donald Score 0                1
UnityEngine.Debug:LogFormat (string,object[])

gnInWithEmailAndPasswordAsync encountered an error: System.AggregateException: One or more errors
ccurred. (The email address is badly formatted.) ---> Firebase.FirebaseException: The email address is badly
rmatted.
at Firebase.Auth.FirebaseAuth.SignInWithEmailAndPasswordAsync (System.String email, System.String
assword) [0x00038] in
```

Sometimes for new accounts when playing the first game their new Data cant be passed into leaderboard and into the playerStats, thus the UI doesn’t update accordingly

Sometimes the HighScore key under players doesn’t update despite it working for most other users

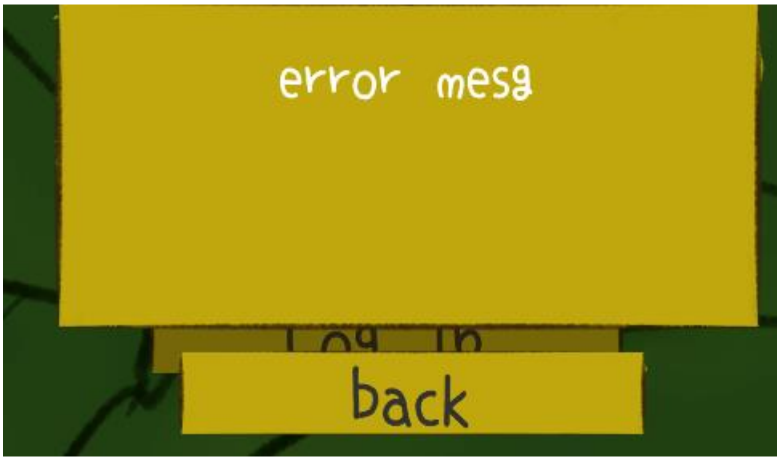
As you can see here it works for these users but if u see the demo video it didn’t work



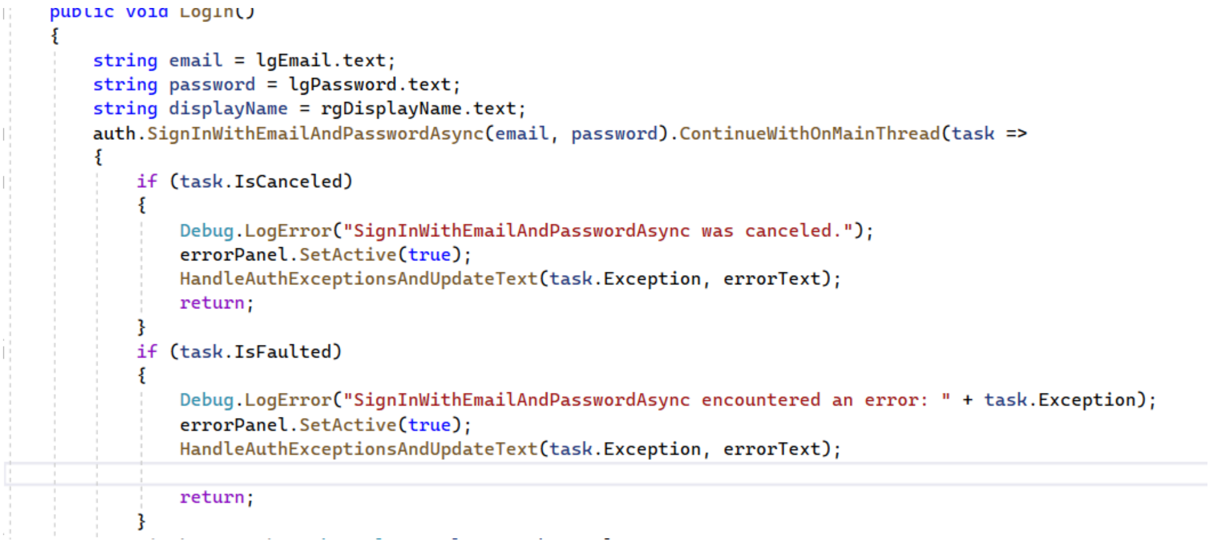
```
players
    J7ZQ4C8H7hWXW9jOW0r9Gcge0N82
        HighScore: 6
        displayName: "rainbow"
        email: "pinkie@gmail.com"
    Mfmlffjve4XIz9jhyroZncxaQMl2
        HighScore: 1
        displayName: "bigbig"
        email: "smaller@gmail.com"
```

I made a script, ui and code for when there is an error the error UI message will show when there is an error according to whats there but it doesn't show in game or the function is not called for some odd reason

This is the ui I made for this

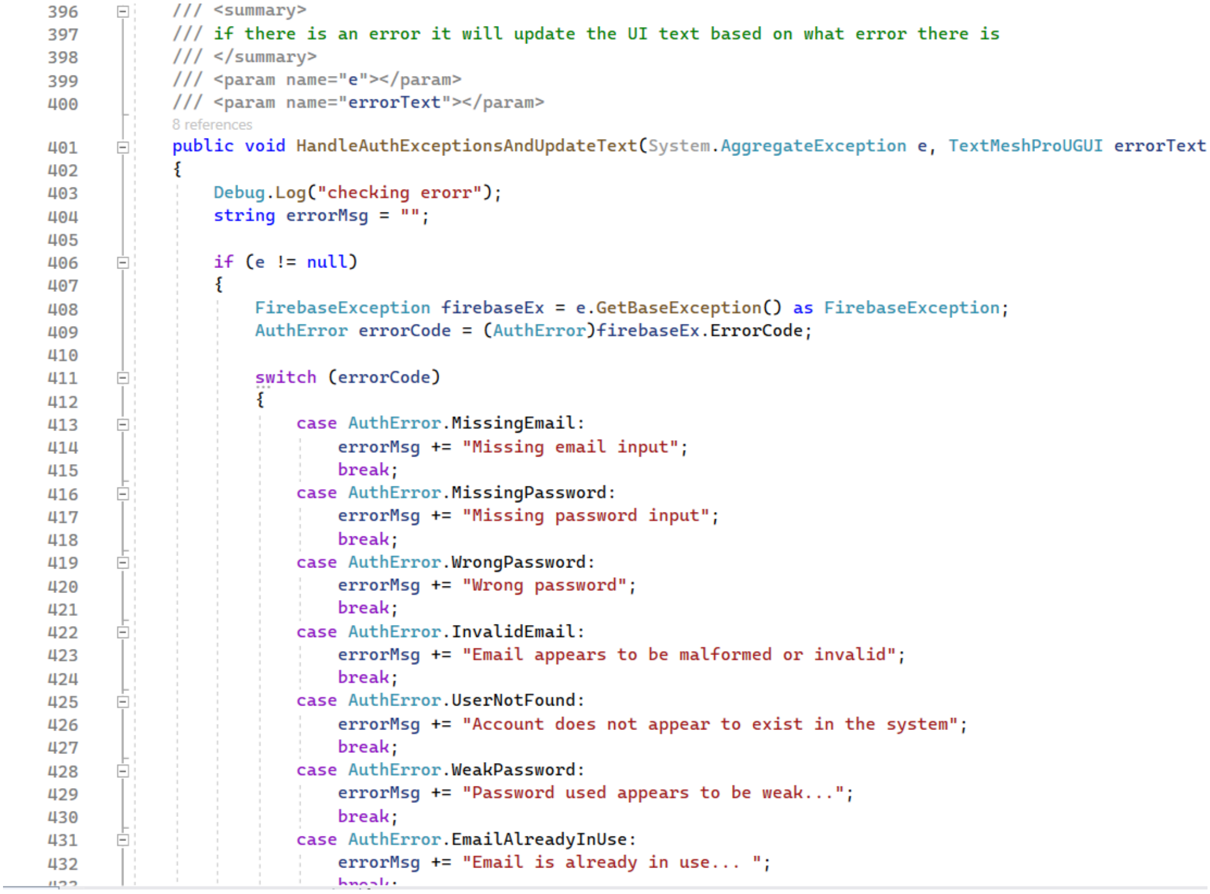


For example if there is an error here it will call the function but it doesn't call it when theres an error (debug log doesn't show)



```
public void Login()
{
    string email = lgEmail.text;
    string password = lgPassword.text;
    string displayName = rgDisplayName.text;
    auth.SignInWithEmailAndPasswordAsync(email, password).ContinueWithOnMainThread(task =>
    {
        if (task.IsCanceled)
        {
            Debug.LogError("SignInWithEmailAndPasswordAsync was canceled.");
            errorPanel.SetActive(true);
            HandleAuthExceptionsAndUpdateText(task.Exception, errorText);
            return;
        }
        if (task.IsFaulted)
        {
            Debug.LogError("SignInWithEmailAndPasswordAsync encountered an error: " + task.Exception);
            errorPanel.SetActive(true);
            HandleAuthExceptionsAndUpdateText(task.Exception, errorText);

            return;
        }
```



```
    /// <summary>
    /// if there is an error it will update the UI text based on what error there is
    /// </summary>
    /// <param name="e"></param>
    /// <param name="errorText"></param>
    public void HandleAuthExceptionsAndUpdateText(System.AggregateException e, TextMeshProUGUI errorText
    {
        Debug.Log("checking erorr");
        string errorMsg = "";

        if (e != null)
        {
            FirebaseException firebaseEx = e.GetBaseException() as FirebaseException;
            AuthError errorCode = (AuthError)firebaseEx.ErrorCode;

            switch (errorCode)
            {
                case AuthError.MissingEmail:
                    errorMsg += "Missing email input";
                    break;
                case AuthError.MissingPassword:
                    errorMsg += "Missing password input";
                    break;
                case AuthError.WrongPassword:
                    errorMsg += "Wrong password";
                    break;
                case AuthError.InvalidEmail:
                    errorMsg += "Email appears to be malformed or invalid";
                    break;
                case AuthError.UserNotFound:
                    errorMsg += "Account does not appear to exist in the system";
                    break;
                case AuthError.WeakPassword:
                    errorMsg += "Password used appears to be weak...";
                    break;
                case AuthError.EmailAlreadyInUse:
                    errorMsg += "Email is already in use... ";
                    break;
```